Miracles and Debacles: Do Free-trade Skeptics have a Case?

Arvind Panagariya¹

¹ Professor of Economics and Co-director, Center for International Economics, University of Maryland, College Park, MD 20742 and V.K.R.V. Rao Professor, Institute for Social and Economic Change, Bangalore, India.

Table of Contents

1	Inti	oduction	1
2	Glo	balization has Many Facets	5
3	Tra	de Openness and Growth	7
	3.1	The Necessity of Trade Openness for Growth	7
	3.2	Miracles and Debacles	12
	3.3	Trade Volumes versus Trade Barriers	16
	3.4	Import Substitution versus Outward Orientation	18
	3.5	Additional Country-specific Evidence	21
	3.6	What do Free-trade Skeptics Recommend?	23
4	Fre	e Trade and Poverty Alleviation	27
	4.1	A Fallacious Argument	27
	4.2	The Conceptual Link between Openness and Poverty Alleviation	30
	4.3	Growth and Poverty: Cross-country Evidence	31
	4.4	Growth and Poverty: Country-specific Evidence	33
	4.5	Global Poverty	38
	4.6	Free Trade and Other Social Agendas	42
	4.7	Corrective Action	42
5	Coı	ncluding Remarks	43

Miracles and Debacles: Do Free-trade Skeptics have a Case?

Arvind Panagariya

God did not bestow all products upon all parts of the earth, but distributed His gifts over different regions, to the end that men might cultivate a social relationship because one would have need of the help of another. And so He called commerce into being, that all men might be able to have common enjoyment of the fruits of earth, no matter where

produced.

Libanius in *Orations* (III) in the 4th century¹

1 Introduction

Paul Samuelson, the first American to win the Nobel Prize in economics, famously likened protection to venereal disease, which reappears even as you treat it. Though free-trade advocates have made much progress since Adam Smith first ripped through the mercantilist case for protection in his *Wealth of Nations*, they can scarcely rest. Consistent with Samuelson's observation, skeptics who argue that free trade has failed to deliver economic prosperity and is the cause of much social stress remain ubiquitous.

This essay is a contribution to continuing fight by the advocates of free trade against protectionism. The goal is to demonstrate that systematic evidence on the growth experience during the past 40 years offers little support to the hypothesis that countries perform better under import substitution than outward orientation. Virtually all growth miracles we can identify are associated with rapid expansion of trade rather than

¹ Quoted in Irwin (1996) who, in turn, cites Grotius ([1625] 1925; 199) as the source.

wholesale substitution of imports by domestic production. Evidence also fails to point a finger at free trade as the cause of economic failures or what I call "debacles." Declines in per-capita incomes are rarely associated with sustained growth in imports.

On the social front, there is overwhelming evidence that trade openness is a more trustworthy friend of the poor than protectionism. Few countries have grown rapidly without a simultaneous rapid expansion of trade. In turn, few of them have achieved significant reduction in poverty without rapid growth in the per-capita income. Conversely, it is rare that countries have grown at 3 percent or more in per-capita-income terms on a sustained basis and failed to reduce poverty. Available evidence simply does not support the "trickledown" claims that rapid growth bypasses the poor. Instead, it points to what Bhagwati calls the "pull-up" effect that absorbs ever-increasing numbers of the poor into gainful employment.

I hasten to add two qualifications to this case for free trade, however. First, while trade openness is empirically more or less necessary for rapid growth, it is not sufficient by itself. There are complementary conditions such as macroeconomic stability, credibility of policy and enforcement of contracts without which the benefits of openness may fail to materialize. Indeed, there are plenty of examples from Africa, Latin America, Eastern Europe and the former Soviet Union during the past 20 years demonstrating that opening to trade need not result in faster growth.

The second qualification is that the claim about openness being a friend of rather than enemy to the poor is a claim only about the central tendency. No policy measure is capable of helping everyone simultaneously or of having no adverse effect on anyone in the society. Openness is no exception. In general, increased openness is likely to hurt

some individuals, especially in the short run. But the response to that ought to be targeted action to compensate those hurt rather than deny the benefits to a larger majority. If building a dam benefits many but also displaces a few, the remedy is to compensate the displaced rather than abandon the dam. Likewise, if an invention allows robots to handle soft cloth, which displaces workers in the apparel industry while bringing about dramatic reductions in the cost of manufacturing apparel, the right policy is to offer apparel workers adjustment assistance rather than ban the invention altogether.

In this context, it is useful to note that many anti-trade groups, especially non-governmental organizations (NGOs), deliberately focus exclusively on the poor who have experienced either no increase in income or suffered a loss during a phase of liberalization and proceed to assert that trade is therefore detrimental to the interests of the poor. This is particularly true when these NGOs speak of the "core" poor often defining them tautologically as precisely the groups that did not benefit from the policy change or were actually hurt by it. But this is a faulty approach since it focuses exclusively on the cost side of openness, ignoring entirely the benefits side. Economists squarely reject such an approach and are willing to trade costs against benefits with the humane touch that those hurt, especially among the poor, be compensated.

Despite differences, it is safe to say that free trade is one of the least controversial aspects of globalization among economists. Nevertheless, since anti-globalization groups often ignore the fine distinction among various components of globalization, free trade has become an innocent victim of the generalized attacks on the latter. Therefore, in Section 2, I offer a brief discussion of various components of globalization arguing that as a matter of practical choice, countries rarely accept or reject it as a whole. Instead,

they are more willing to embrace some components while rejecting others. Within this scheme, free trade is among the relatively benign components of globalization.²

Beyond Section 2, the paper is devoted to building the empirical case for free trade. Thus, in Section 3, I consider various aspects of the relationship between trade and growth. I begin with an elaboration of the proposition that though not sufficient by itself, trade openness is a necessary condition for faster growth. Even if the main trigger to growth is an alternative policy, say, a rise in the rate of investment, this trigger will fail to yield spectacular results unless the economy is also open to trade. I then discuss the empirical evidence linking growth miracles to trade openness and de-linking growth debacles from it. I also re-examine the empirical proposition by Dani Rodrik (1999) that import substitution during 1960s produced superior results than outward orientation. I conclude the section by noting that if we scrutinize their writings carefully, when pushed to make a choice, even free-trade skeptics such as Rodrik, Joseph Stiglitz and Richard Freeman go for free trade over protection.

In Section 4, I take up the issue of openness and poverty reduction, presenting overwhelming evidence supporting a positive link between the two. Cross-country evidence, country case studies and the evidence on global poverty uniformly demonstrate that growth has served the poor better than any other instrument of poverty reduction. Based on the work of Angus Deaton (2001) and Surjit Bhalla (2002), I demonstrate that even the weak conclusion of some of the World Bank studies that during 1987-99, openness and growth failed to reduce the *absolute* number of the poor even as it lowered their share in the total population does not stand up to careful scrutiny. The balance of

² Bhagwati (2000) makes this point forcefully in his brilliant WIDER annual lecture.

the evidence is in favor of the conclusion that the global poverty declined during this period both as a proportion of the total world population and in absolute terms. In Section 6, I conclude the paper.

2 Globalization has Many Facets

Globalization has many facets and over time countries have not accepted or rejected it in totality. There is considerable flexibility in embracing some aspects more fully than others or in embracing some aspects without embracing others altogether. To appreciate this fully, consider some major components of the phenomenon:

- Free trade in goods
- Free Trade in Services: Banking, Insurance, Internet
- Free Trade in Technology
- Direct Foreign Investment
- Other Capital Flows including Short-term Financial Capital
- Migration
- Globalization of Media, Culture
- Globalization of Governance: Intellectual Property Rights, Environmental and Labor Standards, Competition Policy

Potential benefits from these various forms of globalization are not known with equal certainty. I will nevertheless argue that based on the past 40 years of experience, we now have sufficient knowledge of the benefits and costs of liberal trade policies to conclude that all countries, developing or developed, stand to benefit from them. Free trade is economically beneficial in that it is more conducive to growth than protection. Additionally, as a matter of central tendency, it also helps reduce poverty and is, thus,

socially benign. When deviations from this central tendency occur, corrective action is a superior policy to protection.

The same can also be said of trade in services and direct foreign investment though the empirical evidence on them is less voluminous. Beyond trade and direct foreign investment, uncertainties increase. For instance, hypothesized benefits from short-term capital flows are not grounded in empirical evidence. Moreover, these flows are known to lead to periodic crises in developing countries.³ As a result, even though I have strongly advocated the freeing up of trade in India, I have generally opposed opening up the capital account for some years to come.

Some aspects of globalization are even more contentious than short-run capital mobility. This is true, for instance, of migration. Whereas countries generally welcome capital inflows but fear its outflows, the situation with respect to labor is the opposite: countries are comfortable with outflows but not inflows. Even the rich countries, which have been largely the engines of globalization during the past several decades, fear immigration and severely restrict it. The overall economic benefits of migration are not in question in that it does increase the size of the pie. But it leads to visible incomedistribution and other social effects that countries are often not willing to accept as the cost of the economic gain.

