Trade Liberalization and the Poor: A Framework for Poverty Reduction Policies
With Special Reference to Some Asian Countries including India

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Abstract

The paper examines the impact of trade liberalization on the poor through its impact on prices and incomes. A simple framework is given which traces the impact of trade liberalization on the poor. There is unambiguous empirical evidence from economies around the globe and for some of the Asian economies included in our sample that trade openness promotes economic growth. Raising economic growth in a sustained manner reduces poverty. Further, for cross section of fourteen Asian economies included in our study no significant relationship could be found between changes in inequality and poverty, and inequality of incomes with economic growth rates and trade openness. However, most of the poor in the developing economies are in the agricultural sector, therefore raising growth in the agricultural sector is essential ingredient for making the reform process successful. The paper provides the basic elements of a good trade policy regime. Some guidelines are given for making trade work for the poor after identifying how the trade regime works. The paper also discusses necessary complementary policies that can make trade policy reform effective. These complementary policies identified are macroeconomic and microeconomic stability, a competitive exchange rate, flexible labor markets and competent product markets. The success of trade reform lies in focusing the reform agenda on agricultural and additionally services sector. It is imminent from the study that these two sectors are key sectors in poverty reduction. These provide a benchmark against which to judge the prevailing trade regime and provide guidance for the direction of reforms for the poor in future.

Also, there is large outstanding agenda that can and should be undertaken by high-income countries that will generate significant benefits for ordinary people in developing countries. These include trade distorting policies in agriculture, disciplining non-tariff measures that restrict trade and removing restrictions on the temporary movement of natural persons supplying services (Stern, 2002).

I. Introduction:

1 Lecturer-Department of Economics, Jamia Millia Islamia, New Delhi-25, India. Email: som@del3.vsnl.net.in. Thanks are due to Dr M.S.Bhat, Professor Naushad Ali Azad and Dr Abusaleh Shariff for discussion on the theme of the paper.
The article "The Death Trap" in the January, 2003 issue of the Frontline magazine reports the causes of the suicide of cotton farmers in May 2001 in 12 districts of the Vidarbha region of Eastern Maharashtra. The article notes "The farmers faced with mounting debt, a failed crop and government indifference are resorting to suicide as a way out of misery". Patnaik (2002) concludes that majority of cotton growers are small farmers and are highly price responsive since colonial times. International cotton prices started declining in 1995-96 from 75 cents a pound to all time low of 35 cents in October 2001. Since government lifted quantitative restrictions on cotton since 1999 and actual tariff rates for cotton were not enough to deter cotton imports it had adverse impact on farmers by making them non-competitive in the open environment. Vijay Jawandhia leader of the Kisan Sangatana based in Warda says that "By permitting imports of cotton at 5 percent duty, the Central Government has destroyed the domestic market. Prices have fallen drastically and it has adverse impact on farmers." On the other side, cotton textile owners gained due to declining trend in cotton prices as cotton is their main input. In fact its is reported that the powerful textile lobby resisted move to increase import duty.

The above episode indicates integration of markets with international economy have differing impact on different sections of the society and it is possible that the more powerful which have vested interest will usually benefit and not the poor. The role of safety nets and retraining are important in dealing with the adjustment costs of trade liberalization. Trade reforms in agriculture and services provide significant opportunities for employment and income of the poor as well as reductions in their costs of their consumption.

On the other side there are many cases where Indian industrial producers who since the reform era of 1990s have favored increase in import duties for resisting competition especially for want of level playing field.

This paper shares the experiences of different countries where trade reform was successfully undertaken with adjustment costs and implications for the poor. This impact is usually felt via prices and incomes of the poor. Alan Winters (2000) has however identified several linkages between trade, trade policy and poverty (see Section II below). It is therefore important to study and identify how the trade regime works. Knowledge of how poor obtain and how the poor spend their income is important in designing pro-poor policies. Trade policies will affect the welfare of the poor through what they consume and what they produce. A simple framework is developed which traces the impact of trade liberalization on the poor. Some guidelines are given for making trade work for the poor.

Proponents of globalization offer about how greater integration with the world economy may reduce poverty. The two mechanism usually identified in this context are: first, that reduced industrial protection should turn terms of trade in favour of agriculture and thereby agricultural (and rural) incomes; and, second, that this should increase industrial employment, since comparative advantage would favour labour intensive manufacturing in regions with abundant labour. The paper examines the two hypothesis in context of some South Asian countries including India.

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2 "We may recall that in Europe during the 16th century, poor relief was shifted from a charitable to government organized activity. The creation of social insurance schemes and the subsequent expansion of the welfare state cannot be explained as public acts of charity; these factors have been the key elements in the survival strategy of capitalism". (Maran, 2002)

3 The first step in designing a strategy to use trade policy for growth and poverty reduction is to understand how trade regime works (Hoekman et. al, 2001). This involves learning of the importance of non-tariff barriers, including who gets the licenses and permits. What is the structure of the tariff and including its dispersion, exemption and rebates? How much revenue comes from tariff? What policies are in place which may tax or subsidize exports? Are trade related institutions such as standard organizations, export finance and marketing facilities adequate to support an expansion of exports? Does the pattern of protection favor the income of the poor or segment of the poor and many policies be designed to assist the poor during transition. For more discussion on this issue see below.
Trade liberalization involves reducing discrimination against foreign suppliers of goods and services. This is achieved not simply by eliminating quotas and reducing average tariffs and dispersion across tariff, but also by strengthening trade related institutions in particular customs and standards bodies.

There is ample empirical evidence that trade liberalization and openness to trade increases growth rate of income and output (Sachs Warner, 1995, Dollar, 1992, Edwards, 1993, 1998, Ben David, 1993, Frankel and Romer 1999, among others). Also, the link of overall growth to poverty alleviation has been demonstrated both in cross country analyses (Dollar and Kray, 2000) and for individual countries. Trade liberalization can therefore be expected to help the poor overall given the positive association between openness and growth. The paper tests the hypothesis that whether trade openness promotes growth for fourteen Asian countries included in our sample. The study also examines the impact of economic growth rates, trade openness and inequality of incomes on poverty for the sample of Asian countries included in our study. The economic significance of economic growth rates and trade openness on inequality of incomes is also measured. Cross-country regression is used for analysis.

As important, the political economy of trade policy is such that in practice it is unlikely that the poor have much influence on the pattern of protection that prevails in a country. As trade policy has the effect of redistribution income, this implies that trade policy often acts to tax the poor, and that liberalization can improve income of the poor. However, in the short run liberalization may have negative impact on some of the poor, depending on their sources of incomes and the impact on prices of goods and services the poor consume. Thus there is a need to examine the impact of trade liberalization in some detail to help design policies that protect those among the poor who may be adversely affected, especially in the short run. The paper provides the basic elements of a good trade policy regime. These provide a benchmark against which to judge the prevailing trade regime and provide guidance for the direction of reforms for the poor in future.

It is a fact, however, that despite recurring rounds of trade liberalization under GATT/WTO auspices as well as unilateral reforms, many developing countries have not been able to integrate into the world economy. It is true that no developing economy can develop within its protected wall. Equally, it is also true that no country has developed simply by opening up to foreign trade and capital flows. Domestic policies can be effective and work for the poor if they are undertaken with appropriate mix of trade policies and supporting complementary policies. These complementary policies are identified in the paper. These include among others: macroeconomic and microeconomic stability, a competitive exchange rate, flexible labor markets and competitive markets. External policies like trade restrictions-tariff peaks, tariff escalation, subsidies, even tighter product standards, rule of origin, etc-reduce the ability of developing countries to exploit comparative advantage. This includes a regime that encourages investment and competition including openness to foreign direct investment so that business services are supplied at competitive prices and macroeconomic policies that encourage stable prices and a competitive real exchange rate. Although the poor

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4 For example, Srinivasan (2000) found that for India of the 17 percentage point reduction in the population below the poverty line over some 40 years (between 1951-55 and 1993-94), a 15 percentage point reduction is to be attributed to growth and 2 to redistribute policies. Agricultural and rural growth in a sustained manner is though important.

5 Trade policy instruments include tariff and non tariff barriers, antidumping duties, special custom regimes for exporters, export subsidies, export taxes, export processing zones with trade related institutions like customs clearance, export finance, product standards and access to information on market opportunities and linkages with the Regional Trade Agreements & World Trade Organization. See appendix table I for the effects of alternative trade policies on the welfare of consumers, producers, the government and the nation as a whole. For detailed analysis of the impact of trade policy instruments on the poor see Hoekman, et al (2001).

6 Poverty is not only due to lack of income but also due to lack of capabilities (skill, education), livelihood, security and assets, troubled and unequal gender relations, exhausted and weak body, disregard and abuse by the more powerful, disempowering institutions, lack of radical and comprehensive land reforms, degraded environment, inadequate rural infrastructure, among others. Effective domestic policies for poverty reduction should cover all the above stated issues. Pre-occupation for long with minimal concept of poverty has impaired the capacity of anti-poverty strategies in eradicating poverty. The scope of this paper is however limited.

7 Rodriguez and Rodrik (2000) note that “there is strong association between exports and growth. However, we are unable to be sure whether this association is a consequence of exports causing output growth or of the two being jointly determined by the strength of countries institutions.” Even if we were to accept to this view, the resulting policy
are very diverse, they frequently work in the rural sector and in the urban informal sector. Thus, policies that affect agricultural and labor markets are important complements to trade reform for the poor.

From the perspective of the developing countries, a multi-pronged strategy is required that recognizes that some of the agenda can and should be addressed by developed countries governments for benefits of ordinary people in developing countries. Section IX below deals specifically with this issue.

The paper is organized as follows. Section II discusses the linkages between trade, trade policy and poverty. A framework is however developed to examine the impact of trade liberalization on poverty through its impact on prices (and hence consumption) and income (Production). Section III links trade liberalization with growth, poverty and inequality. Section IV gives empirical evidence on the previous section issue for fourteen Asian countries included in our study. Section V discusses political economy of protection while Section VI is on adjustments costs of trade reform process. Section VII discusses the basic elements of good trade policies (liberal). These can provide benchmark against which judgement can be made of the prevailing trade regime and guidance for future reform process. Section VIII importantly discusses the strategies for poverty reduction via appropriate mix of trade policies and complementary policies. This section also deals with role of safety nets in coping with uncertainty. Section IX discusses developed countries trade and domestic policies which can have significant impact on poor in developing countries. The last section give conclusions.

II. Linking Trade, Trade Policy and Poverty: A Closer Examination

It is useful to consider the linkages that exist between trade, trade policy, and poverty. In a comprehensive paper on this topic, L. Alan Winters (2000) identifies several key linkages, which are reiterated in large part by Bamister and Thugge (2001). Potential links include changes in:

(a) the price and availability of goods;
(b) factor prices, income, and employment;
(c) government transfers influenced by changes in revenue from trade taxes;
(d) the incentive for investment and innovation, which affect long-run economic growth;
(e) external shocks, in particular, changes in the terms of trade;
(f) short-run risk and adjustment costs.

Our paper develops a framework linking trade with poverty using link (a) and (b) (see section II.1 below)

Linkages (b) through (f) tend to be less frequently considered. A study by Levin (2000) focuses on transfers, link (c). A number of economy-wide analyses account for terms of trade effects, link (e). The factor price, income, and employment link (b) may have the greatest relative importance of all the links between trade and poverty. Household survey data as well as casual observation suggest that people tend to be much more heterogeneous with respect to income than with respect to consumption. In order words, two households may have identical commodity budget shares, and same level of income, but entirely different sources of income; one derives all income from agricultural labor, while the other relies on transfers from a relative who works abroad. This point is underscored by the fact that opposition to free trade initiatives often arises from groups with highly specialized income, such as steel workers and sugar farmers in the U.S., to name just two examples.

Within the world of classical trade theory, income effects are key to the famous Stolper-Samuelson theorem, which relates international trade to the domestic distribution of income (Dixit and Norman). By the Heckscher-Ohlin theorem, a country has a comparative advantage in the good that intensively uses the country’s relatively abundant factor. Free trade will increase the relative price of that good and so, by the Stolper-Samuelson theorem, increase the real return of the relatively abundant factor by an even larger prescription is a relatively comprehensive approach to development that includes improvement of a range of institutions along with trade liberalization.
percentage. At the same time, trade will reduce the return to the relatively scarce factor, though to a smaller
degree. As a result, it can be said that changes in commodity prices due to trade liberalization magnify the
resulting changes in factor prices.

The presence of this Magnification Effect (due to Jones, 1965) in theoretical trade models is one
reason why trade economists tend to focus on factor market effects when analyzing trade liberalization and
poverty. Some (e.g. Winters, 2000) have argued that the practical relevance of the Stolper-
Samuleson/Magnification result is negligible, since it rests on so many restrictive assumptions as to be a
special case. Nevertheless, this theoretical insight underscores the importance of considering factor earnings
effects when examining the relationship between trade liberalization and poverty.