The case of technology is more curious. Even though its international movement has had arguably serious adverse social effects such as increased inequality resulting from technological change that favors skilled over unskilled labor and the assault on local

_

³ See Bhagwati (1997) who questions forcefully the benefits of embracing the short-run capital mobility.

culture and moral standards through mediums such as television and the Internet, few countries oppose its inflow. Quite the contrary, persistent complaints about the "technology gap" and "digital divide" are aimed at more and not less inflow of technology. This is presumably because the economic benefits from technology inflows are so large that they dwarf any adverse social effects.

Finally, the reach of globalization today is much deeper than in the past. Concerns such as labor and environmental standards, intellectual property, corruption and gender gap, which would have been regarded as purely domestic a few decades ago have now assumed global importance. These concerns directly impinge on internal polices and governance and are therefore highly contentious.

The upshot of this discussion is that globalization is a complex phenomenon and one need not make an all or nothing choice in embracing it. I now turn to the component of globalization about which we know most: free trade in goods.

3 Trade Openness and Growth

Critics of free trade often point to a lack of persuasive evidence linking the removal of trade barriers *causally* to growth. In this paper, I take the view that the case for outward-oriented policies need not depend on a direct causal relationship with growth. What one needs to establish is that the prospects for turning high potential growth into reality are better under an open rather than closed trade regime.

3.1 The Necessity of Trade Openness for Growth

It must be recognized at the outset that within the context of the conventional theoretical models, no policy change is beneficial (or harmful) under all circumstances.

Anyone with the slightest ability to play with these models can readily produce counter examples. This is particularly true of the gains from trade proposition both in static and dynamic sense. If there are domestic distortions, autarky or restricted trade can be shown to dominate free trade. Indeed, a large body of the theoretical literature in international trade does precisely that and many of the arguments for protection have been based on precisely such demonstration. In the same vein, growth effects of trade can be shown to be either absent or even perverse by appropriate choice of models. Therefore, the *economic* case for free trade, as for almost any other policy, must be made principally on the ground that empirically, its central tendency is to generate a larger pie.

Economists have applied three approaches to studying the empirical link between trade and economic performance. The first approach estimates the "static" cost of protection. I offer a systematic discussion of the studies based on this approach in Panagariya (2002a).⁴ As discussed there, estimates of the costs of protection depend crucially on the level of protection and the modeling approach. Sufficiently high protection can make these costs as much as 5 to 6 percent of the GDP in the conventional models. If economies of scale are incorporated into the analysis, the costs can readily exceed 10 percent of GDP. This approach has not played significant role in the debate on free trade, however, and I shall not rely on it in the remainder of the paper.

The second approach employs cross-country regressions to establish whether increased openness is associated with or leads to faster growth. Authors use a variety of measures of openness along with other control variables to establish the link. While a large majority of the studies have found the link to be positive and statistically

⁴ Also see the longer version of Panagariya (2002a) at www.bsos.umd.edu/econ/ciepanag.htm.

significant, this line of research has been contentious due to many problems associated with cross-country regressions as well as the difficulties in constructing the measures of openness.⁵ The advocates of free trade such as Srinivasan and Bhagwati (2001), Bhagwati and Srinivasan (2002) and Edwards (1993) as well as critics, most notably Rodriguez and Rodrik (1999), have argued against basing the case for free trade on these studies.

The case for free trade is to be defended, therefore, on the strength of the third approach, which relies on cross-country comparisons of indicators of growth and openness and more detailed in-depth country case studies. This approach is quantitatively less precise than the cross-country econometric studies and does not purport to establish trade openness as the cause of growth but has the virtue of incorporating detailed information relating to both global economic environment and country-specific details into the analysis.

Before I turn to the country experience more systematically in the next section, however, two qualifications may be noted:

• First, it will be preposterous to suggest that trade openness by itself is sufficient to stimulate growth. For instance, in the absence of macroeconomic stability, policy credibility and enforcement of contracts, it is quite unlikely that a country will be able to register significantly high growth rates for a sustained period.⁶ This is

⁵ Some of the commonly quoted studies based on cross-country evidence are Dollar (1992), Ban-David (1993), Sachs and Warner (1995), Harrison (1996), Edwards (1998) and Frankel and Romer (1999).

⁶ As Bhagwati reminds, however, in so far as macroeconomic stability is concerned, it need not be viewed as an independent condition since it is generally necessary to maintain trade openness. One of the manifestations of macroeconomic instability is the overvalued exchange rate, which, like trade barriers, leads to discrimination against traded goods.

why one can find innumerable examples of countries opening up to trade without a significant jump in the growth rate. On the other hand, it is difficult to come up with examples of developing countries that grew rapidly for a decade or longer without experiencing a significant expansion of their trade.

• Second, closely related to the previous point, from the policy perspective, it is not necessary for trade to be the primary catalyst of growth. Critics of free trade often focus on the flaws in econometric studies aimed at establishing the causality between openness and growth to make their case. But this misses the point since the policy choice must be based not on whether openness by itself leads to higher growth but on whether it is more conducive to growth than the alternative. Of course, if trade also ends up serving as a direct stimulus to growth, it is an added advantage.

This second point is sufficiently important to require further elaboration. Rodrik (1995) has questioned the importance of openness in Korea's growth experience during 1960s and 1970s arguing that the country grew rapidly because its government "managed to engineer a significant increase in the private return to capital" by "subsidizing and coordinating investment decisions." To be sure, one can question Rodrik's basic premise: During 1961-80, Korea's exports grew at an annual rate of 23.7 percent in real terms. Even though Korea began at a relatively low exports-to-GDP ratio of 5.3 percent in 1961, by 1980, the exports-to-GDP ratio had reached 33.1 percent! This dramatic growth in exports had to provide a significant stimulus to the economy at the margin rather than being a purely

⁷ Unless otherwise noted, export figures reported in this paper include both goods and services and are measured at the 1995 constant prices.

passive response to the successful solution of the domestic investment coordination problem by the government. Nor could the efficiency gains that accrue from competing against the most competitive producers in the world and accessing the state-of-the-art technology through imports of both products and machinery have been of secondary importance.

Indeed, Larry Westphal, who is one of the earliest proponents of the view, held by Rodrik, that Korea successfully pursued activist industrial policy to achieve high rates of growth regards outward orientation as one of the centerpieces of its overall growth strategy. In his review article in the *Journal of Economic Perspectives* entitled "Industrial Policy in an Export-Propelled Economy: Lessons from South Korea's Experience," Westphal (1990) notes, "Korea's industrial performance owes a great deal to the government's promotional policies toward exports and to its initiatives in targeting industries for development. If nothing else, policies towards exports have created an atmosphere--rare in the Third World-in which businessmen could be certain that the economic system would respond to and subsequently reward their efforts aimed at expanding and upgrading exports." Exports were not a passive response to the import demand generated by investment boom but one of the "propellers" of the investment activity itself.

But suppose we grant Rodrik his point that it was the successful coordination of the investment decisions by the government that triggered Korea's growth. Does this diminish the importance of outward-oriented trade policies that Korea pursued during the period under consideration? Some light on this critical question can be thrown by reviewing the contrasting experience of India, which also tried to solve the investment-coordination problem through explicit investment planning. By the standards applied by Rodrik to Korea, public interventions in India were also successful in this dimension with total

investment as a proportion of GDP rising from 15.7 percent in 1960-61 to 22.7 percent in 1980-81.8 Public investment consistently accounted for more than a third of this investment. While India was successful in pushing its GDP growth rate from less than 1 percent during the first half of the 20th century to the 3-4 percent range, it came nowhere near the ultra-high growth rates experienced by Korea during the sixties and seventies principally because it opted for an increasingly protectionist trade policy regime with nearly all imports coming under strict licensing by early 1970s. India's exports-to-GDP ratio stood at 3.4 percent in 1970 and rose to a measly 6 percent in 1980. Whereas Korea recognized the importance of competing against the world's most efficient producers and the need for importing the stateof-the-art machinery from abroad, India chose to hide behind a steel wall of protection, manufacturing its own machinery (and steel!). The result was an annual per-capita GDP growth of 6.3 percent in Korea and 1.1 percent in India during 1961-80. Thus, Rodrik's conclusion that outward orientation of the Korean economy was merely "the result of the increase in the demand for imported capital goods" misses the important point that ultimately such openness was the result of a conscious policy choice made by the country. Had Korea chosen to take the same path as India, its miraculous growth would have been choked despite its supposed success in coordinating the investment decisions.

3.2 Miracles and Debacles

The experience of Korea is not unique. We now have considerable systematic evidence supporting the hypothesis that openness is a necessary condition for fast growth.

-

⁸ Year 1960-61 and 1980-81 refer to India's financial year which begins on April 1 and ends on March 31.

⁹ Comparable data for India during 1960s are not available.

Specifically, the Global Development Network Growth Database, available on the World Bank website, provides growth rates for approximately 200 countries over a period of 38 years from 1961 to 1999. Despite missing entries in a number of cases, the database is sufficiently comprehensive to allow a systematic analysis.

In analyzing these data, one obvious question concerns the division of 38 years into sub-periods. We can divide the data by decades or shorter or longer time periods. It turns out that for the purpose at hand, the conclusions are insensitive to whether we divide the time period into two, three or four sub-periods. Therefore, for the purpose of this paper, I divide them in two equal 19-year periods: 1961-1980 and 1980-1999. For each period, I identify countries that grew at 3 percent or more in per-capita terms as "miracles" and those that declined in per-capita terms as "debacles". I then look at how growth in per-capita incomes correlates with growth in exports and imports for miracles and debacles.

Table 1 shows all non-oil-exporting developing countries that grew at 3 percent or more in per-capita terms during 1961-80 in the declining order of the growth rates.¹⁰ Alongside, third and fourth column show annual growth rates of exports and imports. The last column shows the population of the country at the beginning of the period under consideration. The most remarkable point to note in Table 1 is that even though 1960s

-

¹⁰ Note that my approach and argumentation is to be distinguished from that of Dollar and Kraay (2000, 2002) who employ evidence similar to that in Tables 1 and 3 by correlating high growth rates and increases in trade-to-GDP ratios. By arguing that countries that globalize according to the change in the trade-to-GDP ratio also grow faster, they essentially claim a direct causation running from openness to growth. My approach is to allow for the possibility that increased openness need not always be accompanied by high rates of growth though the reverse almost never happens. Dollar and Kraay also fail to look at the debacles reported in Tables 2 and 4 below.

and 1970s are commonly identified with the import-substitution phase in developing countries, the remarkable fact is that virtually all countries that grew rapidly did so while rapidly expanding their exports and imports. The countries in this group come from virtually all continents in the South including, especially, Latin America, which is often described as having led the developing world in the pursuit of import substitution. Brazil, which grew at the impressive rate of 4.6 percent, expanded its exports and imports at 8.1 and 7.6 percent, respectively, during the period. Among countries that grew at 3.6 percent or more in per-capita terms, the lowest recorded growth rate of imports was 7.2 percent for Tunisia, which grew at 4 percent in per-capita terms. Even as we go down the growth-rate column, there are only two countries that register relatively low growth rates of imports: Mauritius and Kenya with import growth of 3.8 and 3.6 percent, respectively.

In addition to arguing that openness is not necessary for growth and openness, some critics of free trade go so far as to contend that it is responsible for declining incomes. To examine this contention, Table 2 lists all countries that experienced growth debacle during 1961-80. For the purpose of the table, growth debacle is defined as a reduction in the percapita income on a sustained basis. It is evident that the weight of evidence is hugely against trade openness being responsible for the debacles. Out of the seven debacle cases in which we have data on both growth rates of per-capita income and trade, only two show significant growth in imports. In the other cases, declines in per-capita incomes are accompanied by import growth of less than 2 percent.

This experience is repeated during the second period under study, 1980-99. Tables 3 and 4 show growth rates of per-capita incomes and trade for the miracle and debacle countries, respectively. As in Table 1, leaving aside a handful of the cases, the miracle

countries in Table 3 experience very substantial growth in imports and exports. Two largest countries in the world, China and India, join the club of miracle-growth countries in this period and they both show respectable rates of growth of both exports and imports. In turn, Table 4 provides more substantial evidence that debacles are rarely accompanied by import surges. We now have as many as 65 countries in this category and in no case does the rate of growth of imports reach even 6 percent. And in many cases, it is actually negative and large in absolute terms.

If we go by the *number* of countries that grew at 3 percent or more in per-capita-income terms, performance during 1961-80 is clearly superior to that during 1980-99. As many as 33 non-oil exporting developing countries grew at this high rate during the first period compared with 26 in the second. Yet, if we go by the *population* in the developing countries experiencing the high growth rates, it is the second period that stands out. Whereas the population of the countries growing at 3 percent or more at the beginning of the period was only 356.5 million during the first period, it was a high of 2.1 billion during the second period. Those who have chosen to characterize the 1980s and 1990s the lost decade of development have often overlooked this fact.

The explanation for why the period 1980-99 has been viewed unfavorably relative to the prior two decades, especially 1960s, is that this period produced a very large number of debacles that also impacted a very substantial population of the world. Thus, during 1961-80, debacles were limited to 14 developing countries with a total population of 68.6 million at the beginning of the period. But during 1981-99, there were as many as 65 debacle countries accounting for 621.4 million people at the beginning of the period. Not only did a large number of tiny countries in Africa do poorly during this latter period but

the large majority of the former Soviet republics, some with sizable populations, also joined the ranks of the debacle countries. It was the coincidence of this fact with a series of financial-flow crises in Latin America and East Asia that fueled the anti-globalization movement, victimizing liberal trade policies in the process despite the fact that trade had little to do with either of the phenomena.

3.3 Trade Volumes versus Trade Barriers

Before I turn to some additional, country-specific evidence, let me address an important criticism of the link between growth and openness offered by free-trade skeptics (Rodriguez and Rodrik, 1999 and Freeman 2002). Observing that the cross-country-regression studies linking growth and *direct* measures of trade policy such as tariff and non-tariff barriers are unpersuasive, these skeptics also reject the link between growth and openness. But the latter need not follow from the former.

Once we agree that fast growth in per-capita GDP strongly correlates with fast growth in trade, the denial of a link between lower trade barriers and growth in per-capita incomes implies a denial of link between lower trade barriers and growth in *trade*. Admittedly, trade barriers are not the only determinant of growth in trade. But they are hardly irrelevant to it. In the extreme case, we cannot expect trade to grow rapidly if a country adopts autarkic or near-autarkic trade policies. The experience of India until late 1970s, discussed earlier, is a case in point. Additionally, if free-trade skeptics truly believe that growth in trade is unrelated to the level of trade barriers, they should be indifferent to them. But their concern with such barriers, which sometimes goes so far as to blame their removal for economic debacles, betrays their faith in a positive correlation between trade barriers and growth in trade.

The relatively weak evidence supporting a positive relationship between trade barriers and growth in per-capita income is more likely the result of our inability to accurately measure the protective effect of a given set trade barriers. Difficulties in measuring the effects of non-tariff barriers are well known. For example, the effect of import licensing depends crucially on the severity with which it is enforced. Traditionally, developing countries have not specified specific quantities permitted under licensing. Instead, they stipulate conditions under which an import license can be obtained. A license may be issued depending on the desired use of the product, its proposed user, availability of like domestic products and the availability of foreign exchange. Under such a regime, even without any formal change in the policy regime, imports can be permitted in smaller or larger quantities through a more or less strict administration of the existing rules.

Even when restrictions take the form of tariffs, aggregating them into a single measure that is comparable across countries is difficult. A 15 percent uniform tariff has a very different effect from a two-part tariff such that one half of the imports are subject to a 10 percent tariff and another half to a 20 percent tariff. Yet, when aggregated for purposes of regressions, they are both set equal to 15 percent. More dramatically, as we know from the concept of effective protection, a two-part tariff with a 20 percent and a 10 percent rate can have a *more* protective effect than a single 20 percent tariff rate on everything. Thus, starting with a 20 percent tariff on auto parts as well as automobiles, a reduction in the tariff on the former increases the effective protection to the latter. If domestic output of auto parts is small, this will likely result in increased overall protection in the economy. Not surprisingly, in his provocative paper "Measuring

outward orientation in LDCs: Can it be done?" Pritchett (1996) found that some of the measures of openness used in cross-country growth regressions were actually negatively correlated. This means that if one measure yielded a positive correlation between growth and trade barriers, the other one would do exactly the opposite.

Finally, we must add the point that the criticism that trade barriers fail to correlate convincingly with growth is based on the evaluation of cross-country regressions that try to establish such a link. But these regressions themselves require heroic assumptions to justify the estimation equations and are known to be notoriously sensitive to the specification. Srinivasan and Bhagwati (2002) have recently discussed these issues in greater detail and I will not delve on them here.

3.4 Import Substitution versus Outward Orientation

Rodrik (1999) has observed that if one counts the *number* of countries experiencing rapid growth, the years 1960-73 define the golden period of growth for developing countries. Per-capita incomes in as many as 30 countries grew annually at rates equaling or exceeding 3 percent during this period. In comparison, growth rates plummeted in most developing countries during 1973-84 and 1984-94. Noting that 1960-73 was the period of import-substitution industrialization (ISI) and 1984-94 that of liberalization, Rodrik concludes that this suggests the triumph of ISI.

What is wrong with this story? To begin with the proposition that 1960-73 defined the golden period of growth for developing countries is itself questionable. For it is based on counting the *number* of countries that grew rapidly. But most of these countries were tiny in terms of population as well as GDP. As already emphasized above, if we choose to count the number of people in the developing countries impacted by high growth, we get a

different picture. With East and South Asia, which include such populous countries as China and India, growing rapidly during 1980s and 1990s, one can as easily argue that it is these decades that define the golden period of growth. Indeed, if we consider developing countries as a whole, the growth rate is higher in the 1980s and 1990s than during 1960-73.

But let us set aside this qualification and consider Rodrik's case. How is ISI to be defined? Rodrik offers no definition. Nor does he make the case that the fast growing countries during 1960-73 were import substituting and doing so more vigorously than the slow-growing countries during the same period. Indeed, he does not even look at growth rates of exports and imports or trade policies. The reader must simply take him on faith that the period in question was one of ISI.