Three empirical studies reinforce this view. A general equilibrium analysis of technical change in the
Philippines by Coxhead and Warr (1995) found earnings effects to be substantially more important than
consumption effects. In particular, income effects accounted for two-thirds of poverty alleviation when there
was a rise in agricultural productivity. The nature of the shock is not dissimilar since the adjustments are
transmitted through commodity and factor markets. Harrison, Rutherford, and Tarr (2000) find that factor
price changes drive the incidence of trade liberalization in Turkey. They demonstrate this by employing three
counterfactuals in which the 40 representative households in the analysis (differentiated by rural/urban
orientation and by income level) have (i) identical consumption shares, (ii) identical factor income shares, and
then (iii) identical consumption and factor income shares. Since counterfactual (i) provided nearly identical
results to those generated when the heterogeneity of the 40 households is left intact, the authors conclude that
"clearly, for the poor it is the source of income, not the pattern of expenditure that is driving the adverse
impact relative to the average household" (p. 12).

A general equilibrium analysis by Warr (2001) of Thailand's proposed rice export tax also
suggests that factor earnings effects are the driving force behind welfare and distributional effects. Although
an export tax generates government revenue and lowers the price of rice for consumers, it also lowers the
return to unskilled labor, which is used intensively in the Thai rice industry. Because both the rural and urban
poor derive more than 40 percent of their income from unskilled labor (according to the Thai survey upon
which the stylized households are based), the negative income effect ends up outweighing the consumption
benefit, such that both the rural and urban poor are harmed by the export tax.

Despite the apparent importance of factor earnings effects, they are often not accounted for in
studies that quantify the effects of external shocks on the poor in developing countries. This is particularly the
case for analyses based on detailed household surveys, at least historically. Because abstracting from this
particular linkage may be quite misleading, this paper will pay particular attention to how each analysis deals
with the income side of the story. At the same time, the issue of whether a focus on "factor markets" is the
same as a focus on "income" is not explored in depth here. It can be argued that many of the poor are
subsistence farmers and largely disconnected from markets, or that their well being is largely determined by
their net trade position in a food commodity such as rice. Studies that explore this latter issue in more detail
include Ravallion (1990) and Ravallion and van de Walle (1991). As to the importance of thinking about a
household's income in terms of commodities versus factors, Hertel, Preckel, Cranfield, and Ivanic (2001)
provide interesting survey evidence on this issue for seven developing countries in Figures 1-21 of their
paper.

Further, greater integration with the international economy may reduce poverty through two
routes. The first relates to terms of trade effect (link e above) and the second is through employment effect (link
b above). The two mechanisms usually identified in this context are: first, that reduced industrial protection
should turn terms of trade in favour of agriculture and thereby agricultural (and rural) incomes; and, second,
that this should increase industrial employment, since comparative advantage would favour labour intensive
manufacturing in regions with abundant labour. Sen (2003) notes that reduced protection to industry in South
Asian countries have not been able to raise agricultural terms of trade. He notes that agricultural terms of trade
have actually worsened in Bangladesh, Pakistan and Nepal.
The domestic policies regarding food subsidies and price support in India and Sri-Lanka, however, has raised cereal prices and thus improved terms of trade (cf Table I below).

In the South Asian Region it is services that gained from the shift in the terms of trade against manufacturing, suggesting not only that skill differentials increased but also considerable part of the dividend from reduced tariffs was retained by trade and finance.

Simultaneously, despite overall GDP growth being maintained or slightly improved the growth of agricultural GDP decelerated throughout the region (Table II). This combination of slower output growth in agriculture with deteriorating terms of trade is the major reason why rural incomes in South Asia have tended to lag behind urban incomes. Globalization would have had greater effect if agricultural growth would not have lagged due to falling terms of trade, low technology diffusion and cuts in public investment including investment in rural infrastructure, public irrigation, roads and power.

As far as employment is concerned there is complicated picture among the South Asian countries (Table III below). It is true, for example, that garment exports and employment has expanded rapidly, particularly in Bangladesh and Sri-Lanka, but in both countries this occurred alongside significant decline in employment in other import substituting industries. In Pakistan, manufacturing as a whole experienced a severe slowdown. In India, the 1990s patterns is more complicated with manufacturing employment stagnant in unorganized sector, but a marginal increase in employment in organized firms after reforms. (Tendulkar, 2000). However, data from labor surveys by ILO show that industrial employment in India had declined in the late 1990s (cf Table III).

Table I: Sectoral Price Relatives to Overall GDP Deflator

<table>
<thead>
<tr>
<th>Country</th>
<th>1979 (Ag)</th>
<th>1989 (Ag)</th>
<th>1998 (Ag)</th>
<th>1979 (Man.)</th>
<th>1989 (Man.)</th>
<th>1998 (Man.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bangladesh</td>
<td>100</td>
<td>83.5</td>
<td>85.8</td>
<td>100</td>
<td>101.4</td>
<td>95.4</td>
</tr>
<tr>
<td>India</td>
<td>100</td>
<td>107.0</td>
<td>119.1</td>
<td>100</td>
<td>101.4</td>
<td>90.5</td>
</tr>
<tr>
<td>Nepal</td>
<td>100</td>
<td>82.2</td>
<td>86.6</td>
<td>100</td>
<td>92.7</td>
<td>94.5</td>
</tr>
<tr>
<td>Pakistan</td>
<td>100</td>
<td>116.0</td>
<td>104.0</td>
<td>100</td>
<td>95.7</td>
<td>91</td>
</tr>
<tr>
<td>Sri Lanka</td>
<td>100</td>
<td>109.9</td>
<td>121.0</td>
<td>100</td>
<td>95</td>
<td>81.7</td>
</tr>
</tbody>
</table>


Table II: Growth Rates of Sectoral GDP

<table>
<thead>
<tr>
<th>Country</th>
<th>1980s (Agriculture)</th>
<th>1990s (Agriculture)</th>
<th>1980s (Industry)</th>
<th>1990s (Industry)</th>
<th>1980s (Services)</th>
<th>1990s (Services)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bangladesh</td>
<td>2.7</td>
<td>1.6</td>
<td>4.1</td>
<td>7.3</td>
<td>5.4</td>
<td>5</td>
</tr>
<tr>
<td>India</td>
<td>3.4</td>
<td>3.1</td>
<td>6.6</td>
<td>6.5</td>
<td>6.7</td>
<td>7.5</td>
</tr>
<tr>
<td>Nepal</td>
<td>3.8</td>
<td>2.4</td>
<td>8.5</td>
<td>7.4</td>
<td>3.5</td>
<td>6.3</td>
</tr>
<tr>
<td>Pakistan</td>
<td>4.6</td>
<td>4.4</td>
<td>7.3</td>
<td>4.3</td>
<td>7.2</td>
<td>4.5</td>
</tr>
<tr>
<td>Sri Lanka</td>
<td>3.5</td>
<td>2.1</td>
<td>5</td>
<td>7.1</td>
<td>6.5</td>
<td>5.6</td>
</tr>
</tbody>
</table>


Table III: Sectoral Distribution of Employment

<table>
<thead>
<tr>
<th></th>
<th>Bangladesh</th>
<th>India</th>
<th>Pakistan</th>
<th>Sri Lanka</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agr. Early 80s</td>
<td>57.1</td>
<td>68.7</td>
<td>52.7</td>
<td>45.9</td>
</tr>
<tr>
<td>1990</td>
<td>66.4</td>
<td>62.1</td>
<td>47.5</td>
<td>41.4</td>
</tr>
<tr>
<td>Late 90s</td>
<td>63.2</td>
<td>63.9</td>
<td>50.0</td>
<td>35.1</td>
</tr>
<tr>
<td>Industry Early 80s</td>
<td>12.1</td>
<td>13.8</td>
<td>18.9</td>
<td>18.6</td>
</tr>
<tr>
<td>1990</td>
<td>13.0</td>
<td>15.5</td>
<td>19.1</td>
<td>25.7</td>
</tr>
<tr>
<td>Late 90s</td>
<td>9.6</td>
<td>14.3</td>
<td>16.7</td>
<td>22.4</td>
</tr>
<tr>
<td>Services Early 80s</td>
<td>26.4</td>
<td>17.5</td>
<td>28.4</td>
<td>29.3</td>
</tr>
<tr>
<td>1990</td>
<td>16.2</td>
<td>22.3</td>
<td>33.4</td>
<td>29.6</td>
</tr>
<tr>
<td>Late 90s</td>
<td>25.0</td>
<td>21.8</td>
<td>33.3</td>
<td>38.8</td>
</tr>
</tbody>
</table>

Source: ILO, KLIM data set from Labour Force Surveys
Four main types of methodologies are used for studying the impact of trade liberalization on poverty (Reimer, 2002). These studies are summarized in the appendix tables II through V at the end.

II. Trade Reform and the Poor: A Simple Framework

In order to provide an overview of the various possible effects of a trade policy reform, we follow Hoekman et al. (2001). The model assumes three types of sectors: those producing import-substitute goods (M), exportable goods (X) and non-tradable or home goods (H) as well as two factors of production, labor and capital. The only asset of the poor consists of labor, while the asset owned by non-poor is capital.

The effects of trade policy reform on the poor depend on the consumption and production of the poor in these three sectors. The effects also differ in the short and long run. In the short run, factors of production are immobile, while they are mobile in the long run.

The model assumes that countries have no power to affect world prices of trade goods and that labor markets function efficiently, i.e., nominal and real wages are flexible. Domestic prices of M (Pm) and X (Px) depend on their world price and on policy variables such as exchange rate and import tariffs. On the other hand, the price of H (Ph) is determined fundamentally by domestic supply and demand. In the long-run resource allocation depends on relative prices only, such as Px/Pm and Px/Ph. With three nominal prices, there are only two independent relative prices. For instance, choosing Px/Pm and Px/Ph, the third relative price (Pm/Ph) is obtained by dividing Px/Ph by Px/Pm.8

Trade liberalization (a reduction in tariffs) raises Px/Pm, and labor and capital have an incentive to move from M to X. Whether Pm falls or Px rises makes an enormous difference in the short run and is likely to determine the success of the reform. This is where complementary policies play crucial roles, including exchange rate policy.

Suppose the nominal exchange rate (ER) remains unchanged following a tariff reduction. Then Pm falls while Px remains unchanged, and labor and capital in sector M are hurt in the short run. The groups that are hurt are likely to lobby for a policy reversal. Also, though in the long run both imports and exports increase with a tariff reduction, imports tend to increase faster than exports, with a likely deficit in the balance of trade that may be unsustainable. Both the pressure from short-term losers and the balance of trade problem may result in a failure of the reform. This outcome can be avoided or its effects are mitigated by depreciation of the domestic currency. This raises the price of importables relative to non-tradables, and helps dampen both the increase in import demand and the decline of labor and capital's nominal income in sector M. On the other hand, labor and capital in sector X benefit from the devaluation since Px increases.9

Thus, a policy package of tariff reduction and currency depreciation should make it easier for the factors of production in sector M in the short run and during the transition period, and should dampen the resistance to the reform. In countries with a flexible or floating exchange rate policy, the lower tariff will raise the demand for imports and for foreign exchange. This will raise the price of foreign exchange or lower the value of the domestic currency. In other words, the exchange rate will depreciate (more units of domestic currency per unit of foreign currency). This is similar to a devaluation except that it is determined by the market and not by the monetary authorities.

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8 With three nominal prices, there are only two independent relative prices. For instance, choosing Px/Pm and Px/Ph, the third relative price (Pm/Ph) is obtained by dividing Px/Ph by Px/Pm.

9 A devaluation has no impact on the relative price Px/Pm because both prices increase in the same proportion.
The effect of trade reform on the poor also depends on the second relative price \( P_x/P_h \). That relative price depends not only on policy but also on consumer reaction to the policy since it is determined by supply and demand. \( P_x/P_h \) also rises following a tariff reduction, though less than \( P_x/P_m \).

When the value of the nominal exchange rate cannot be changed, a tariff reduction has no impact on \( P_x \) but lowers \( P_m \). This leads to a shift in consumption from \( H \) and \( X \) to \( M \), and thus to a reduction in \( P_h \) (though less than the reduction in \( P_m \)). This implies an increase in \( P_x/P_h \). With a full devaluation equivalent to the tariff reduction, \( P_m \) remains unchanged and \( P_x \) rises by the magnitude of the depreciation, shifting consumption from \( X \) to \( M \) and \( H \), raising \( P_h \). \( P_x/P_h \) rises by the exact same amount as in the absence of devaluation. Finally, with flexible exchange rates, the depreciation is less than the reduction in the tariff, so \( P_m \) fails, while \( P_x \) rises. Consumption shifts from \( X \) to \( H \) and \( M \), and from \( H \) to \( M \), so the net effect on the demand for \( H \) is ambiguous, as is the effect on \( P_h \). Note, however, that \( P_x/P_h \) rises exactly as in the other two cases.

**Effects on Real Income in the Short Run**

The impact of trade reform on the poor in the short run will critically depend on their location in terms of consumption and production (income), in particular whether they are employed in tradable or nontradable activities. There are three cases to consider that indicate the types of effects that may arise:

i) **Poor employed in the exportable sector.** The relative price of sector \( X \) increases. Thus, in the short run, as factors are not mobile across sectors, the wage rate of labor employed in \( X \) increases. On the consumption side, labor (and the poor, by assumption) would gain as long as they consume either some \( M \) or some \( H \) or both (since their prices fall). Thus, labor's real income must improve; and the higher the proportion the poor spend on \( H \) and \( M \), the larger the gains. Thus, the real income of labor in \( X \) must rise, or remain unchanged in the unlikely circumstance that the poor spend their entire income on the exportable \( X \).

ii) **Poor employed in the importable sector.** If, on the other hand, the poor produce in the importable sector, a tariff reduction would lead to a decline in the wage of the poor (labor) employed in the importable sector. How much they would lose then would depend on the consumption effect: if they spend all their income on importables, the income and consumption effects would cancel out and the net effect of trade liberalization on their real income is zero. However, if they also consume \( X \) and \( H \), they will lose. The expected result is that the poor lose in the short run, but their loss is smaller than the decline in their wages, because of the gains from the effect of trade liberalization on the prices of things they consume.

iii) **Poor produce only in the non-tradable sector.** With the decline in the price of \( H \), the wage rate in that sector also declines by about the same percentage. On the other hand, labor in \( H \) also benefits from the lower cost of consuming \( M \) and \( H \). It is possible that the impact on the real income of the poor rises because the cost of the consumption bundle falls more than their wages. In general, the impact on the real income of labor in \( H \) is ambiguous and depends on the shares of \( M \), \( X \) and \( H \) in the consumption basket, and on the response of the price of \( H \) to trade liberalization. The larger the share of \( M \) in the consumption basket of the poor, the greater the likelihood that they will gain. They must gain if they only consume \( M \), they must lose if they only consume \( X \), and they are unaffected if they only consume \( H \).

These results are summarized in the matrix below(Table IV). Each cell in the matrix represents the "location" of the poor in terms of production and consumption. The first sign represents the effect of trade liberalization on the income of the poor, i.e. the return to their assets (labor). The second sign represents the effect on their real income due to changes in the cost of their consumption basket. Thus a "-" after the "I" sign means that the cost of their consumption basket has fallen following trade liberalization. The sign in parenthesis gives the net effect of changes in their nominal income and cost of their consumption baskets on their real-income in different "locations". To summarize, the best outcome is when the poor are employed primarily in the exportable sector \( X \) and consume importable goods \( M \). And the worst outcome occurs if the poor are primarily employed in sector \( M \) and consume primarily exportable goods \( X \).
Table IV : Location of the poor and effects of trade liberalization in the short-run

<table>
<thead>
<tr>
<th></th>
<th>M</th>
<th>X</th>
<th>H</th>
<th>TOTAL©</th>
</tr>
</thead>
<tbody>
<tr>
<td>M</td>
<td>+/-(+0)</td>
<td>+/-(-)</td>
<td>+/-(-)</td>
<td>+/-(+0)</td>
</tr>
<tr>
<td>X</td>
<td>+/-(+0)</td>
<td>+/-(-)</td>
<td>+/-(+0)</td>
<td>+/-(+0)</td>
</tr>
<tr>
<td>H</td>
<td>+/-(+0)</td>
<td>+/-(-)</td>
<td>+/-(+0)</td>
<td>+/-(+0)</td>
</tr>
<tr>
<td>TOTAL©</td>
<td>+/-(+0)</td>
<td>+/-(-)</td>
<td>+/-(+0)</td>
<td>+/-(+0)</td>
</tr>
</tbody>
</table>

Note: The TOTAL© gives the effect for the poor that receive their income from production in only one sector but their consumption basket includes products from the three sectors.

Total© gives the effect for the poor that consumes products from only one sector but receive their income from the three sectors.

Although the discussion has focused on trade reform involving tariffs, in practice reforms often involve the abolition of quantitative restrictions (QRs) such as import licenses. As discussed above, due to rent-seeking, shifting from QRs to tariffs could significantly help the poor.

Effects in the Long Run

In the long run, labor and capital are mobile across sectors. Then, trade liberalization results in a contraction of sector M and an expansion of sector X. If, as is likely for most low income developing countries, M is on average capital intensive while X is relatively labor intensive, then, in the new output configuration results in an increased demand for labor and a higher nominal wage rate. As the prices of M and H fall, labor's real income rises as well. Consequently, while in the short run some labor employed in M loses from trade liberalization and the impact on labor in H is ambiguous, when factors are mobile, labor in both sectors gain. Of course, for this to apply to all the poor, labor markets need to be integrated. If they are segmented, then some poor could lose, especially if they are employed in the import competing sector and are unable to move. In order to ensure that the poor are better off following trade liberalization, the conditions affecting the functioning of the labor market are therefore critical.

In the analysis presented above, it is assumed that all factors are fully employed and changes in trade policy are reflected in changes in relative factor prices. In practice, and for many of the countries for which Poverty reduction strategies are being prepared, there may be a large supply of unskilled labor in the subsistence sector that can be employed at a fixed real wage in the modern sector. Trade reform may have a positive impact in this case, not through increase in the wages of the unskilled workers but rather by reducing the amount of unemployed or underemployed in the subsistence sector and inducing an expansion of the output of the modern sector. Indeed, following the Indian trade reform in 1991, manufacturing employment increased faster while wages increased slower than before the reform (Winters, 2000). In most cases, one can expect a lasting trade policy reform to have a mixture of quantity and price effects on the labor markets. But no matter what the situation, labor mobility is essential in order ensure movement of workers from the contracting and expanding sectors.

Sector-Specific Issues

The above framework is highly stylized and abstracts from many factors that are important in determining the impact of reform on the poor. Such factors include the existence of imperfect competition and inter-sectoral dependencies. For example, although the agricultural sector is generally made up of small and competitive farms, this is typically not the case for marketing and distribution services. In a number of LDCS, marketing is organized by public agencies, who usually fix producer prices at levels below world prices and do not always change them in response to changes in world prices or in exchange rates. An issue to take into account is the degree to which farmers consume their own output. The greater the share of own consumption, the smaller the impact of the reform on the real income of the farmers. If farmers consume exactly what they produce, then the real income effect of trade reform on them is nil. If farmers are net buyer, it is often argued that in that case farmers lose from an increase in the price of the product they produce. This may well be the case, but one must also consider that in order to be net buyers, they need to obtain additional income. If this
additional income is obtained by working on other farms, real income of these farmers need not decline given that nominal rural wages will tend to increase with the price of farm products (or increase with trade reform in the long run).

III. Trade Liberalization, Growth, Inequality and Poor

Trade is likely to make impact on the poor through higher growth. However, the impact on the poor over a period of years would depend on how steady the growth is and also whether the growth is poor friendly. There are numerous individual country studies over the past three decades which suggest that "trade does seem to create, even sustain higher growth (Bhagwati and Srinivasan, 1999). A country's trade policy is the key link in the transmission of price signals from world markets, in combination with the exchange rate, allow resource allocation consistent with comparative advantage, thereby increasing productivity. An open trade regime and investment regime encourages integration into the global trading environment and the import of diverse and modern technologies that are important for productivity improvements (See Coe, Helpman and Hoornaerster (1997) for evidence and Romer (1994) for a further discussion.). However, it has been argued that from 1960 to mid-1990s in some of the East Asian economies Hong Kong, Korea, Singapore, Taipei, Indonesia, Malaysia and Thailand it was domestic investment boom which sustained the growth process rather than outward oriented policies (Rodrik, 1995). According to him, exports were initially too small in relation to GDP to have a significant effect on aggregate growth. According to Rodrik the boom was the outcome of number of strategic government interventions and favorable initial conditions, such as the presence of an educated labor force and the equality of income and wealth. Many have contested their argument. Bhagwati (1996) opined that even if it originated from sources other than trade policy reform, the investment boom could not have nurtured in a closed economy.

However, for most of developing economies agricultural growth is important and such process should be inclusive so that backward population have opportunities to catch up with pockets which make gains in modernization and capabilities of growth. The strategy of inward-oriented development in which imports are kept to a minimum, proved to be ineffective everywhere, even in most populous countries such as Brazil, China, India and the former Soviet Union (Bajpai and Sachs, 1998).

Trade can affect the poor adversely if economic growth worsens the income distribution. Table V documents the data for India. This table reports worsening of distribution in 1997.

Table V: Distribution of Per-Capita Expenditure in India

<table>
<thead>
<tr>
<th>Year</th>
<th>Lowest 20%</th>
<th>Second 20%</th>
<th>Third 20%</th>
<th>Fourth 20%</th>
<th>Highest 20%</th>
</tr>
</thead>
<tbody>
<tr>
<td>1972</td>
<td>8.5</td>
<td>12.6</td>
<td>16.5</td>
<td>21.8</td>
<td>40.6</td>
</tr>
<tr>
<td>1973</td>
<td>9</td>
<td>13.1</td>
<td>17.2</td>
<td>22.6</td>
<td>38.1</td>
</tr>
<tr>
<td>1977</td>
<td>8.5</td>
<td>12.5</td>
<td>16.4</td>
<td>21.7</td>
<td>40.9</td>
</tr>
<tr>
<td>1983</td>
<td>8.6</td>
<td>12.7</td>
<td>16.5</td>
<td>21.7</td>
<td>40.5</td>
</tr>
<tr>
<td>1987</td>
<td>8.9</td>
<td>12.5</td>
<td>16.3</td>
<td>21.3</td>
<td>41</td>
</tr>
<tr>
<td>1992</td>
<td>8.8</td>
<td>12.5</td>
<td>16.2</td>
<td>21.4</td>
<td>41.1</td>
</tr>
<tr>
<td>1994</td>
<td>9.2</td>
<td>13</td>
<td>16.8</td>
<td>21.7</td>
<td>39.3</td>
</tr>
<tr>
<td>1997</td>
<td>8.1</td>
<td>11.6</td>
<td>15</td>
<td>19.3</td>
<td>46</td>
</tr>
</tbody>
</table>

Source: The figures for 1994 are from World Bank Development indicators on CDROM. All other figures are from NSS, reported in Datt (1999).

However, Deininger-Squire (1996) and the WIDER (2000) data suggests that there is virtually no change in income distribution (defined as share of bottom 40 percent) over twenty five year period, 1972 to 1997. The constancy of the share of the bottom 40% has implication for studies on poverty. It means that the poor have shared equally in whatever economic growth has occurred.
Xavier Sala-I-Martin (2002) using data for 125 countries concludes that poverty rates as well as absolute headcounts declined significantly from 1970 to 1998. Moreover, income inequality also declined, particularly in the last two decades. The author uses nine most common inequality indices in the economic literature to offer the same result: Though inequality remained more or less constant in 1970s, it declined substantially in the 1980s and 1990s. As a result, the shape of the income distribution has changed, from a bimodal distribution with peak of poor people and peak of rich in 1970 to a smoother distribution in 1998, suggesting emergence of world middle class.

Dollar and Kray (2001) defined the poor as the lowest 20 percent of the population, and assumed that poverty falls if the mean income of the bottom 20 percent goes up relative to the mean income of the population. Dollar and Kray's regression analysis, which used data from 80 countries for four decades, indicated that trade openness enhances growth, which affects all income groups proportionately, including the lowest quintile. This result was robust with respect to variation over time, between rich and poor countries, and between crisis and non-crisis periods. However, openness does not have any direct impact on income distribution—either positive or negative—other than through growth.

There are three reasons why growth is crucial to poverty reduction (Panagariya, 2002). First, when the growth engine is nearly 3 percent or more in per-capita terms, it overpowers any negative effects resulting from increased inequality. It gives rise to what Jagdish Bhagwati call the powerful pull-up effect rather than what skeptics call the trickle down effect. This effect rapidly brings the poor into gainful employment. Second, faster growth generates much more resources to finance anti-poverty programs. Finally, growth also improves the ability of the poor to access public services. At low levels of income, most poor people send their children to work. It is only increased incomes that result in the children being able to switch from work to school.

IV. Trade Openness, Growth, Inequality and Poverty: Empirical Evidence from Some Asian Economies

We have run OLS regression on cross-country data for fourteen Asian countries. Econometric software statmost is used for the analysis. The countries included are India, Pakistan, Bangladesh, Nepal, Sri Lanka from South Asia and Indonesia, Malaysia, Philippines, Hong Kong, China, Japan, Singapore, Thailand and South Korea from East Asia. The dependent variable is poverty as measured by population below the international poverty line of $1 per day; the independent factors are average annual trade openness and average annual per-capita GNP/GNP growth rates (1960-97) and measure of inequality—"Gini average" (the average Gini across all observations for the given sample period for each country included in the sample). Gini coefficient in 1990s is also regressed on economic growth rates and trade openness to examine the impact of such factors on income distribution.

Regression analysis results show that trade openness is one of the significant factors in explaining variation in growth of PCGDP for fourteen Asian countries (cf. note in Table VI for the regression result). In turn economic growth process (1960-1997) has significant impact on reducing poverty for these economies in the 1990s (cf note of Table VII for the regression results). However, trade openness becomes insignificant factor in explaining poverty when per-capita growth rates are included as an additional explanatory factor in the regression equation. The effect of trade openness is captured by per-capita growth rates. This suggests that trade openness has impact on poverty via raising economic growth rates (note Table VII).

10 The cross-country regression approach has a number of advantages for understanding the links between trade and poverty. First of all, it enables the use of traditional statistical tools for testing results and hypotheses, as opposed to only making predictions. Secondly, cross-country regression results are typically much more general than the country-specific results of many applied simulation models. Thirdly, cross-country regression may be able to account for some of the dynamic aspects of trade reform that are missed by static simulation models. Given the differing advantages and disadvantages associated with the cross-country regression and simulation approaches, they should probably be viewed as complementary forms of analysis as opposed to substitutes.