Indeed, if we look at Table 5, which reports the growth rates of per-capita GDP and exports and imports of top 15 performers during 1960-73, we find that the fast-growing countries were in fact rapidly expanding their exports and imports. Among these, we have substantial additional information on the countries in East Asia in the detailed country studies mentioned earlier to conclude that they were outward-oriented in their *policies* as well.

Perhaps the greatest scope for making a case in favor of import substitution is offered by Latin America. But even here the story turns out to be more complicated than presented by Rodrik. Thus, on the surface, it seems that at least Latin America did better under ISI policies during 1960-73 than under outward-oriented policies of the 1980s. But closer examination reveals a different picture.

Thus, the case of Brazil, by far the largest country on the continent and the star performer of 1960-73, fails to fit the ISI model. Its exports and imports in constant 1995 dollars grew at the impressive annual rates of 7.8 and 8.9 percent, respectively. With imports rapidly substituting for domestic production and exports accounting for increasingly larger share of the GDP, *prima-facie* Brazil cannot be characterized as succeeding through import substitution.

But this is not all. Even if we consider policies rather than trade outcomes, the Brazilian growth experience during the post 1960 era fails to fit the ISI story. Thus, consider Brazil's growth rates during 1961-68, 1968-1975 and 1975-80, reported in Table 6. During 1961-68, the average growth rate was 1.6 percent followed by 8.3 and 3.5 percent, respectively, in the subsequently periods. It turns out that thoughtful trade policy specialists on Brazil describe the period 1965-73 as one of "cautious outward-looking trade policy liberalization" and 1974-80 as one of "renewed inward-looking policies." During the former period, Brazil adopted a number of policy measures aimed at integrating the economy into the global economy. On the exchange-rate front, it undertook several devaluations to correct the overvaluation of the real exchange rate and later adopted the crawling peg to ensure its stability. It also introduced several export incentives to reduce the anti-export bias. Finally, it lowered the average legal tariff

¹¹ During this period, growth rate of per-capita income in Brazil was second to only that of Barbados in Latin America.

¹² See Braga and Tyler (1992). Rodrik has suggested in personal correspondence that most accounts place Brazil's turn to outward orientation in 1968. Fortuitously, that date brings liberalization even closer to 1969, the year in which growth rate takes off.

(including surcharges) for manufacturing from 99 to 57 percent and for agriculture from 53 to 34 percent.

This still leaves the question why Latin America failed to grow during 1980s despite substantial trade liberalization. Here we must remind the reader the qualification that trade openness is an important necessary ingredient in the fast-growth recipe but not the only ingredient. Therefore, the debacle of 1980s in Latin America is to be attributed not to trade liberalization but to macroeconomic instability that resulted from short-term capital mobility, which most Latin American countries had embraced by then. The seventies had been characterized by rising foreign debt in many Latin American countries with debt-service as a proportion of exports rising to 30 percent or more by early 1980s in many cases. On top of that came the Volcker-era interest-rate increases in the United States, which led capital to flow out of Latin America abruptly and choked all growth potential.

3.5 Additional Country-specific Evidence

For at least three decades now, economists have investigated the link between openness and growth and gathered considerable evidence via country case studies. Two large-scale projects, one directed by Little Scitovsky and Scott (1970) at the OECD and the other by Bhagwati and Krueger (1974) at the NBER, offer detailed documentation of the success achieved by countries that adopted outward-oriented policies and the general failure of those who did not during 1960s and early 1970s. In particular, the Newly Industrialized Economies (NIEs) consisting of Hong Kong, Singapore, Taiwan and Korea all managed to register growth rates in per-capita incomes exceeding 5 percent during those years. All four of them did so under very open trade regimes. Hong Kong and Singapore had essentially

free-trade regimes. Korea and Taiwan used selective protection but kept the imports of intermediate input and capital goods, necessary for efficient investment and production, flowing relatively freely. In contrast, India, which opted for a highly controlled trade regime all around, performed poorly.

The experience of China and India during 1980s and 1990s lends further support to the hypothesis that outward-oriented policies constitute a necessary ingredient into high-growth performance. Starting in late 1970s, China gradually began to open its economy to both trade and foreign investment. The results were spectacular. China's GDP grew at double-digit rates during both 1980s and 1990s with per-capita incomes more than quadrupling over the two decades. This was accompanied by the annual growth in imports of goods and services at 10.3 percent during 1980s and 16.3 percent during 1990s. The corresponding growth rates of exports of goods and services were 12.9 and 15.2 percent.

India's experience is slightly more complicated. It undertook modest liberalization during 1980s with the total volume of imports under the so-called Open general Licensing rising from 5 percent of total imports in 1980-81 to 30 percent in 1987-88. In addition, borrowing abroad permitted some expansion of imports and investment. The country also expanded domestic demand through fiscal stimulus supported by large deficits. While this strategy allowed the country to achieve a growth rate of nearly 6 percent during 1980s, it also increased foreign and domestic debt at an unsustainable rate. The result was a macroeconomic crisis in 1991 that stimulated more genuine reforms, especially the liberalization of trade. In approximately a decade, import licensing, which covered virtually all sectors and approximately 70 percent of the imports, was entirely abolished and the

highest tariff rate was brought down from 355 percent to 30 percent.¹³ The result was a growth rate of nearly 6 percent during 1990s with a rapidly declining ratio of foreign debt to GDP.

3.6 What do Free-trade Skeptics Recommend?

As a final point, let me note that despite their *apparent* difference of opinion, the bottom line drawn by free-trade skeptics is so close to the position taken by many profree-trade economists as to be virtually indistinguishable from it. This fact was driven home to me recently when, reacting to a *New York Times* story on the critique of globalization by Stiglitz (2002) in his widely publicized book *Globalization and its Discontents*, Robert Stern of the University of Michigan proposed to a small group of pro-free-trade economists that they respond to Stiglitz. Alan Deardorff, also from the University of Michigan and one the members of the group, had a most interesting reaction to Stern's proposal.

"I too just finished reading the Stiglitz book," he wrote in an email addressed to the group. "I do agree that in some ways the book is outrageous, and I gather from [the IMF Research Director Ken] Rogoff's response to it that it has lots of errors and unjustified negative comments. I also felt that it was deceptively packaged, claiming to be about globalization more generally when almost the entire book is very specifically about IMF policies. It looks to me like he wrote the core of the book about the IMF, then realized it would sell better if he made it sound like a diatribe against globalization and added the title and some opening and closing material to move in that direction. But

1000

¹³In 1990, as many as 60 per cent of tariff lines were subject to rates ranging from 110 to 150 per cent and only 4 per cent of the tariff lines were below 60 per cent.

there is really very little in the book about the forces of globalization if they are not being promoted by the IMF."

"Regarding trade, in fact, I agree with almost all that he says," noted Deardorff. "He objects strongly to the agricultural subsidies and manufacturing tariffs that developed countries retain that undermine LDC competition, and so do we all. He says that is hypocrisy, and I agree. He also objects to the TRIPS [Trade-related aspects of Intellectual Property Rights] agreement, and so do I. About the only thing that he says about trade that I would be hesitant to support is his approval of infant industry protection. And even here, to the extent that he asks that trade liberalization be done slowly and carefully, with due attention to cushioning the blow to the poorest who may lose from it, such as the small farmers in Mexico, I'm inclined to agree with him."

"On issues other than trade, I don't feel as qualified to judge," continued Deardorff. "But I think I do agree that free mobility of short-term capital has turned out to be a bad idea. I'm not sure that I would condemn those who promoted it initially, since it wasn't necessarily obvious that it would turn out as badly as it has. But the case for some sort of capital controls today does seem to be pretty strong."

The view of Stiglitz that emerges from this informal email from Deardorff is applicable to other prominent free-trade skeptics. Generally speaking, serious economists critical of globalization rarely take a firm stand against free trade. Much of the discomfort of these economists with globalization derives from the injury inflicted by financial crises that followed the embrace of short-term capital mobility by Latin America and East Asia. Free trade has simply turned into an innocent victim of that discomfort.

Thus, consider a recent paper by the Harvard University economist Richard Freeman (2002) why and how to raise labor standards around the world. In the early part of this paper, Freeman expresses deep appreciation for anti-globalization demonstrators and mercilessly attacks various forms of globalization including trade liberalization: "While orthodox policies have a certain logic inside simple Macro and Trade models, whether they are right for real economies is less clear. Cross-country evidence shows that policy measures relating to openness such as tariffs and trade barriers have little link to growth."

Yet, in the later part of the paper when Freeman draws up his own list of steps that may be taken to promote labor standards in the poor countries, liberal trade policies occupy a place of pride on it. "Elimination of tariffs and other barriers to LDCs, particularly in agriculture, and reduction of huge debt burdens almost certainly can create more good for more people than improved labor standards for workers in the export sector or even more broadly," he writes.