11 The Gini coefficient, although not a perfect tool, is relatively good summary indicator of income inequality. For discussion on the merits and drawbacks of using the Gini indicator see Deninger and Squire (1996, pg. 567).
Inequality of income (Average Gini) during the last three decades has no significant impact on poverty for the Asian economies in the 1990s. The t-values are insignificant but surprisingly they come out with negative signs for the sample included in our study suggesting that higher inequality tends to reduce poverty (note Table VII).

Also, neither economic growth nor average trade openness from 1960-1997 are significant factors in explaining inequality of incomes in 1990s as measured by Gini coefficient for the fourteen Asian economies. The signs of the independent factors, however, suggest that higher economic growth rates tend to reduce inequality while higher trade openness tends to increase inequality (see note of Table VII).

In summary, trade openness tends to increase economic growth rates. No significant relationship could be however found in our study between changes in inequality and poverty, and economic growth rates, trade openness and inequality of incomes (see notes on Table VIII).

The above analysis for the fourteen Asian countries confirms the results of other studies (Dollar and Kray, 2001) that raising economic growth rates is the factor which reduces poverty across economies.

### Table VI: Average Trade Openness, Growth of GNP, Per-Capita GNP and Volume of Trade for Some Asian Countries

<table>
<thead>
<tr>
<th>Country</th>
<th>Average Annual Growth Rate of Volume of Trade(1960-1997) Column (1)</th>
<th>Average Annual Growth Rate of GNP(1960-1997) Column(2)</th>
<th>Average Annual Growth Rate of Per-Capita GNP:1960-97 Column(3)</th>
<th>Average Trade Openess (Trade(Exports+Imports)/GNP)in % 1960-1997 Column(4)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bangladesh</td>
<td>5.6</td>
<td>3.879</td>
<td>1.58</td>
<td>26.33</td>
</tr>
<tr>
<td>China</td>
<td>11</td>
<td>7.725</td>
<td>6.215</td>
<td>27.92</td>
</tr>
<tr>
<td>Hong-Kong</td>
<td>8.7</td>
<td>7.977</td>
<td>5.61</td>
<td>280.31</td>
</tr>
<tr>
<td>India</td>
<td>7.9</td>
<td>4.712</td>
<td>2.55</td>
<td>15.43</td>
</tr>
<tr>
<td>Indonesia</td>
<td>8</td>
<td>6.26700</td>
<td>4.24</td>
<td>50.94</td>
</tr>
<tr>
<td>Japan</td>
<td>5.100</td>
<td>5.5100</td>
<td>4.45</td>
<td>18.21</td>
</tr>
<tr>
<td>South Korea</td>
<td>12</td>
<td>7.94100</td>
<td>6.16</td>
<td>74.84</td>
</tr>
<tr>
<td>Malaysia</td>
<td>8.8</td>
<td>7.073</td>
<td>4.37</td>
<td>144.66</td>
</tr>
<tr>
<td>Nepal</td>
<td>6.9</td>
<td>3.465</td>
<td>1.12</td>
<td>34.83</td>
</tr>
<tr>
<td>Pakistan</td>
<td>6.7</td>
<td>5.743</td>
<td>2.78</td>
<td>34.82</td>
</tr>
<tr>
<td>Phillipines</td>
<td>8.3</td>
<td>4.179</td>
<td>1.45</td>
<td>55.41</td>
</tr>
<tr>
<td>Singapore</td>
<td>9.4</td>
<td>8.6</td>
<td>6.43</td>
<td>354.18</td>
</tr>
<tr>
<td>Sri-Lanka</td>
<td>4.1</td>
<td>4.572</td>
<td>2.88</td>
<td>70.40</td>
</tr>
<tr>
<td>Thailand</td>
<td>10</td>
<td>7.516</td>
<td>5.13</td>
<td>70.12</td>
</tr>
</tbody>
</table>

Source: GNP and Per Capita GNP data is in constant 1995 US $. GNP, PCGNP and Trade data from World Bank World Development Indicators in Cdrom for various years.

Note: Regressing Average Annual Growth Rate of GNP(Y-Column 2) on Average Trade Openness(X-Column 4) yields

\[ Y = 3.0545 + 0.5915X \]

\[ t = (5.1640) (2.192) \]

\[ R^2 = 0.28 \]

\[ F = 4.809 \]

### Table VII: Economic Growth, Poverty and Inequality Index for Some Asian Countries

<table>
<thead>
<tr>
<th>Country</th>
<th>Average Annual Growth Rate of GNP(1960-1997)</th>
<th>Average Annual Growth Rate of Per-Capita GNP(1960-1997)</th>
<th>Average Population Below $1 a day in 1990s</th>
<th>Gini Average</th>
<th>Gini Coefficient in % in 1990s</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

12
<table>
<thead>
<tr>
<th>Country</th>
<th>1997) Column (1)</th>
<th>GNP:1960-97 Column (2)</th>
<th>1990s Column(3)</th>
<th>Column(4)</th>
<th>Column(5)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bangladesh</td>
<td>3.879</td>
<td>1.58</td>
<td>29.1</td>
<td>36(1963-86)</td>
<td>33.6</td>
</tr>
<tr>
<td>China</td>
<td>7.725</td>
<td>6.215</td>
<td>18.5</td>
<td>32.68(1980-92)</td>
<td>40.3</td>
</tr>
<tr>
<td>HongKong</td>
<td>7.977</td>
<td>5.61</td>
<td>.1</td>
<td>41.58(1971-91)</td>
<td>42</td>
</tr>
<tr>
<td>India</td>
<td>4.712</td>
<td>2.55</td>
<td>44.2</td>
<td>32.55(1951-92)</td>
<td>37.8</td>
</tr>
<tr>
<td>Indonesia</td>
<td>6.26700</td>
<td>4.24</td>
<td>7.7</td>
<td>33.67(1964-90)</td>
<td>31.7</td>
</tr>
<tr>
<td>Japan</td>
<td>5.5100</td>
<td>4.45</td>
<td>0.1</td>
<td>34.82(1962-90)</td>
<td>24.9</td>
</tr>
<tr>
<td>South Korea</td>
<td>7.94100</td>
<td>6.16</td>
<td>1</td>
<td>34.52(1965-88)</td>
<td>31.6</td>
</tr>
<tr>
<td>Malaysia</td>
<td>7.073</td>
<td>4.37</td>
<td>0.1</td>
<td>50.76(1970-84)</td>
<td>49.2</td>
</tr>
<tr>
<td>Nepal</td>
<td>3.465</td>
<td>1.12</td>
<td>37.7</td>
<td>36(1960-90)</td>
<td>36.7</td>
</tr>
<tr>
<td>Pakistan</td>
<td>5.743</td>
<td>2.78</td>
<td>31</td>
<td>31.55(1969-88)</td>
<td>31.2</td>
</tr>
<tr>
<td>Phillipines</td>
<td>4.179</td>
<td>1.45</td>
<td>49</td>
<td>48.53(1957-85)</td>
<td>46.2</td>
</tr>
<tr>
<td>Singapore</td>
<td>8.6</td>
<td>6.43</td>
<td>.1</td>
<td>40.12(1973-89)</td>
<td>38</td>
</tr>
<tr>
<td>Sri-Lanka</td>
<td>4.572</td>
<td>2.88</td>
<td>6.6</td>
<td>42.50(1953-87)</td>
<td>34.4</td>
</tr>
<tr>
<td>Thailand</td>
<td>7.516</td>
<td>5.13</td>
<td>2</td>
<td>45.48(1962-92)</td>
<td>41.4</td>
</tr>
</tbody>
</table>

Source: GNP and Per Capita GNP data is in constant 1995 US $. GNP and PCGNP data is from World Bank World Development Indicators in Cdrom. for various years. Poverty data (international poverty line) and Gini index (area between Lorenz curve and line of equality) are from the World Bank World Development Indicators 2001. Note: Higher values of Gini index indicate higher levels of inequality. Gini Average data in Column 4 for years indicated in the bracket (Sarel, 1997)

Note:
- Regressing Poverty (Column 3 of Table VII) on Trade Openness (Column 4 in Table VI)
  \[ \text{Poverty} = 24.21 - 0.088 \text{Trade Openness} \]
  \[ R^2 = 0.25 \]
  \[ F = 3.1 \]

- Regressing Poverty (Column 3 of Table VII) on Per-Capita Growth Rates (Column 2 of Table VII) and Trade Openness (Column 4 in Table VI)
  \[ \text{Poverty} = 46.037 - 7.1471 \times \text{PCGNPGR} - 0.019452 \times \text{Tradeopenness} \]
  \[ R^2 = 0.1179 \]
  \[ F = 9.28 \]

- Regressing Poverty (Column 3 of Table VII) on Growth Rates (Column I in Table VII) and Trade Openness (Column 4 in Table VI)
  \[ \text{Poverty} = 61.285 - 7.2272 \times \text{GNPGR} - 0.012184 \times \text{Tradeopenness} \]
  \[ R^2 = 0.533 \]
  \[ F = 6.285 \]

- Regressing Poverty (Column 3 of Table VII) on Per-Capita Growth Rates (Column 2 in Table VII) and Gini Average (Column 4 in Table VII)
  \[ \text{Poverty} = 70.1027 - 7.755 \times \text{PCGNPGR} - 0.61 \times \text{GINI Average} \]
  \[ R^2 = 0.662 \]
Regressing Inequality of Income (Gini) (Column 5 of Table VII) on Growth rate (Column I in Table VII) and Trade Openness (Column 4 in Table VI)

\[
\text{GINI} = 36.04 - 1.78\text{GNPGR} + 0.023\text{Tradeopeness} \\
t-values (4.88) (-.1315) (1.0265) \\
R^2 = 0.06279, F = .7447
\]

Regressing Inequality of Income (Gini) (Column 5 of Table VII) on Per-Capita Growth Rate (Column 2 in Table VII) and Trade Openness (Column 4 in Table VI)

\[
\text{GINI} = 37.533 - 0.78803\text{PCGNPGR} + 0.0228\text{TRADEOPENNESS} \\
t-values (-.691) (1.416) \\
R^2 = 0.154 \\
F = 1.005
\]

V. Political Economy of Protection and the Poor

Even when trade reform will benefit the poor and economy broadly, it will often be resisted. The sectors with the highest protection know they receive concentrated gains from protection and will oppose the reforms. The expansion of exports following reforms is likely to be spread throughout the economy often with new and sometimes unexpected industries arising. It is often difficult to identify future exports and exporters. Thus the employment and income gains from reforms are likely to be diffuse. The same is true for the consumers who will gain from the reform through lower prices and greater choice. The diffuse nature of the gains to consumers and producers explains why those oppose liberalization often are dominant in the political lobbying. Redistributive effects of trade reform can be major factor impeding the launch of welfare improving policy changes (Rodrik, 1998).

Abstracting from fiscal revenue considerations, barriers to trade are typically put in place to protect domestic producers from international competition and usually benefit powerful interest groups, not the poor. Non-tariff barriers are especially pernicious in this regard as they result in the transfer of rents from consumers broadly including the poor, to license holders. Such rents arise because the restriction on imports results in domestic prices that are above the world price. Whereas in case of a tariff the government collects the revenue that is implied by the difference between the world price and tariff inclusive domestic price, in the case of non-tariff barriers this implicit revenue is captured by those who have the right (hold the license) to import. There is evidence that in developing countries such rents are a major source of inefficiency from rent seeking activity (Krueger, 1974). I.e from the spending of real resources to obtain import licenses and influence policy in general. These license holders are often among the wealthiest members of society. Thus, in addition to the inefficiency costs of trade protection, protection will often transfer income toward the rich and away from the poor. Indeed, in percentage terms the effect of trade reform on the incomes of those who currently gain and those who currently lose from reform can easily be a multiple of the economy wide welfare gains from liberalization. This is because trade policy is inherently a redistribute policy.

VI. Adjustments Costs of Trade Liberalization

Trade reform may not be implemented due to political dynamics or a fear of adjustment costs. A recent review of over 50 empirical studies of adjustment costs by Matusz and Tarr (2000) found that all the evidence supports the view that the adjustment costs to the economy are very small in relation to the benefits of trade liberalization. Private adjustments costs can be substantial or very small depending on whether displaced workers were earning rents in their initial position and whether markets function reasonably well. The poor are not likely to be earning rents or they would not be poor. The evidence shows that adjustments costs are typically short term and terminate when workers find a job, while the benefits of trade reform can be expected to grow with the economy. In developing economies, trade liberalization should favor
labor since exports will typically be labor intensive. Significant within-industry shifts typically occur after trade liberalization which tend to minimize the dislocation of factors of production. Moreover, the duration of unemployment for most industries is not high especially where workers were not earning substantial rents in the original job. Finally, in many industries normal labor turnover exceeds dislocation from trade liberalization so that downsizing where necessary could be accomplished without causing much unemployment. Nonetheless, the extreme poor may be incapable of sustaining even short periods with adverse adjustments costs, and there may be selected poor groups that do not gain, while some of those that gain may lose in the short run. In order to minimize adjustment costs and help make trade reform work more effectively for the poor complementary policies are necessary. One important complementary policy for the poor is an efficient social safety net. In general, attaining and sustaining a high rate of economic growth is a key factor in improving outcomes for the poor over time.