One might still argue that skeptics do not advocate liberalization by the poor countries themselves. Instead, their recommendations are limited to the removal of trade barriers imposed against their products by rich countries. But such a position would be logically inconsistent. If skeptics believe that the removal of rich country barriers stimulates poor country exports by making the latter more profitable, they cannot simultaneously argue that poor country liberalization, which also makes their exports

more profitable by lowering the relative price of import-competing goods, does not accomplish the same objective.¹⁴

Indeed, if the poor country barriers are high, they are likely to fail to take advantage of even the rich country liberalization. For example, during 1960s and 1970s, while the more open Far Eastern economies took advantage of the progressive opening and expansion of the rich country markets and managed to register spectacular export growth, autarkic India failed to register rapid growth of exports as well as GDP. Symmetrically, the poor country liberalization will fail to bear fruit if their rich country counterparts are autarkic. The poor country door must be open to let the goods out and the rich country door to let the goods in.¹⁵

Rodrik seems to recognize at least some of the logic behind a country's own liberalization more explicitly when confronted with the choice between liberal and protectionist trade policies. Thus, in his famous critique of econometric studies linking growth and trade, written jointly with Francisco Rodriguez, he states in the last to first paragraph, "We do not want to leave the reader with the impression that we think trade protection is good for economic growth. We know of no credible evidence--at least for the post-1945 period--that suggests that trade restrictions are systematically associated with higher growth rates."

-

¹⁴ The only difference between to two types of liberalization is that the partner's liberalization improves the *external* terms of trade whereas your own liberalization may worsen or leave them unchanged. But the external terms of trade are hardly at the center of the debate on free trade versus protection.

¹⁵ See Bhagwati and Panagariya (2001, 2002) where this and related arguments are developed in greater detail.

The paper goes on to conclude, "The effects of trade liberalization may be on balance beneficial on standard comparative-advantage grounds; the evidence provides no strong reason to dispute this. What we dispute is the view, increasingly common, that integration into the world economy is such a potent force for economic growth that it can effectively substitute for a development strategy." But few thoughtful trade economists consider free trade as sufficient for fast growth. On the contrary, many of them also happen to be serious development economists and as such actively advocate complementary policies alongside free trade. ¹⁶

4 Free Trade and Poverty Alleviation

Anti-globalization movement has derived much of its momentum today not from fears that it hampers growth but that it hurts the poor. Many NGOs and civil society groups argue that even if trade openness promotes economic growth it is to be resisted because it has an adverse impact on the poor and undermines other social objectives such as eradication of child labor, unionization and collective bargaining.¹⁷ Before we examine the evidence, let us first consider a common, fallacious argument.

4.1 A Fallacious Argument

Sometimes globalization critics refer to specific groups that have not been lifted out of poverty or have even been impoverished during a period of trade liberalization and

¹⁶ For example, see various opinion columns written monthly by the author in the *Economic Times* available online at http://www.bsos.umd.edu/econ/panagariya/apecon/etcolumn.htm.

¹⁷ I hasten to add that increased poverty has different meanings in the context of developing and developed countries. For the former, it refers to increase in the proportion of the population that fails to achieve a minimum absolute living standard defined in terms of nutrition, clothing and shelter. For the latter, it refers to a decline in the real incomes of those at the bottom of the income distribution even though they may not suffer from poverty in the absolute sense.

sustained growth to make the sweeping claim that openness and growth do not help the poor.¹⁸ They point to what they call the "core poor," where the latter are tautologically defined as precisely the groups that remained poor or even impoverished after a period of sustained growth accompanied by increased openness, and conclude that therefore openness hurts the poor and growth does not "trickledown" to them.

Two factors make it particularly easy to focus asymmetrically on losers rather than winners during periods of growth accompanied by increased openness. First, the specific sector, which is liberalized and is likely to shrink, is clearly identified. In contrast, exportable sectors that expand to generate foreign exchange that pays for increased imports are anonymous since they are not directly subject to a policy action. Indeed, when these sectors expand, the credit may readily be given to alternative, directly observable factors such as the entrepreneurship of specific individuals, improved infrastructure or even some direct government initiative. Second, the impact on the liberalized sector is immediate whereas the impact on other sectors that expand is slower. Reallocation of resource takes time such that they must be first dislocated before being transferred to more productive jobs.

But the argument that openness is to be resisted or even reversed because it bypasses some of the poor is fallacious. Almost no policy benefits everyone. Even the policies designed to assist the poor directly can and often do fail to aid many of the poor. Such propoor initiatives as the 1960s Green Revolution in India, subsides to farmers through high procurement prices or low fertilizer prices, rural electrification and primary education can all

¹⁸ This is a common argument made by anti-globalization NGOs. Recently, however, even the World Bank fell pray to it. Thus, an early draft of the World Development Report 2000-01, which focused on poverty, sought to downgrade the importance of growth as a means to poverty reduction with the help of a catalogue of instances in which growth had been accompanied by injury to selected groups afflicted by poverty.

leave the poorest of the poor untouched because they lack resources to access these programs. Therefore, the critical issue is not whether openness and growth help all of the poor but whether they help more of them than alternative policies would.

Indictment of growth on the ground that it bypasses many poverty-stricken groups, without recognition of the fact that it yields greater *aggregate* reduction in poverty than alternative policies, is not new. In his book *Poverty, Inequality, and Development*, published more than two decades ago, Gary Fields (1980) offers an interesting contrast between two studies, one by Keith Griffin (1977), which foreshadows the current skepticism of many towards growth, and the other by Walter Galenson (1977), which views growth as the key to poverty reduction. Summarizing Griffin's study, Fields (Fields, 1980, p. 167-8) states.

"Drawing on a series of earlier studies, Griffin gives evidence of persistent poverty for *selected* groups in particular countries, even rapidly growing ones. The indicators of poverty differ from country to country: proportion of the rural poor below an absolute poverty line in several Asian countries; income share of the poorest 20 percent in the Philippines and 80 percent in Bangladesh; incomes of smallholders and landless workers in Malaysia and Sri Lanka; average real incomes of cocoa producers in Ghana; incomes of informal sector workers and smallholder farmers in the poorest regions of Tanzania; 'pure labor share' of national income in Colombia; and so on." [Emphasis added.]

In contrast, Galenson (1977) focuses on the fast-growing economies, defined as those exhibiting annual GDP growth rates of 7 percent or more and concludes, "rapid sustained growth has had positive effects on the living standards of all economic groups of

those countries that experienced it." He goes on, "Growth has not 'failed;' there has simply not been enough of it in the great majority of the less developed nations." ¹⁹

To make their case plausibly, globalization critics must demonstrate that openness and growth increase poverty *in aggregate* and that an alternative set of policies that compromises growth delivers better results. I will argue below that both economic logic and empirical evidence fail to support such a position. In so far as growth and trade liberalization bypass or impoverish specific groups, the remedy is targeted corrective action rather than a major departure from the pro-growth strategy.

4.2 The Conceptual Link between Openness and Poverty Alleviation

Before I turn to some of the evidence, however, let me note that conceptually we can distinguish several effects of trade liberalization that work toward reducing poverty. These effects may work either directly or indirectly through growth. Of course, the effects working through growth, even though indirect, are likely to be more powerful than the direct effects.

There are two direct effects of trade openness on poverty alleviation. First, we have the Stolper-Samuelson effect, which is well known to trade economists. Poor countries typically export labor-intensive goods. Removal of trade barriers stimulates exports of these products and increases the demand for and hence incomes of labor. Second, typically, protectionist policies discriminate against agriculture, which employs the bulk of the poor. Liberalization removes this discrimination and is thus likely to benefit the poor.

_

¹⁹ Quoted in Fields (1980, p. 167).

Indirect effects can work through at least three channels. First, growth leads to what Jagdish Bhagwati calls the active "pull-up" effect rather than what skeptics call the passive "trickle-down" effect. Economies that manage to push the per-capita growth rate to 3 percent or more on a sustained basis rapidly absorb the poor into gainful employment and out of the marginal jobs. Second, rapidly growing economies also generate vast fiscal resources that allow governments to undertake targeted anti-poverty programs. In contrast, stagnant economies simply rob the government of its ability to fight poverty through such programs. Finally, growth that helps raise incomes of the poor families also improves their ability to access public services such as education and health. At low levels of income, even if schools are built, the poor may simply fail to avail of them.

4.3 Growth and Poverty: Cross-country Evidence

Empirical evidence linking openness to poverty reduction comes in two forms: cross-country regressions and country-specific experience. While I prefer to rely principally on country-specific experiences, given the role played by cross-country regressions approach in the current debate, I offer a brief review of the important studies in this tradition.

The pioneering cross-country regression study addressing the relationship between growth and poverty is due to Montek Ahluwalia (1976). Though Fields (1980) gave this study a central place in his review of the cross-country evidence, as Surjit Bhalla (2002) emphasizes, subsequent authors have simply ignored it. This is surprising since the Ahluwalia study was done at the World Bank, which also happens to be the source of many of the recent cross-country studies. Moreover, the better known of these latter studies, Dollar and Kraay (2000), follows a methodology virtually identical to that of Ahluwalia.

Among other things, Ahluwalia tested for what was then called the "absolute impoverishment" hypothesis, which states that at low levels of per-capita income growth may make the poor absolutely worse off. He estimated equations in which average incomes of the poorest 20, 40 and 60 percent were successively dependent variables and logarithm of per-capita GNP entered in the linear and quadratic form, share of agriculture in GDP, share of urban population in total population, literacy rate, secondary school enrollment rate, population growth rate, and a socialist/non-socialist dummy variable were independent variables. He found the elasticity of income of the poor with respect to national per-capita income to be uniformly positive though less than unity. He also found that this elasticity rises as we move from low to higher per-capita-income countries. Ahluwalia thus rejected the absolute impoverishment hypothesis.