VII. Liberal Trade Regimes and their Impact on the Poor

Although trade openness is the common element to all success stories of poverty reduction, there is considerable differences in the models of trade policy that the countries have adopted. The success stories may be grouped into three broad categories:

a) Economy wide Trade Liberalization: Countries like Hong-Kong, Singapore and Chile adopted very liberal trade regimes. These countries avoided non-tariff barriers. Hong-Kong and Singapore practiced free trade (zero tariffs), while Chile employed low uniform tariffs.

b) Protection with offsetting policies for Exporters: Some countries that experienced rapid growth in trade and GDP did so in the context of trade regimes characterized by significant import controls on the domestic market. Korea, Taiwan (China) and Japan (in the early stages) are the main examples. The key to understanding these experiences has to do with looking at all factors that affect competitiveness and incentives to producers to sell in the domestic versus the export market. However, these economies managed an elaborate system that offset the bias against exports. Two of the most important mechanisms used by countries like Korea were duty free access to intermediates used in production for export and capital subsidies to exporters. Also important was that exporters had preferred access to working capital at interest rates that were considerably lower than the interest rates paid by firms supplying the domestic market. This system however required development and enforcement of these policies over a long period required strong political will supported by a broad consensus and highly competent administration (Westphal and Kim, 1977, Rhee, Rosslarson and Pursell (1984). It is difficulty to apply the development model of Korea to other countries where managing such an elaborate system would become difficult.

c) Protection with Export Processing Zones (EPZ): In a protected trade regime that discourages exports, EPZs may be used to partly place exporters on a footing equal to producers for domestic market. While very many countries have introduced EPZs, few have actually succeeded in stimulating exports substantially and on a sustainable basis through this mechanism. The experience of Mauritius in the last 15 years of the 20th century, however provides an experience of a country that expanded exports significantly and reduced poverty through EPZs in a trade regime that was not liberal overall.

In practice, the most practical way of stimulating trade and opening up to the international economy is through liberal trade regimes, rather than through a complex structure of protection and export incentives. The basic elements of a good trade policy regime involve predictability, transparency and uniformity. A liberal trade regime provides guidance for the direction of reforms.

As a practical matter, duty drawback mechanisms are ineffective in most of the developing economies. Thus, a regime with high protection will diminish exports and growth. Moreover, differentiated structures of protection and subsidization creates opportunities for elite's and powerful producers groups to capture trade policy for their special interests. This lobbying for protection and subsidies engenders corruption and inefficiencies which, in end hurt the poor.
These problems can be avoided by simple and transparent protection regimes of low uniform tariffs. Most low income countries have differentiated tariff structures with significant tariff escalation. The main reason include fiscal objectives, import substitution motivations combined with the political weight of vested interests. Tariff escalation is a problem since it affords high effective protection to final goods producers, thereby discouraging the development of intermediate industries. Exporting of intermediate products is an important way for developing countries to participate in modern global economy, but these activities are discouraged by the escalation of tariffs.

A uniform tariff conveys a number of advantages (Tarr, 2001), the most important of which is that if the tariff is uniform, the gains to industry lobbying are much smaller (and may be negative), creating a kind of free rider problem for the lobbying industry and dramatically reduces the incentive to lobby for protection. A uniform tariff greatly simplifies customs operations, eliminates a number of ways used to avoid paying the tariff and should help reduce corruption and save on scarce administrative resources. There will also be a direct saving of resources from reduced lobbying for higher protection and an associated gain from encouraging scarce entrepreneurial talent to be employed more productively in the creation of better and cheaper products. Overall, the level of protection is likely to be lower as the incentive to lobby for higher tariffs is attenuated. Many of these factors are pro-poor as they greatly reduce the scope for the exercise of power and rent seeking.

Uniformity does not imply that there can be no exemptions for products that are deemed to be of great social importance such as essential medicines. However, care should be taken that such exceptions target only products that are critical to attain social and public health objectives.

If tariffs are important for revenue generation, uniformity implies that the overall level of the tariff should be such as to generate the revenue required. However, some products such as alcohol and tobacco products may be subjected to high duties to raise revenue as long as equivalent excise taxes are imposed on domestic production.

The more dispersion are the tariffs the greater the difference in treatment of different sectors and segments of society is likely to be and the greater the urgency of reforms. Dispersion often generated by exemptions and tariff escalation will lead to high effective rates of protection and is likely to entail significant inefficiencies.

Many countries tend to use anti-dumping as a safeguard instrument. India, for example is the largest perpetrator of anti-dumping duties (Mathur, 2001a). This is not be advised. Anti-dumping is trade policy instrument that allows duties to be imposed on imports that are sold for less than what is charged in the exporters home market. That is, it can invoke to offset price discrimination across markets. Such differential pricing usually reflects economic conditions and is not detrimental to welfare. As antidumping is an instrument that is easily captured by industries to raise the price of imports, and requires the use of scarce administrative resources, it is counterproductive to economic development and poverty reduction. If there is need to raise protection because imports injure domestic industry it is preferable to use WTO consistent safeguard actions as they allow the country to consider the impact of taking action on the economy as a whole, including the poor as opposed to simply the industry that confronts import competition.  

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12 Chile which has had a uniform tariff since 1979, is a dramatic case in point. In Chile in 1998, the legislature considered a progressive reduction of the uniform tariff from 11 to 6 percent, to be accompanied by one percent per year reductions through 2003. Chilean industry groups supported a reduction of the tariff, which passed the Chilean legislature. Evidently, uniform tariffs led industrialists to conclude that a reduction was in their collective interest.

13 Under the WTO, safeguards also require compensation to be offered to exporting countries if the action lasts more than 3 years. This is useful mechanism to ensure that protection is temporary. See Hoekman and Kostecki (2001) for more detailed discussion.
The best policy option from a development perspective in this area is to have no anti-dumping instrument. If anti-dumping procedures are adopted efforts should be made to establish procedures that allow for the national interest and the impact on the poor to be taken into account prior to the imposition of an anti-dumping duty.

In addition to the commercial policy instruments there are number of trade related institutions that can have important implications for the impact of trade reforms.

Custom clearance efficiency and transparency is an important determinant of the costs associated with trade. Burdensome and redundant procedures-red tape-can give rise to substantial uncertainty and are often associated with rent seeking and corruption. Minimizing discretion by simplifying as much as possible the clearance process, including through adoption of international standards for classification of goods, elimination of most exemptions and providing officials with training and appropriate information technology are important dimensions of trade reform. An efficient customs clearance process with little red tape that ensures tariff free access to intermediate imports for exporters is required.

Non-tariff barriers include mechanisms such as quotas, licenses and monopoly rights to import. When these mechanisms are in place for reasons other than for health or safety they are the most pernicious of trade barriers in terms of their harm to growth and poverty alleviation. Partly this is because non-tariff barriers encourage competing interests to lobby to obtain the valuable licenses to import. This competing lobbying activity (known as rent seeking) wastes valuable resources. Non-tariff barriers also lack transparency, and thereby may allow protection to go relatively unnoticed. As discussed above, the political economy of protection suggest that import controls (and then sometimes export control) are usually put in place to benefit powerful interest groups, not to help the poor.

The overall analysis of the trade regime should yield a preliminary judgement on the desirability of trade reform. Analysis of both the impact of the status quo policy and the alternative reforms on the poor is important. The tools to undertake such an analysis can be constructed for most economies; the basic requirements include detailed data on imports and exports, the trade barriers that apply to those goods, household survey information on the consumption pattern of the poor and the sources of their income and data on the basic structure of the economy.

This judgement should be reviewed in the light of the potential short term effects of trade reform on the poor. If there are possible negative affects, it is important to identify the relevant products and sectors early on, in order to help design arrangements for dealing with adverse impacts of the reform and develop strategies for developing consensus in their support.

It might appear tempting to design a pro-poor trade reform by identifying sectors that are important to the poor—either on consumption side or the income side and signaling out these sectors for differentiated cuts in protection. There are at least two problems with this approach. One is fundamental and the others relate to political economy. The fundamental problem is that trade policy is a single instrument and a fundamental principle of economic policy formulation is that a single instrument cannot be expected to address multiple targets. The political economy problem is that once a highly differentiated trade regime is adopted, it is essentially impossible to stop special interests building a case that their sector deserves special treatment for one reason or the other.

A better approach is to focus on developing two different sets of instruments—one trade policy, focused on providing the incentives appropriate for efficient production and use of goods and services and another distributional policy, focused on alleviating poverty. A set of distributional instruments will necessarily have a much wider range of dimensions, including investments in expanding access to education, the provision of safety nets, and a range of infrastructure investments needed to allow people in poorer regions access to the markets and other amenities enjoyed by relatively disadvantaged people.

VIII. Guidelines for Poverty Reduction
As discussed above the effect of trade reform on poverty in the short run hinges on the impact on incomes. The effects in the long run will depend on the growth process which in turn will depend on a variety of complementary policies and institutions. The key complementary policies are 1) macroeconomic, microeconomic and especially exchange rate policy; 2) the operation of the market for labor, since the poor are often concentrated in the informal sector; 3) the operation of the markets in agriculture—which is both source of income and accounts for large portion of the household expenditures of the poor; 4) access of the poor to trade related services—for example credit, marketing, transportation and 5) access to safety nets.

VIII.1 Complementary Policies to Trade Reform

1) Macroeconomic, Microeconomic and Exchange Rate Policies

To have sustained growth and contribute to an efficient allocation of resources, trade liberalization must be supported by a stable macroeconomic and microeconomic environment and competitive real exchange rate. Trade reform works the transmission of price signals. These are concealed in a regime of high and variable inflation. Thus, macro-stability is a key complementary policy.

In addition to stable macroeconomic environment it is necessary that internal mainsprings of growth process are present (micro level stability). These are competent governance, technological and managerial innovations, impartial judiciary, efficient legal system and improvement in the quality of human resources. The basic point is that international trading opportunities cannot benefit a given country in the absence of favorable internal factors relating to society, polity and economy.

A competitive real exchange rate is also crucial to create conditions for continued support of liberal trade policies. With an overvalued exchange rate, import competing industries are at a competitive disadvantage, and this generates political pressures for protection that are difficult to withstand in the face of rising trade deficits and declining foreign exchange reserves (Shatz and Tarr, 2001 provide a more general treatment).

Initially, trade liberalization is likely to lead to a trade deficit because the rise in imports tends to occur faster than the export supply response. A depreciation of the real exchange rate will help to restore a balance between exports and imports since it makes imports more expensive and exports are more profitable in domestic currency. Under a flexible exchange rate regime, the real exchange rate will adjust through market forces. Under a fixed exchange rate regime, significant trade reform should be accompanied by a devaluation of the domestic currency. The required depreciation is larger the greater the extent of trade liberalization and the greater the lags in the supply response (see section above).

VIII.2 Issues in Tax Policies and Tariff Reform

Policy makers in low-income countries may be concerned that reform might substantially reduce government revenue, yielding larger fiscal deficits and inducing inflation. While these concerns have some merit, trade reform need not entail diminished revenues. Many countries have implemented successful trade reform programs without significant loss of revenue. For example, in the 1990s, Ghana, Kenya, Senegal, Malawi and India implemented trade reforms without a significant loss in revenue as a percent of GDP (Ebrill et al., 1999 and Ahluwalia, 1999 for India).

Perhaps the foremost reason why trade reform need not lead to a loss of revenue is that developing countries have traditionally relied heavily on quantitative restrictions of imports. Government revenue increases when quantitative restrictions are converted into tariffs. Reduction of tariffs should start with the highest ones. Also, where tariff rates are very high initially, they will generate little or no revenue. Reductions of the tariffs to more moderate levels will increase imports and thus revenues, as the incentive to smuggle is

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14 The relative price of tradable to non-tradable (or home) goods, Pt/Ph, is typically referred to as the real exchange rate (RER) and is used as a measure of the competitiveness of the tradable sector. The reason is that several of the determinants of Ph (such as wages) affect the production costs of tradables. Oversimplifying for purposes of illustration, suppose a government runs a fiscal deficit and finances it by printing money. The resulting inflation raises prices in the non-tradable sector. If tradable prices do not increase by the same amount, inflation lowers Pt/Ph and thus the real exchange rate, thereby reducing the competitiveness of the tradable sector.
reduced. Moreover, exemptions often are a significant source of revenue loss and their reduction increases tariff collections. Finally, an exchange rate depreciation, which should accompany significant tariff reduction, will raise the local currency value of imports and thus tariff revenue.