Several subsequent studies have confirmed and indeed strengthened Ahluwalia's central finding rejecting the absolute impoverishment hypothesis. Among the more recent of these studies are Roemer and Gugerty (1997), Timmer (1997), Gallup, Radelet and Warner (1998) and Dollar and Kraay (2000). Each of these studies estimates the elasticity of income of the poorest 20 or 40 percent of the population with respect to the overall income as in Ahluwalia (1976) using samples that vary in terms of the number of countries as well as time periods involved. The elasticity estimate varies across studies between 0.8 and 1 indicating that a 10 percent increase in the national per-capita income translates into 8 to 10 percent increase in the income of the poorest 20 percent of the population.

Among these four studies, Dollar and Kraay assemble the largest sample consisting of 80 countries and four decades. They find that the elasticity of per-capita

income of the poorest 20 percent with respect to per-capita income of the country is unity: a one percent increase in the national per-capita income translates into an equal increase in the incomes of the poor. When they split the sample into two on the basis of per-capita income, they find the elasticity to be 1.06 for the poor countries and 1.07 for the rich countries. Thus, growth helps the lowest 20 percent in poor countries as much as it does in the rich countries.

In a separate paper, Dollar and Kraay (2002) rank countries according to three criteria: increased openness to trade as measured by the rise in trade to GDP ratio, growth rates and reduction in poverty. It turns out that high performance countries according to one criterion are also high-performance countries according to the other criteria. Thus, trade openness, growth and poverty reduction go hand in hand.

Thus, the cross-country evidence yields a rather tight connection between growth and the income of the poorest 20 or 40 percent of the population. But as Ahluwalia (1976, p. 335) noted almost three decades ago, "A systematic treatment of the absolute improvement hypothesis obviously calls for an examination of the trends in per capita income in particular socio-economic groups in particular countries." Therefore, I next turn to country-specific evidence.

4.4 Growth and Poverty: Country-specific Evidence

Fields (1980) provides the first systematic compilation of country-specific evidence. He brings together evidence on all developing countries for which *reliable* income distribution data for two or more years were available at the time of his study. He finds 13 such countries including ten that experienced a reduction in poverty and three an increase in it. Nine countries including Bangladesh (1963-64 to 1973-74), Brazil (1960-70), Costa Rica

(1961-71), Pakistan (1963 to 1969-70), Puerto Rico (1953-63), Singapore (1966-75), Taiwan (1964-72) and Mexico 1963-69) experienced 'demonstrable improvements in the economic position of the poor' and also grew at moderate to fast rate.²⁰ Only one country, Sri Lanka 1953-73), achieved substantial reduction in poverty in spite of slow growth while two, Argentina 1953-61 and the Philippines (1951-61), experienced deterioration in poverty despite fast growth. Finally, one country, India (1960 to 1968-69), neither grew nor achieved poverty reduction. Thus, the evidence available at the time Fields (1980) wrote his book strongly supports the positive connection between growth and poverty reduction.

Considerable additional evidence has become available supporting the openness-growth-poverty link since Fields (1980). The lowest poverty rates in developing Asia today are in the most open and fast-growing economies of East Asia. The Newly Industrialized Economies, Hong Kong, Singapore, Taiwan and Korea, have entirely eliminated poverty according to the dollar-a-day criterion. Poverty levels have also gone down substantially in other East Asian economies including Indonesia, Malaysia and Thailand.

The case of India perhaps offers the most compelling example of the link among openness, growth and poverty. A little more than two decades ago, in his case study of India, Fields (1980, p. 204) offered the following pessimistic view:

"India is a miserably poor country. Per-capita yearly income is under \$100. Of the Indian people, 45 percent receive incomes below \$50 per year and 90 percent below \$150. Of the total number of absolutely poor in the world (according to the AID data in Table 1.1), more than half are Indian. During the 1960s, per capita private consumer expenditure grew by less than ½ percent per annum. India's poverty

²⁰ Fields (1980) does not specify the cutoff points defining moderate and fast growth rates.

problem is so acute and her resources so limited that it is debatable whether any internal policy change short of a major administrative overhaul and radical redirection of effort might be expected to improve things substantially."

Though reality that unfolded in the subsequent two decades proved Fields utterly wrong, his gloomy view was not without foundation. During 1950-80, per-capita incomes in India grew less than 1.5 percent per annum and the trend of the proportion of the population below the poverty line showed little change (Srinivasan 2001). There was neither significant growth nor reduction in poverty. The three decades were also characterized by highly restrictive trade policies with the ratio of trade in goods and services to GDP being 15.9 percent in 1980.

But the decades following 1980 turned out to be in total contrast to those preceding it, transforming India from the "miserably poor country" to an "emerging market economy" that has been able to deliver a per-capita GDP growth rate of more than 3 percent even in the face of global recession. During 1980-2000, per-capita incomes grew at 4 percent per annum and the poverty ratio came down from 49 percent to 26 percent. Admittedly, trade liberalization and growth in trade during 1980s were modest with foreign and domestic debt being the main drivers of growth. But predictably this strategy proved unsustainable with the country finding itself in the midst of a balance-of-payments crisis in 1991. Serious reforms including wholesale trade liberalization followed with the ratio of trade in goods and services to GDP rising from 17.2 percent in 1990 to 30.6 percent in 2000. For a brief three-year period during 1990s, per capita GDP growth was pushed in the 5 percent range.

China offers yet another example of a country that has rapidly contained poverty through growth rates during the last two decades assisted by progressive opening of the economy. According to the official poverty line, the proportion of the poor in China fell from 28% in 1978 to 9% in 1998. This period also happens to be one of rapid expansion of trade for China. Barriers to trade have come down rapidly with the result that the ratio of its trade in goods and services to GDP has risen from 19 percent in 1980 to 49 percent in 2000. Growth rate of the country has been in the double digits during the 1980-2000.

A common complaint of globalization critics is that openness and growth have not helped reduce poverty in Latin America. Thus, speaking at the recent World Bank sponsored annual conference, ABCDE Europe 2002 in Oslo, when I suggested that one is hard pressed to come up with examples of countries that have grown at 3 percent or more in per-capita terms on a sustained basis and failed to reduce poverty, a participant was quick to point out that Brazil had in fact achieved the high growth rate during 1960s but experienced increased poverty.

Subsequently, I have examined the studies on the Brazilian experience and found that it too fails to contradict the hypothesis that sustained growth of 3 percent or more in percapita terms has a better chance of yielding poverty reduction than virtually any other formula. Based on his 1977 paper in the *American Economic Review*, Fields (1980) offers a systematic case study of the Brazilian experience during the relevant period. He summarizes one of his key findings as follows (Fields 1980, p. 211):

"During the 1960s, income grew by 79% and income per-capita by 32%. The income distribution in 1970 was absolutely superior to the 1960 distribution; that is,

a smaller fraction of the population was below any income level, and conversely, any given population group had a larger average income than before."

Fields (1980, 211) goes on to add,

"There was a small decline in the fraction of the economically active population classified as below the poverty line (according to my estimate, from 37% to 35.5%); but those who remained "poor" experienced a marked percentage increase in real income (from one-third to as much as two-third higher)."

Because several leading development economists criticized the original work by Fields (1977), these conclusions may be viewed with suspicion. Recently, however, Ricardo Barros and Rosane Mendonca (undated) have taken a detailed fresh look at the Brazilian data and restored the basic conclusion of Fields that poverty declined in Brazil during 1960s. After a careful dissection of the data in different forms, they reach the following conclusion:

"Despite the growing inequality, the poorest 30 percent was not the group which benefited the least. Actually, the gains concentrated at the top and bottom of the distribution being almost non-existent or even negative at the middle of the distribution (fourth, fifth, sixth and seventh tenths)."

Much of the current concern with high poverty rates is rooted in countries, mainly in Sub-Saharan Africa, that have failed to grow at healthy rates on a sustained basis in recent years. Symmetrically, during 1960s when Sub-Saharan Africa was growing at healthy rates, there was much less concern with poverty in that region. Instead, that was the period when China and South Asia registered poor growth and the worst fears then were about "who

would feed China" and whether any internal policy change could be expected to lift India out of its "miserably poor" state.

4.5 Global Poverty²¹

But this is not the end of the story. So far, I have said nothing about poverty on a worldwide basis. At first blush, since the world is made up of individual countries, evidence from them would already seem to contain the evidence on global poverty. But there is one complication: to count the poor worldwide, it is necessary to define a *common* poverty line across countries and convert it into domestic-currency poverty lines using the appropriate exchange rate before we can count the poor. In principle, this procedure may lead to a different conclusion than the one based on national poverty lines that are not generally comparable across countries.

Ahluwalia, Nicholas Carter and Hollis Chenery (1979) were the first to estimate global poverty. These authors defined the poverty line at \$200 per capita at 1970 prices. The purchasing power parity (PPP) exchange rates from the then United Nations International Comparisons Project were used to convert this common poverty line into a domestic-currency poverty line for each country, which was in turn applied to household expenditure survey data to count the number of poor. Ahluwalia, Carter and Chenery (1979) found that excluding China, 38 percent of the developing country population lived in poverty in 1975. They also estimated that the poverty ratio was 50.9 percent in 1960. Thus, the period 1960-75, which was associated with relatively high growth rates, was also associated with significant poverty reduction in developing countries. Subsequent

²¹ I draw much of the information in this section from Bhalla (2002).

research by Albert Berry, Francois Bourguignon and Christian Morrison (1981), Fields (1989) and Pan Yotopoulos (1989) complemented the essential message of Ahluwalia, Carter and Chenery (1979).

But recently, a set of studies at the World Bank, carried out by Martin Ravallion and his co-authors, have presented a subtle challenge to the growth-poverty. Since one of these studies, Shaohua Chen and Martin Ravallion (2001), also defines the official World Bank position on global poverty, they assume special significance. The key contention of these studies and the World Bank is that though globalization and growth have reduced the *proportion* of the poor living below the poverty line, the decline is sufficiently small that after taking into account the increase in population, the absolute number of poor has remained unchanged.

Specifically, as detailed in Fischer (2003, Table 1), according to the World Bank, if we draw the poverty line in all developing countries at \$1 at 1985 prices, convert it into domestic currencies at the PPP exchange rate and apply the latter to the household expenditure survey data, the proportion of poor declines from 28.3 percent in 1987 to 23.2 percent in 1999. With rising population, this leaves the absolute number of poor virtually unchanged from 1.18 billion in 1987 to 1.17 in 1999. The implication then is that despite 24 percent increase in per-capita GDP of developing countries during the era of increasing openness to trade, poverty declined very little. Growth is not as good a friend of the poor as previously thought!

There are several problems with this conclusion and the calculations on which it is based, and Bhalla (2002) has discussed them in detail. While one can take issue with some of Bhalla's criticisms, taken at a whole, they raise serious doubts about the World

Bank poverty figures. Recent work by Angus Deaton (2001) on the measurement of poverty in India, which is less controversial, also suggests that the World Bank estimates overstate global poverty.

As described in Chen and Ravallion (2001), the World Bank poverty estimates are derived entirely from household sample surveys, which constitute the only available source of detailed income-distribution data required to estimate poverty. For reasons that are not entirely clear, in contrast to the 24 percent per-capita income growth and 21 percent per-capita consumption growth in the national income accounts, the per-capita consumption growth in the survey data over 1987-99 is a paltry 11 percent. In other words, the annual growth in per-capita consumption as per the survey data has been less than 1 percent. It is then not very surprising that the reduction in poverty is also small. We are back to the Galenson proposition: Growth has not failed the poor; going by the household survey data, there has simply not been enough of it.

If one truly believes that per-capita income growth was 24 percent, as the World Bank seems to do when it relates this figure to the low magnitude of poverty reduction to conclude that growth has failed the poor, one must ask how per-capita consumption could have grown by only 11 percent while the national income was growing at 24 percent? To appreciate the inconsistency of the two growth rates, we need only note that if the savings rate was 20 percent in 1987, the only way both of these growth rates could be valid is if the savings rate rose to 30.4 percent in 1999. But such a large increase in the savings rate has simply not happened. One must either give up the claims to 24 percent growth in per-capita GDP or 11 percent growth in consumption. In the former case, the claim that

²² I rely on Bhalla (2002, footnote 12, p. 83) for these figure.

growth fails to serve the poor satisfactorily must be dropped. In the latter case, the calculated poverty ratio itself is suspect.

Assuming the national accounts accurately reflect the growth in the per-capita income and expenditure, Bhalla replaces the mean per-capita expenditure in sample surveys by the mean per-capita expenditure in national accounts. He then re-computes the poverty ratio and finds it to be 14 percent in 1999. This translates into 766 million poor people representing a reduction of nearly 400 million in the absolute number of the poor. While this procedure is also problematic since it assumes that all error in reporting is in the household surveys and that this error is uniformly distributed over different income groups, it does highlight the potential implication of the error for the poverty estimate.

Recent work by Deaton (2001) on the estimates of poverty in India also moves the global poverty estimates in the direction of Bhalla (2002) though not quite as far. Deaton works strictly with the household survey data and exploits the price information contained in them to convert nominal expenditures into real expenditures. Because the World Bank gives estimates for South Asia as a whole rather than India, we cannot precisely assess the implications of Deaton's estimates relating strictly to India for the global poverty. But considering that India has 1 billion people and accounts for the bulk of the population in South Asia and estimates by Deaton for India range from 18 to 30 percent in contrast to the World Bank estimate of 36.6 percent for South Asia, a significant upward bias in the latter would be indicated.²³ The upshot is that the World

²³ The higher of these figures is based on the official rural and urban poverty lines that are well above the 1985 PPP dollar a day level. The lower one, 18 percent, on the other hand, is based on adjusted rural and poverty lines that are slightly below the 1985 PPP dollar a day level. As such

Bank position that growth has not been a sufficiently trustworthy friend of the poor when it comes to the global poverty is simply untenable.

4.6 Free Trade and Other Social Agendas

Many analysts and civil society groups, especially those based in the rich countries, also argue that free trade is to be resisted because it has adverse effects on labor standards including child labor, unionization and collective bargaining. There is a fierce debate on this issue with the large majority of thoughtful analysts disagreeing with the view that trade leads to a decline in the labor standards.²⁴ As an example, take child labor. To begin with, those holding trade responsible for child labor have provided little empirical evidence supporting the view that trade liberalization increases child labor. Quite the contrary, in so far as child labor results from poverty and trade openness helps reduce poverty, trade can only help in faster phase out of this social evil. Likewise, concerns that imports of cheaper labor-intensive goods may undermine unionization and collective bargaining give rise to sweatshop conditions in the rich countries are also not grounded in empirical evidence.

4.7 Corrective Action

Evidence and analysis, thus, lead to the conclusion that as a matter of central tendency, trade is beneficial both in the economic and social sense. But this still leaves out possible deviations from the central tendency. The most obvious deviation is the temporary impoverishment of those employed in the import-competing sectors that are liberalized.

the higher figure overstates poverty while the lower one understates it relative to that implied by the 1985 PPP dollar a day poverty line.

²⁴ See Bhagwati and Hudec (1996) for the pioneering work on the subject and Panagariya (2002b) for a recent concise treatment of the debate.

There is a clear case for making provisions for adjustment assistance to those experiencing this dislocation and for training programs that help them relocate into more efficient and expanding sectors.

Likewise, freeing up trade, which facilitates faster growth, may lead to adverse environmental effects. Once again, this calls for direct corrective action. This makes not only good economic sense since the correction promotes welfare but also political sense. Ignoring the environmental damage may lead to backlash from environmental groups that may eventually undermine trade liberalization itself.

Finally, it also makes good sense to accelerate the pace of change in areas such as child labor, unionization and collective bargaining. These objectives are worth pursuing in their own right and, moreover, their pursuit may help contain the political backlash against trade liberalization.

5 Concluding Remarks

In this paper, I have brought together considerable empirical evidence to bear on the proposition that free trade is empirically a necessary condition for fast growth, it rarely accounts for long periods of negative growth, and it is just about the best friend of the poor. The alternative to free trade--protectionism--cannot be given credit for growth and poverty reduction even during periods associated with import substitution. The countries that grew fast during this period had generally been pursuing outward-oriented policies or were moving away from inward-looking policies and rapidly expanded the share of imports in GDP rather than reduce it. Indeed, when it comes right down to it, even the critics of free trade choose free trade over protectionism.

There have been cases of countries growing fast without achieving poverty reduction such as those of the Philippines (1961-71) and Argentina (1953-61). Likewise, there are countries such as Sri Lanka (1953-73), which have managed to reduce poverty during periods of slow growth. But both kinds of examples are few and far between. Moreover, the countries in the former category are typically resource rich countries. Ownership of resources is often concentrated. Periods of high growth in these countries are often related to booms in the resource markets, which primarily benefit the owners of resources. These are surely the cases requiring direct action involving taxation of the windfall to help the poor. But as already stated, these cases are exceptions rather than the rule.

While trade openness, thus, must be a centerpiece of any policy package designed to achieve faster growth and poverty reduction, there remains room for corrective action in favor of certain groups that may be impoverished in the process. But caution is needed in the design of such action. Country experiences are full of well-intentioned interventions in favor of the poor that actually enriched those already out of poverty. The fertilizer and food subsidies in India, which account for nearly 2 percent of the GDP and were ostensibly instituted to aid the poor, have ended up principally in the pockets of the super-inefficient fertilizer industry and well-to-do farmers.

Finally, not all forms of globalization are benign. Unfettered flows of short-term capital flows do have a serious downside, which must be recognized. For countries that have already adopted free capital mobility, it is not clear what they could do beyond taking some corrective measures. But countries such as India and China, which have not yet adopted capital mobility, would be well advised to go slow in this direction and place the necessary regulatory mechanisms in place before opening the floodgates.