**Box1. Summary of Revenue Impacts of Trade Liberalization**

<table>
<thead>
<tr>
<th>Trade Reform</th>
<th>Expected Revenue Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>Replace NTBs with tariffs</td>
<td>Positive</td>
</tr>
<tr>
<td>Eliminate tariff exemptions</td>
<td>Positive</td>
</tr>
<tr>
<td>Eliminate trade-related subsidies</td>
<td>Positive</td>
</tr>
<tr>
<td>Reduce tariff dispersion</td>
<td>Ambiguous/Positive</td>
</tr>
<tr>
<td>Eliminate state trading monopolies</td>
<td>Ambiguous/Positive</td>
</tr>
<tr>
<td>Reduce high average tariffs</td>
<td>Ambiguous</td>
</tr>
<tr>
<td>Lower maximum tariff</td>
<td>Ambiguous</td>
</tr>
<tr>
<td>Reduce moderate or low average tariffs</td>
<td>Negative</td>
</tr>
<tr>
<td>Eliminate export taxes</td>
<td>Ambiguous/ Negative</td>
</tr>
</tbody>
</table>

*Source: Sharer et al. (1998).*

When tariffs rates are already uniform and in the moderate to low range, then further tariff reduction is likely to result in revenue loss. Only in this latter case does revenue represent a genuine problem for trade liberalization. Alternate broad-based and nondiscriminatory revenue sources should be sought, and trade reform sequenced to coincide with the availability of these alternate revenue sources. Such alternative, broad based tax instruments will be more efficient (much less distorting) than trade taxes. For many products, such as alcohol, tobacco and petroleum, collection of taxes on domestic production as well as imports will have very low additional administrative costs, and will reduce the incentives to develop inefficient import-substituting firms. Even very poor countries such as Cambodia have been able to introduce broad-based consumption taxes that reduce dependence on customs duties, and raise much-needed revenues for development expenditures.

**VIII.3) Labor and other Factor Markets**

Where labor market flexibility is low, reforms to improve the operation of labor markets should accompany trade reforms in order to enhance labor mobility. For instance, in Peru in the 1980s, a trade reform failed to generate any supply response because of severe labor market rigidities. Labor legislation prohibited firms to shed labor, close plants or even change activities. This led to many bankruptcies, contributed to foreign exchange and financial crises and a failure of the reform (Nogues, 1991).

The poor are often concentrated in the informal sector and reforms which increase labor mobility in the formal sector can have a powerful effect on reducing poverty when combined with trade liberalization by opening up additional jobs in the formal sector for workers previously in the informal sector. This was the case in Panama, for example, see World Bank (1999). The mutually supportive relations between trade, macroeconomic, labor market and other policies may then serve to increase the credibility and payoffs of each.

Property rights for land (and water) are also important in coping with needed adjustments or taking advantage of export opportunities that may be beneficial to the poor. For example, Egypt could produce labor-intensive crops (fruits and vegetables) for export to the EU, as is done in other Mediterranean countries, and the rural poor could gain significantly (Barres and Vaides, 2000). But because of the lack of existence of land (and water) markets, Egypt has not taken advantage of this opportunity and continues to grow traditional crops.
In manufacturing, prices paid by poor consumers are affected by competitive conditions in the country. It is possible to increase the competitiveness of markets for manufactured goods in developing countries, that is, reduce the markup over the cost of production by lowering external barriers to international competition as well as by reducing government imposed barriers to entry against domestic firms. Both are important in providing goods to poor consumers with low monopoly markups. In small countries an open trade regime is especially crucial, since there are fewer domestic firms contesting the market. In large countries, administrative and legal barriers against domestic entry are relatively more important than in small countries since there are more potential entrants blocked by domestic barriers to entry (Hoekman, Kee and Olarreaga, 2001).

An important sector in the context of trade reform is distribution. If there are barriers to entry into distribution, those who control this sector may be the primary beneficiaries of trade liberalization, pocketing much of what used to be collected as tariff revenue and not passing the tariff cut on to consumers. In agriculture, parastatal marketing boards often strongly restrict competition for the products of poor farmers and restrain their incomes. Elimination of the these boards, while paying attention during the transition that key ancillary services like transportation and credit that these parasatals may be providing continue to be supplied, should benefit the poor. But competition among private firms is also important. Thus, exclusive government licenses to the private sector should also be avoided so that poor farmers do not have to pay excessive prices for their inputs or receive monopsonistically depressed prices for their outputs. The prescription applies to import monopolies and exclusive distribution arrangements.

VIII.4) Foreign Direct Investments and Intellectual Property Rights

FDI is an important channel of technology transfer across national boundaries. Multinational corporations account for a large share of the world’s research and development, and more than 80 percent of royalty payments for technology transfers flow from subsidiaries of foreign companies to their parent firms (UNCTAD 1997). Econometric evidence tends to support the view that developing countries receiving FDI perform better in terms of productivity than their counterparts that are not FDI recipients.

What matters from a poverty reduction perspective is whether and to what extent FDI has a positive effect on the incomes (employment) of the poor and on the prices of what they consume. As far as employment is concerned, it is important from a short run viewpoint that FDI involve labor-intensive production and result in the transfer of skills through training. Improvements in communications, transport and information technology, together with global trade policy reforms, have made it much more attractive to companies to engage in so-called outsourcing and processing trade, where the labor-intensive parts of production are located in developing countries. In the 1970s such FDI focused in particular on textiles, more recently it has also included the electronics and auto parts sectors. Such investment can be an important catalyst for the creation of low skilled employment-as exemplified by Mexico and South-East Asian economies.

Given the importance of low trade costs for such activity, policy makers should avoid offering trade protection to foreign investors, since this will attract the ‘wrong’ type of investment from an employment creation perspective by depriving the host country of the benefits from participation in international production and distribution networks. Protection may also result in losses to the host economy by providing rents to foreign investors at the expense of domestic consumers. Lall and Streeten (1977:172-174) studied some 90 foreign investments, using a cost-benefit methodology, and found that more than 33% reduced national income; this was mainly due to excessive tariff protection that allowed high cost firms to produce for the local market at very high prices, even though they could have been imported much more cheaply. Encarnation and Wells (1986) found that between 25-45% of 50 projects studied (depending on analytical assumptions) reduced national income; again the main culprit was high protection.

Intellectual property right protection can be important in attracting FDI in sectors that rely extensively on patent protection, helping to tilt the focus of investment projects toward manufacturing and away from distribution (Smarzynska, 2000). Intellectual property protection is of direct importance to the poor in
developing countries, especially for products and sectors that rely heavily on traditional knowledge and culture, including activities such as writing and performing music (Mathur, 2003). The absence of effective protection of intangible assets and intellectual property can have very adverse consequences for the poor that are either producers (e.g., handicrafts) or the beneficiaries of assets that have been built up over time (e.g., traditional designs, plant varieties). The costs of intellectual property rights include the price increasing effect of protection. This can have harmful effects on the poor by preventing access to drugs and keeping prices far above the cost of production. As discussed at greater length by Maskus (2001), intellectual property right protection must be complemented by trade and competition policy instruments that serve to offset the market power granted to right holders.

VIII.5) Sector Issues

In many developing countries the manufacturing sector has been most protected as a means of promoting industrialization and longer term development. A great deal of the analysis regarding trade reform in earlier sections focuses implicitly on reforms in that sector. However, trade reforms in agriculture and services provide significant opportunities for employment and incomes of the poor as well as reductions in the costs of their consumption.

VIII.5.1) The Importance of agriculture

Because the poor in developing countries are often located in rural areas and employed in agriculture, how trade reform affects agriculture will critically affect its overall impact on poverty alleviation. Sen (2003, pg 478) reports that "In case of India almost all agricultural production is carried out in rural areas and agriculture accounts for about 55 percent of rural GDP. Currently, about 35 percent of India's non agricultural GDP is also produced in rural areas, employing almost 25 percent of the rural work force or about 45 percent of all non-agricultural workers in the country. Integration with the world economy will benefit the vast majority of India's population only if it is associated with accelerated growth of rural incomes."

Higher investments and rural infrastructure is a necessary condition for increasing agricultural growth. The governments role seems to be much important for not only raising public investments but also inducing private investment.

Agricultural importables (mainly staples) are typically protected, while agricultural exportables are often subject to export taxes. Agriculture as a whole has tended to be taxed indirectly through protection of the manufacturing sector, overvaluation of the real exchange rate (Schiff and Vaides, 1992, ), and the operation of marketing boards. Trade reform, which should cover both agriculture and manufacturing, will therefore typically raise agriculture's domestic terms of trade and help the rural poor. The same is true for improved macroeconomic and fiscal policies that result in a real exchange rate that is closer to a sustainable equilibrium. In other words, the rural poor will generally benefit from trade reform, even when it includes agriculture.

Some of the rural poor, however, may lose. Foremost among these to consider are those who are employed or produce in sectors that are highly protected, low-productivity sectors. Examples include maize in Mexico, wheat in Morocco, Cotton farmers in India and various import-competing crops in many developing countries. If the mobility of these rural poor is limited, then a reduction in the tariffs in that sector is likely to hurt that sub-group, especially in the short term, as prices of their output fall. Over time these losses can be minimized as farmers change their output mix and produce more of the crops whose prices did not fall. In a study on the Northeast of Brazil, one of the world's poorer regions, switching to more profitable crops after trade liberalization and devaluation greatly reduced negative real income effects for small farmers (Lopez and Romano, 2000). Thus, trade liberalization accompanied by devaluation (see section II.1) can help dampen the short-term effect on incomes of the rural poor.

The ability to shift to the production of new products (possibly exportables whose price has risen) may depend importantly on necessary complementary reforms. Shifting crops may require restructured land
arrangements, additional capital or access to water. If markets for these factors are poorly developed, farmers may be unable to take advantage of new opportunities. Thus, complementary reforms that focus on these markets may be necessary to help poor farmers. Given that poor farmers may be hurt in the short run, compensation policies such as improving rural infrastructure, research and development, and creating educational opportunities for children are important. These options will almost always be better than protection, as only if farmer's returns outside agriculture are increased will poverty be reduced in the longer term. As far as trade reform itself is concerned, one option to consider is to phase down tariffs in the vulnerable sector gradually following a pre-announced schedule. This is what was agreed for the maize sector in the NAFTA negotiations between the US and Mexico. Experience shows that unless a schedule of tariff reductions is pre-announced and actually implemented from the start, reforms with long transition periods (typically over five years) lack credibility and provide lobbyists with time to defeat reform.

VIII.5.2) Fluctuating world prices. The liberalization of a country's agricultural trade policies means not only adjusting to lower or higher general price levels prevailing in international markets, but also to the fluctuations in world prices of agricultural commodities. In many countries, the impact of these fluctuations on the domestic economy is a major motivation for interventions that de-link domestic and international markets. Export and import controls, government controlled parastatals or marketing boards, and variable tariffs all reduce the size of the international market in which the commodity is freely traded and thus increase the sensitivity of international prices to erogenous shocks such as bumper harvests and crop failures. For example, international trade in rice is equivalent to only 5 percent of world production. More important, the extent to which some of the largest producing and consuming countries (e.g. China, India, Indonesia, and Brazil) import or export is subject to discretionary government controls. Policies by these countries aimed at stabilizing domestic prices can have a very large impact on prices in the narrow international market, in turn leading to pressures to maintain or increase border interventions elsewhere. For this reason, all countries have a common interest in reducing the instability of world prices by opening their domestic markets and removing policies which de-link domestic from world markets.

Although policies to open domestic markets, especially in large countries-both developed and developing\footnote{For example, if the markets for rice, wheat, sugar, milk products, sugar and cotton were open in China and India, that would greatly expand the size of the world market for these products and reduce the impact of various erogenous shocks (Tyers and Anderson, 1992).} have the potential to substantially reduce the amplitude of fluctuations in world commodity prices, these prices are inherently less stable than the world prices of manufactured goods and the prices of services\footnote{Abstracting from fragmented world markets, commodity price instability is associated with inelastic demand, lags in supply adjustments due to seasonal production, weather conditions etc.}. In any case, most individual small countries cannot on their own have any perceptible effect on the level or volatility of world commodity prices, and need to find the best way to live with the price swings that they must by and large take as a given'. Consequently, trade liberalization in any individual country, if fully implemented, will often (but by no means always) mean that domestic commodity prices, including prices at farm level, will become more unstable\footnote{Prices in domestic commodity markets (e.g. for sorghum and maize in inland areas of Africa and South Asia) that are disconnected from world markets by a combination of high domestic and marketing costs and/or restrictive trade policies, may fluctuate more than world prices both within and across seasons. Linking them to world markets by opening imports could increase price stability, e.g., by cutting off price peaks resulting from crop failures. The use of measures to control imports and exports in ways that do not adjust flexibly to domestic market conditions may also lead to higher domestic price instability than in world markets, or worse still, to costly and wasteful accumulations of excess stocks held by government marketing organizations. A significant portion of such stocks often are lost to pests and weather.}.

income groups that are hurt with actions that increase the ability of farmers and workers to switch between crops, complemented with welfare and workfare programs until a reasonable degree of flexibility and responsiveness is achieved.

In considering price stabilizing policies, it important to recognize that once such policies are introduced, it is very difficult if not impossible to stop the politically powerful from using them to shift the average price. The commodity marketing boards and parastatal monopolies in developing countries discussed previously often stabilized prices at very low levels relative to world prices, implying heavy taxation of small farmers and resource transfers to governments and local processing interests. This may seriously retard the growth of economically efficient rural industries and slow down the contribution that their expansion could make to the alleviation of rural poverty. For import substitutes, the political economy forces generally point in the opposite direction, and intervention originally justified in the name of price stabilization (e.g. price band schemes introduced in Latin America during the 1990s) very often become de facto price support schemes that develop a momentum of their own.

**VIII.5.3) Developed Countries and Agricultural Policies**

Export subsidies on products such as meat, dairy products and grains, depress prices on world markets, and thus also on the domestic markets of developing countries. Some countries such as Japan maintain very high barriers against imports of wheat, rice and other agricultural commodities. As mentioned, such policies contribute to world market price instability, constrain exports and increase import competition. While most of the poorest developing countries produce temperate zone- products such as fruits, nuts and vegetables that do not compete with subsidized and protected meat, milk and grains, for some low-income countries (e.g., meat production in Mali or Burkina Faso), and, of course, for middle income developing countries such as Argentina or Brazil, EU export subsidies are a major factor constraining agricultural exports.

What is the appropriate response to such foreign policies? Insofar as prices are forced downward, consumers tend to gain. The impact of the policies on producers depends on whether farmers compete with subsidized imports, whether the subsidies vary significantly over time, whether farmers are on average net buyers or net sellers of the commodities concerned, the relative importance of subsistence farming, and the relative sizes of the rural and urban poor population. If there is no domestic production of the agricultural products concerned, there is no need for intervention, as subsidized prices are beneficial to consumers. Matters are more complex in instances where there is domestic production of the commodities concerned. It is important to note that households that are net buyers of the products will gain from subsidies, while subsistence farmers will be unaffected. The urban poor will generally gain insofar as the subsidies lower prices. Thus, what matters from a policy point of view is whether the gains to the non-rural poor are larger than the losses incurred by rural households that are net sellers. To answer this question requires collecting information on the number of households that are engaged in subsistence production, those that are net buyers, and those that are net sellers. Another important factor concerns the distribution of the labor force engaged in production in farms that are net sellers. Those that own the land may lose from lower prices, but the extent of such losses are bounded (as they may shift to subsistence farming). While this can imply a severe reduction in real incomes, landless laborers working for net sellers confront the most severe potential loss in that they may lose their source of income without having subsistence farming to fall back on.

In cases of agricultural sectors with significant numbers of households that are net sellers of commodities that are subsidized by OECD countries, it is sometimes argued that higher tariffs on agricultural imports are appropriate. This increases the domestic price, thus helping to offset the effect of the subsidy and allowing domestic producers to compete. This is akin to ‘countervailing’ the effect of foreign policies. From the viewpoint of efficiency, when subsidies are permanent, such a policy moves the structure of protection away from uniformity, and distorts producer and consumer choices. However, given the long-lasting nature of intervention by high-income countries, countries regard this as part of the external environment. The
implication is that importing country governments impose countervailing tariffs. With the Uruguay Round, multilateral disciplines strengthened, and it is clear that there will be significant pressure on the EU and other high-income countries to substantially reduce protection and gradually eliminate export subsidies in the coming decade. Thus, over time the external environment is likely to become less distorted. Insofar as developing countries currently maintain above average tariffs on the relevant agricultural imports, there is then a potential case not to reduce these as much or as rapidly as tariffs on other products as part of an overall trade policy reform. The reason is that liberalization could give rise to inefficient reallocation of resources if there are adjustment costs associated with the downsizing of agricultural production following liberalization and the subsequent expansion as the export subsidies and OECD protection are reduced.

In practice, however, OECD liberalization can be expected to take a long time, witness efforts to do so over the past 30 years. Account should also be taken of the risk that protection may become permanent even if the foreign protection and export subsidies come off, and, more fundamentally, that trade intervention is a second best approach to dealing with the problem. The best policy is to push for the phase-out of export subsidies and OECD protection of agriculture in the WTO context, and ensure that any assistance provided to domestic farmers is designed primarily to target domestic poverty concerns. More generally, whether or not foreign countries intervene in agricultural markets should not be the focus of policy. Instead, the focus should be on determining how large is the population that may lose from trade liberalization in the short run, that is, net sellers of protected commodities.

While trade policy is not the appropriate long-term instrument through which to pursue rural poverty reduction objectives, it can play a role in three situations. The first is to deal with temporary import surges that have a significant negative impact on the livelihood of poor farmers. In such cases a special safeguard mechanism can be considered, under which temporary protection can be sought if domestic prices of products that are of importance to the poor in terms of production and employment fall significantly in a short period of time due to imports. Whether these are subsidized does not matter; what matters is that there is a serious detrimental impact on poor farmers. The general design of any such safeguard mechanism should conform to the principles set out in section above. The second situation is if the overall policy regime discriminates against agriculture, i.e., policy favors industrial production and/or urban consumers of food. While this can be used as an argument in favor of higher protection for poor farmers in low-income countries, the appropriate policy is instead lowering protection for industry and offsetting any prevailing policy bias against the rural poor. In contexts where this cannot be achieved, or where it is pursued gradually, there may be a case for maintaining higher rates of protection on agricultural commodities on second-best grounds. Third, in situations where complementary policies (safety nets) are inadequate and a significant number of the poor are engaged in production of commodities that are sold domestically, agricultural trade policy reform should be gradual, involving a pre-announced schedule of tariff reductions.

Potential negative impacts of reform in this sector on net sellers can be attenuated by accompanying the trade reform with a devaluation and implementing complementary reforms in markets for land, credit and water to enable farmers to take advantage of the new opportunities, adjust to changed incentives and benefit from the reform. Government has an important role to play in fostering agricultural and rural development, including through encouraging absorption of new technologies, education and providing infrastructure. Such complementary policies are crucial in that they can be critical in addressing the needs of the rural poor. In all cases there is a need for careful analysis of the prevailing situation before reforms are pursued. This should focus on identifying the balance between rural net buyers, rural net sellers and the urban poor as well as the importance of subsistence farming. For the least developed countries, a key challenge is meeting the standards and rule of origin requirements imposed under preferential arrangements granting duty-free access. By allowing goods produced in these countries to receive high prices in major export markets, but goods to be imported at world

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18 A key issue is whether the export subsidies are permanent or transitory. If the subsidies are permanent, it will be in the country’s interest to ignore the subsidy for policy purposes because the economic costs of protection to the economy outweigh the benefits to domestic producers. If the foreign subsidy is permanent, then the national interest is unaffected by whether the price is low because of foreign comparative advantage or export subsidies. If the subsidies are transitory (and there are capital market or other imperfections), there is a case for temporary protection for those tariff lines subject to competition from subsidized exports so that adjustment costs can be minimized
prices, they allow the poorest countries a double benefit. Preferential access provides a positive incentive to produce these products for sale in the highly protected markets of the OECD countries that grant such access. In effect, the preferential access provides protection to LDC producers in the developed country markets that offer preferential access. As these markets are both vastly larger than their own, and offer very inflated prices due to protection, this may allow farmers in LDCs to increase their incomes by producing more of these products for export.\footnote{19}

VIII.6) Services

Services—which include activities such as transport of goods and people, financial services (banking, insurance) telecommunications, distribution, tourism (hotels and restaurants), construction, as well as education and health care, account for a rising portion of GDP, in even in the lowest-income countries. The importance of an efficient service sector goes beyond the contribution of the services sector itself to the balance of payments, because the efficiency of many service sectors is a key determinant of the competitiveness of firms. Key sectors that influence the ability of firms to participate in world trade are telecommunications, transportation, financial services and other business services such as accounting and legal services.

A major share of GDP for South Asian economies comes from services sector(Table VIII). There are lot of employment opportunities in this sector. Information and communications technology provides a lot of opportunities to improve productivity in this sector. The model implemented by economists at NCAER, India, for example implies that a 33 percent reduction of tariffs and trade barriers standards in agriculture, minerals and services would result in welfare gains to India of US$11.4 billion or 2.7 percent of GDP (Chadha et al. 2001). Liberalization of services is responsible for the lion's share of the welfare gain. While most of these gains are generated by own policy reforms, actions by partner countries, in particular OECD nations can do much to increase the gains (Stern, 2002). In the area of services, a key area where OECD countries must take the lead is liberalization of temporary movement of natural persons providing services.

VIII. Sectoral Composition of GDP

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</tr>
</thead>
<tbody>
<tr>
<td>Bangladesh</td>
<td>36.7</td>
<td>26</td>
<td>19.6</td>
<td>20.7</td>
<td>20.4</td>
<td>24.3</td>
<td>42.6</td>
<td>53.6</td>
<td>56.2</td>
</tr>
<tr>
<td>India</td>
<td>36.8</td>
<td>31.6</td>
<td>27.7</td>
<td>25</td>
<td>27.6</td>
<td>26.3</td>
<td>38.3</td>
<td>40.8</td>
<td>46</td>
</tr>
<tr>
<td>Nepal</td>
<td>64.3</td>
<td>50.4</td>
<td>41.7</td>
<td>12</td>
<td>16.5</td>
<td>21.3</td>
<td>23.7</td>
<td>33.1</td>
<td>36.9</td>
</tr>
<tr>
<td>Pakistan</td>
<td>30.4</td>
<td>27.9</td>
<td>27.2</td>
<td>23.6</td>
<td>23.9</td>
<td>23.4</td>
<td>46</td>
<td>48.2</td>
<td>49.4</td>
</tr>
<tr>
<td>Sri-Lanka</td>
<td>26.9</td>
<td>25.6</td>
<td>20.7</td>
<td>28.2</td>
<td>26.8</td>
<td>27.3</td>
<td>44.8</td>
<td>47.6</td>
<td>52.1</td>
</tr>
</tbody>
</table>


The gains from eliminating barriers to competition in the various business services can be very large and fundamentally effect the country's comparative advantage and pattern of trade (Markusen, Rutherford and Tarr, 2000). As nations reduce barriers to trade in goods, it has become apparent that in many countries, inefficient business services sectors have become the principal barrier to effective integration in world markets. Inefficient provision of trade-support services acts as a tax on exporters of merchandise goods and ultimately on growth and poverty reduction. Establishing policies that encourage competitive and efficient services sectors, such as allowing entry where possible and encouraging foreign direct investment should therefore be a major element of global integration and poverty reduction strategies. In particular, projects that address restructuring and reform of service sectors should take into account the importance of establishing a regulatory environment that is contestable.

\footnote{19} Farmers in middle income countries may face different incentives, as they will suffer a decline in demand for their products in the EU because of preferential access provided only to the LDCs.
Liberalization of services sectors means reduction or elimination of barrier, where barriers tend to take the form of prohibitions, quantitative restrictions and regulations (World Bank, 1996). For example, such restrictions may prohibit foreign direct investment in certain sectors, limit the share of ownership of foreign firms in these sectors, limit the number of expatriates that can be employed, or restrict the amount of imports of a particular service. Frequently the restrictions apply to both domestic and foreign suppliers and result in public sector monopolies in the provision of services, e.g. in air and maritime transport (inclusive port services), telecommunications, or financial services. In many such cases, elimination of public sector monopolies may need to be accompanied with opening up of service markets to foreign direct investment (e.g. through relaxing of provisions regarding the right of establishment of foreign firms) because it is the foreign providers that may be able to provide significant improvements in efficiency and cost reductions.

There is evidence of a positive relationship between private competitive provision of telecommunication services and the availability of telephone lines at affordable rates. This is especially true in countries where initial conditions are characterized by a low teledensity or service rationing (long waiting lists for obtaining connections). Simply letting the market work can substantially improve access in an environment where services have been traditionally provided by inefficient public monopolies—even in the poorest countries and among low income consumers.

For many internationally traded goods, the cost of international transportation is higher than the applicable tariff on imports. For a small economy confronting given world prices of traded goods, higher transport costs reduce export prices and increases prices of delivered imports. Hence, exporting industries with higher transport costs must pay lower wages or accept lower returns on capital.

VIII.6.1) Services reform and the poor.

Although the poor spend less of their income on services than the non-poor, significant benefits can accrue to the poor from increased efficiency of services markets. Services such as transport, education, and access to communications and finance are vital determinants of the ability of the poor to find employment and market their production. The incomes of the rural poor are strongly dependent on marketing and transportation costs, and on the efficiency of transportation networks. High transport or marketing costs lower the prices received by poor farmers and raise the prices of food to poor consumers. Competition in these sectors is very important to poverty reduction, as are resources devoted to "trade facilitation" to improve the efficiency of service networks and reduce corruption and related transactions costs.

Recent research based on household surveys found that farmers' access to a public telephone is positively related to the price they receive in district markets for their farm output. Decreasing the distance to a telephone by 10 percent would lead to a 1.6 percent increase in local prices (Larson, 2000). In Bangladesh villages, women entrepreneurs provide pay phone services at a profit, using mobile cellular technology. Even though rural villagers cannot afford a phone individually, they can afford one collectively (Lawson and Meyenn, 2000). A key aspect of services liberalization is that it often involves the movement of factors of production because the services concerned cannot be traded. Given the structure of factor prices in poor countries, an inflow of capital through FDI would tend to be to the advantage of the unskilled poor-increasing employment opportunities and wages.

Liberalization of services and the resultant competition are likely to lead to lower prices, greater availability and improved quality of services. In so far as the poor are consumers of these services, they are likely to benefit. However, frequently, the prices in pre-liberalization period are not determined by the market but set administratively, and are kept artificially low for low income end-users. Thus, rural borrowers may pay lower interest rates than urban borrowers, and prices of local telephone calls and public transport may be kept lower than the cost of provision. This structure of prices is often sustained through cross-subsidization within public monopolies or through government financial support. New entrants may focus on the most profitable market segments, such as urban areas, where the cost or service provision may be lower and incomes higher. Privatization could mean the end of government support. The result is that even though the
sector becomes more efficient and average prices decline, the prices for low income households may actually increase and/or availability decline\textsuperscript{20}

Universal service or access goals are not contradictory with liberalization of service markets (Mathur, 2001b). The handicap of providing services to low income households can in principle also be imposed on new entrants in a non-discriminatory way. Thus, universal service obligations can be part of the license conditions for new entrants into fixed network telephony and transport. But recourse to fiscal instruments has proved more successful than direct regulation—for example, through universal service funds or subsidies for providing services in rural areas. Another effective mechanism is to fund the consumer rather than the provider through vouchers, as has been the case for education and energy services in a number of countries.  

VIII.6.2) Assessing services policy and performance.

A careful evaluation of services trade policy requires analysis of the conditions of competition in a particular sector, notably restrictions on entry; ownership limitations, private and foreign; and regulation, especially elements designed to achieve pro-poor outcomes in competitive markets. Relevant questions for policy-makers include: How much greater would the benefits be if privatization were accompanied by the introduction of competition? Are there good reasons to limit entry by policy? What institutional features promote the effectiveness of a sector regulator? What should the regulator regulate? What are the costs and benefits of restrictions on foreign ownership?

In many countries, an assessment of policy and performance in services is frustrated by a dearth of data. Main performance indicators include price and quality variables and measures of access and availability of services to the poor. Detailed templates for an assessment of policy and performance in services in a particular country have recently been developed by the World Bank for three key services sector\textsuperscript{21}. These can be used to benchmark countries against international experience.

VIII.7) Pains of Adjustment: Role of Safety Nets

One of the most important complementary policies for the poor is an efficient social safety net. It is highly recommended that a program to establish a social safety net be in place independent of the needs related to trade liberalization. The best outcomes for the poor can be expected when as a result of the overall reform process, of which trade is a part, growth accelerates in the economy as a whole. Especially in the short run, however, there are bound to be some effects on some groups of poor who may be incapable of sustaining even short periods with adverse adjustment costs. One needs to be especially careful regarding the effects of any reform on the poor, as they are least able to bear risks because they do not have the savings.

An important issue that confronts all trade policy reforms then relates to the hardship faced by poor workers in import competing activities who lose income following import liberalization. The policy choices broadly defined are: employ general social safety nets; establish safety nets targeted to those who are harmed by the trade reform; and selective limitation of the reforms or intervention in markets for the purpose of limiting the impact of market reforms on the poor.

One type of market intervention is based on the view that opening up to world markets will increase risk because world markets are typically unstable. However, poor countries are also subject to large domestic shocks and it is unclear whether openness to trade increases risk. Government attempts to reduce the risk of trade openness through marketing boards and similar institutions aimed to cushion the impact of international price fluctuations on producers, especially the poor, have often been counterproductive. As discussed above, many of these agencies have imposed significant taxes on the poor. Experience with these institutions reveals the risks for the poor of efforts by governments to limit the scope of market reforms, even when these

\textsuperscript{20} In the case of agricultural exportable, increased domestic transport efficiency to the port will typically raise inland farmgate prices. This could worsen the welfare of low income consumers of that product in inland areas.

\textsuperscript{21} They cover telecommunications, air and maritime transport, and financial services and are available at http://www1.worldbank.org/wbiep/tradelservices.htm
limitations are intended for their benefit. A fundamental problem in using government interventions that limit market reforms ostensibly for the benefit of the poor is that these interventions are subject to political lobbying. The poor typically lack political power, so that political intervention in market processes will typically result in outcomes that are even worse for the poor (see above). A variety of efforts are underway in many countries to replace parastatals and similar bodies with more efficient, private sector entities. In low-income countries such alternatives may not be a viable option, however. As noted earlier, complementary actions may be called, such as improving and reducing the cost of education to poor households.

Direct income support tends to be the most efficient type of social safety net, provided it can be administratively arranged. A problem is that it is very hard to identify who actually needs the money and even harder to get it to all those who need it. One approach, which was employed successfully in Jordan, is to provide a money payment to all households initially. The program was subsequently narrowed to middle and low-income families and finally, to only low-income families. Because distinguishing the poor from the non-poor may be difficult, workfare programs may be more generally applicable, and have been proven effective under certain circumstances (Ravallion, 1999), as individuals can self-identify for these programs.

In general, as trade reforms are undertaken, the groups of poor which may be adversely affected need to be identified as accurately as possible and provisions should be made for their enrolment in whatever safety net programs are available for as long as necessary. Clearly safety nets are needed to support the poor during a period of transition which may vary in duration and severity depending on their age, skills, mobility and other similar factors. If there are no general safety nets available, they should be installed, not because trade reform demands them, but because they should be an essential component of a sustainable poverty reduction strategy. A practical problem is that some poor countries may not be able to afford a full-fledged safety net. For the design of trade policy reform this strengthens the need both for up front analysis of where the poor are located in terms of production (income) and consumption, assessing which groups may be seriously detrimentally affected, and determining what types of complementary reforms would best offset these potential losses.

**IX. Developed Countries Policies : Progress is Critical**

There is large outstanding agenda of policy reforms that can and should be undertaken by high income countries that will generate significant benefits for ordinary people in developing countries (Stern, 2002). This includes

- Reducing the large number of very high tariffs that restrict imports from developing countries. In part this is because of associated tariff escalation, whereby tariffs increase depending on the stage of production.
- Reducing trade distorting policies in agriculture. Total OECD support for farmers is over US $300 billion, almost one-third of total farm receipts, and recent developments- the U.S. Farm Bill and Franco-German agreement on European Union (EU) farm support - represent a retreat from needed reform.
- Disciplining non-tariff measures that restrict trade - examples are anti-dumping duties that too frequently target developing countries and food safety standards that are more stringent than is recommended internationally.
- Removing restrictions on the temporary movement of natural persons supplying services, an activity where developing countries have a clear comparative advantage.

The potential welfare (real income) gains from further global trade policy reforms are large. Although inherently imperfect, the best global trade models we have suggest that by 2015 developing countries stand to gain annually around US$ 75 billion in real income from unilateral liberalization of merchandise trade by OECD countries, and around US$120 billion from own liberalization (Table 1 IX):

Table IX: Gains to Developing Countries from Removing Barriers to Trade
(1997 US$ billion, additional income in 2015 as compared with baseline income)*

<table>
<thead>
<tr>
<th>Liberalizing Region:</th>
<th>Agriculture &amp; Food</th>
<th>Textile &amp; Clothing</th>
<th>All Others</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>High Income only</td>
<td>31</td>
<td>19</td>
<td>26</td>
<td>76</td>
</tr>
<tr>
<td>Developing only</td>
<td>114</td>
<td>7</td>
<td>-5</td>
<td>116</td>
</tr>
<tr>
<td>All Regions</td>
<td>142</td>
<td>24</td>
<td>20</td>
<td>184</td>
</tr>
<tr>
<td>Memo:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gains to High-Income Countries: From their own unilateral liberalization</td>
<td>73</td>
<td>-3</td>
<td>-25</td>
<td>49</td>
</tr>
<tr>
<td>From liberalization by All Regions</td>
<td>106</td>
<td>17</td>
<td>50</td>
<td>171</td>
</tr>
<tr>
<td>World Gains from liberalization by All Regions</td>
<td>248</td>
<td>41</td>
<td>70</td>
<td>355</td>
</tr>
</tbody>
</table>

Notes: *Baseline scenario incorporates only those changes to the global trading regime up to 1997. Simulations based on phased elimination of import tariffs, export subsidies, and domestic production subsidies over 2005-10. Results reported in this table do not include gains from productivity improvements, liberalization of services, and removal of non-trade barriers.


Two points are evident. One, the gains to developing countries from removing their own barriers to trade outweigh the gains from agricultural liberalization. These conclusions also hold for India, where the models suggest that some 60 percent of the total gains will come from own and developing country liberalization (Anderson et al, 2002) Most importantly, global trade reform is critical to the attainment of large-scale poverty reduction. According to World Bank analysis, more rapid growth associated with a global reduction in protection could reduce the number of people living in poverty by as much as 13 percent in 2015 (or 300 million people). This would play a key role in meeting the Millennium Development Goals (MDGs) (World Bank, 2002).

Results from the World Bank model imply that a removal of agricultural tariffs and subsidies by all WTO members (on a subset of supported products) would generate an increase in developing country exports of 15 percent and an increase in imports of 12 percent; India would experience an increase in exports of 13 percent and in imports of 11.5 percent. World prices of wheat are expected to rise by about 10 percent and prices of rice are expected to rise by about 16 percent. As an exporter of both rice and wheat, India therefore stands to gain significantly from terms-of-trade improvements. Another study which looks at longer run effects of liberalization finds that removal of protection by high-income countries would lead to a long run increase in prices of about 6 percent for rice and 12 percent for wheat. (Beghin, Roland-Holst and Van der Mensbrugghe, 2002).

Conclusions:

There is unambiguous empirical evidence from economies around the globe and for some of the Asian economies included in our sample that trade openness promotes economic growth. Raising economic growth in a sustained manner reduces poverty. Further, for cross section of fourteen Asian economies included in our study no significant relationship could be found between changes in inequality and poverty, and inequality of incomes with economic growth rates and trade openness. However, most of the poor in the developing economies are in the agricultural sector, therefore raising growth in the agricultural sector is essential ingredient for making the reform process successful. As there is no convincing evidence that economic growth per se could lower income and wealth inequalities, policies like fully government funded public and social services with land reforms may be the key for promoting equitable distribution of incomes in the countries.
Yet, there are several key theoretical linkages between trade, trade policy and poverty which needs further attention. These linkages, although not exhaustive, are through the price and availability of goods (consumption of goods by people), factor prices & income (production), and employment; government transfers influenced by changes in revenue from trade taxes; the incentive for investment and innovation, which affect long-run economic growth; external shocks, in particular, changes in the terms of trade and short-run risk and adjustment costs.

The paper gives a framework of the various effects of a trade policy reform on the poor in the short and long run through its impact on prices and income. A policy package of tariff reduction and currency depreciation should make it easier for the factors of production in importable sector in the short run and during the transition period, and should dampen the resistance to the reform. The impact of trade reform on the poor in the short run will critically depend on their location in terms of consumption and production (income), in particular whether they are employed in tradable or nontradable activities. The best outcome is when the poor are employed primarily in the exportable sector and consume importable goods. And the worst outcome occurs if the poor are primarily employed in importable sector and consume primarily exportable goods. The long-run effects of trade reform are beneficial to the poor if the labor market functions efficiently. Labor market segmentation dampens the positive effect. The overall analysis of the trade regime should yield a preliminary judgement on the desirability of trade reform. The tools to undertake such an analysis can be constructed for most economies; the basic requirements include detailed data on imports and exports, the trade barriers that apply to those goods, household survey information on the consumption pattern of the poor and the sources of their income and data on the basic structure of the economy.

In the South Asian Region it is services that gained from the shift in the terms of trade against manufacturing, suggesting not only that skill differentials increased but also considerable part of the dividend from reduced tariffs was retained by trade and finance.

Simultaneously, despite overall GDP growth being maintained or slightly improved the growth of agricultural GDP decelerated throughout the region. This combination of slower output growth in agriculture with deteriorating terms of trade is the major reason why rural incomes in South Asia have tended to lag behind urban incomes. Globalization and trade reform would have had greater positive effect if agricultural growth would not have lagged due to falling terms of trade, low technology diffusion and cuts in public investment including investment in rural infrastructure, public irrigation, roads and power. As far as the effect of trade reform on employment in South Asian countries are concerned there is complicated picture as employment in the unorganized sector (which employs most of the labor force in the South Asian economies) is stagnant.

Even when trade reform will benefit the poor and economy broadly, it will often be resisted. The sectors with the highest protection know they receive concentrated gains from protection and they will oppose the reforms. The diffuse nature of the gains to consumers and producers explains why those who oppose liberalization often are dominant in the political lobbying. In addition to the inefficiency costs of trade protection, protection will often transfer income toward the rich and away from the poor. Redistributive effects of trade reform can be a major factor impeding the launch of welfare improving policy changes. In order to minimize adjustment costs of trade reform and help make trade work more effectively for the poor, complementary policies are necessary. One important complementary policy for the poor is an efficient social safety net. Complementary actions such as improving and reducing costs of education to poor household is needed. Direct income support tends to be the most efficient type of social safety net, provided it can be administratively arranged. Analysis of the status quo and the likely impact of reform on the poor is very important.

The basic elements of a good trade policy regime involve predictability, transparency and uniformity. A liberal trade regime provides guidance for the direction of reforms.

Appropriate mix of trade policies with complementary macro and microeconomic policies is needed to benefit from interaction with the global economy. Macro-economic stability and a competitive exchange
rate should be in place. The success of trade reform lies in focusing the reform agenda on agricultural and services sector. It is imminent from the study that these two sectors are key sectors in poverty reduction.

The safety nets are absolutely essential to alleviate and minimize pains of adjustment. But if these pains are necessary to put the economy on a higher economic growth path, the society and polity will have to evolve credible mechanisms of cost sharing and conflict resolution. In addition, there is large outstanding agenda that can and should be undertaken by high-income countries that will generate significant benefits for ordinary people in developing countries. These include trade distorting policies in agriculture, disciplining non-tariff measures that restrict trade and removing restrictions on the temporary movement of natural persons supplying services.
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