References

- Ahluwalia, Montek, 1976, "Inequality, Poverty and Development," *Journal of Development Economics* 3, 307-42.
- Ahluwalia, Montek, Nicholas Carter and Hollis Chenery, 1979, "Growth and Poverty in developing Countries," Journal of Development Economics 6, No. 3, 399-441.
- Barros, Ricardo and Rosane Mendonca, undated, "The Evolution of Welfare, Poverty and Inequality in Brazil over the Last Three Decades: 1960-1990, mimeo, Yale University.
- Berry, Albert, Francois Bourguignon and Christian Morrison, 1981, "Changes in the World Distribution of Income between 1950 and 1977," *Economic Journal* 93, June, 331-50.
- Bhalla, Surjit, 2002, *Imagine there's No Country*, Washington, DC: Institute for International Economics.
- Ben-David, Dan "Equalizing Exchange: Trade Liberalization and Income Convergence," Quarterly Journal of Economics, 108(3), 1993.
- * Bhagwati, Jagdish, 1997, "The Capital Myth," Foreign Affairs, May-June.
- Bhagwati, Jagdish, 2000, "Globalization and Appropriate Governance," Wider Annual Lecture 4, WIDER, United Nations University.
- Bhagwati, Jagdish and Robert Hudec, eds., 1996, Fair Trade and Harmonization:

 Prerequisites for Free Trade?", Cambridge, MA: MIT Press.
- Bhagwati, Jagdish and Anne Krueger, eds., 1974, Foreign Trade Regimes and Economic

 Development: A Special Conference Series on Foreign Trade Regimes and

 Economic Development, New York: Cambridge University Press.

- Bhagwati, Jagdish and Arvind Panagariya, 2001, "The Truth about Protectionism," *Financial Times*, March 29.
- Bhagwati, Jagdish and Arvind Panagariya, 2002, "Wanted: Jubilee 2010: Dismantling Protection," *OECD Observer*, No. 231/232, May, 27-29.
- Bhagwati, Jagdish and T. N. Srinivasan, 2002, "Trade and Poverty," *American Economic Review. Papers and Proceedings* May.
- Braga, Helson C. and William G. Tyler, 1992, "Trade Policies in Brazil," in Domonick Salvatore, ed., *National Trade Policies: Handbook of Comparative Economic Policies, Volume 2*, New York: Greenwood Press, 337-359.
- Chen, Shaohua and Martin Ravallion, 2000, "Hoe did the World's Poorest Fare in the 1990s?" World Bank, Development Research Group.
- Deaton, Angus, 2001, "Computing Prices and Poverty rates in India, 1999-2000," Research Program in Development Studies, Princeton university, Princeton, December.
- Dollar, David, 1992, "Outward-Oriented Developing Economies Really Do Grow More Rapidly: Evidence from 95 LDCs, 1976-85," *Economic Development and Cultural Change*, 523-544.
- Dollar, David, and Kraay, Aart, 2000, "Growth Is Good for the Poor", mimeo, World Bank, March.
- Dollar, David, and Kraay, Aart, 2002, "Spreading the Wealth," *Foreign Affairs*January/February: 120-33.
- Edwards, Sebastian, 1993, "Openness, Trade Liberalization, and Growth in Developing Countries," *Journal of Economic Literature*, XXXI(3), September, 1358-1393.

- Edwards, Sebastian, 1998, "Openness, Productivity and Growth: What Do We Really Know?" *Economic Journal* 108, March, 383-398.
- Fields, Gary, 1977, "Who Benefits from Economic Development? A Re-examination of Brazilian Growth in the 1980s," *American Economic Review* 57(4): 570-582.
- Fields, Gary, 1980, *Poverty, Inequality and Development*, Cambridge: Cambridge University Press.
- Fields, Gary, 1989, "Changes in Poverty and Inequality in Developing Countries," World Bank Research Observer 4, No. 2, July, 167-86.
- Fischer, Stanley, 2003, "Globalization and its Challenges." Ely Lecture presented at the American Economic Association meetings in Washington D.C., January 3, 2003.
- Frankel, Jeffrey, and David Romer, 1999, "Does Trade Cause Growth?" *American Economic Review* 89(3), June, 379-399.
- Freeman, Richard, 2002, "The Battle over Labor Standards: A Report from the Front," presented at the IADB-LATN "First Roundtable: Labor Standards," Buenos Aires, September 20, 2002.
- Galenson, Walter, 1977, "Economic Growth, Income and Employment." Paper presented at the Conference on Poverty and Development in Latin America, Yale University, April.
- Gallup, John L, Radelet, Steven, and Warner, Andrew, 1998, "Economic Growth and the Income of the Poor", mimeo, Harvard Institute for International Development, November.

- Griffin, Keith, 1977, "Incresing Poverty and Changing Ideas about Developing Strategies." Paper presented at the Confrence on Distribution, Poverty and Development, Bogota, June.
- Grotius, Hugo, 1625, *De Jure Belli Ac Pacis Libri Tres*, [The Law of War and Peace].

 Translated by F. W. Kelsey. Oxford: Clarendon Press, 1925.
- Harrison, Ann, 1996, "Openness and Growth: A Time-Series, Cross-Country Analysis for Developing Countries," *Journal of Development Economics*, 48, 419-447.
- Irwin, Douglas, 1996, *Against the Tide: An Intellectual History of Free Trade*, Princeton: Princeton University Press.
- Little, Ian, Tibor Scitovsky and Maurice Scott, 1970, *Industry and Trade in Some developing Countries*, London: Oxford University Press
- * Panagariya, Arvind, 2002a, "Cost of Protection: Where do we Stand?," *American Economic Review. Papers and Proceedings* May.
- Panagariya, Arvind, 2002b, "Labor Standards and Trade Sanctions: Right End Wrong Means," in Devashish Mitra and Rana Hasan, eds., *The Impact of Trade on Labor: Issues, Perspectives, and Experiences from Developing Asia*, North-Holland, forthcoming.
- Rodriguez, Francisco and Dani Rodrik, 1999, "Trade policy and economic growth: a skeptic's guide to cross-national evidence," NBER working paper no. W7081.
- Rodrik, Dani, 1995, "Getting Interventions Right: How South Korea and Taiwan Grew Rich," *Economic Policy* 20, 55-107.
- Rodrik, Dani, 1999, *The New Global Economy and Developing Countries: Making Openness Work*, Overseas Development Council, Washington, DC.

- Roemer, Michael, and Gugerty, Mary K., 1997, "Does Economic growth reduce poverty", Harvard Institute of International Development, mimeo, March.
- Sachs, Jeffrey, and Andrew Warner, 1995, "Economic Reform and the Process of Global Integration," *Brookings Papers on Economic Activity* 1, 1-118.
- Srinivasan, T.N., 2001, "Growth and Poverty Alleviation: Lessons from Development Experience," ADB Institute Working Paper 17 (April).
- Srinivasan, T. N. and Jagdish Bhagwati, 2001, "Outward orientation and development: are revisionists right?" In Deepak Lal and Richard Snape, eds., *Trade, Development and Political Economy. Essays in Honor of Anne O. Krueger*, London: Palgrave.
- Timmer, Peter, (1997), "How Well do the Poor Connect to the Growth Process", Harvard Institute for International Development, CAER II Discussion Paper # 17, December.
- Westphal, Larry E., 1990, "Industrial Policy in an Export-Propelled Economy: Lessons from South Korea's Experience," *Journal of Economic Perspectives* 4, No. 3, 41-59.
- Yotopoulos, Pan, 1989, "Distribution of real Income: Within Countries and by the World Income Classes," *Review of income and Wealth* 35, No. 4, 357-76.

Table 1: Miracles of 1961-80*

	Growtl	n Rates		
	GDP per			Population in
Country	capita	Exports	Imports	Million (1961)
Botswana	8.5			0.5
Malta	7.3			0.3
Singapore	7.2			1.5
Hong Kong, China	6.9	10.8	10.6	3.2
Gabon	6.6	10.6	12.1	0.5
Taiwan, China	6.4			11.0
Korea, Rep.	6.3	23.7	18.0	25.7
Lesotho	4.8	7.6	11.8	0.9
Trinidad and	4.7	3.8	9.1	0.9
Thailand	4.6	9.3	9.6	27.2
Brazil	4.6	8.1	7.6	75.0
Malaysia	4.4	6.9	7.2	8.4
Barbados	4.4			0.2
Israel	4.2	10.8	8.1	2.2
Georgia	4.1			4.2
Cote d'Ivoire	4.1	7.6	7.9	3.9
Seychelles	4.0			0.0
Tunisia	4.0	8.3	7.2	4.3
Bermuda	4.0			0.0
Ecuador	3.7	8.2	8.0	4.6
Dominican	3.6	5.6	10.6	3.3
Ireland	3.6	8.0	7.8	2.8
Egypt, Arab Rep.	3.5	5.4	8.1	26.5
Indonesia	3.5	6.5	10.2	95.9

Paraguay	3.5	3.0	10.6	1.9
Mauritius	3.5	2.4	3.8	0.7
Mexico	3.4	8.6	7.8	38.1
Panama	3.4			1.2
Belize	3.4			0.1
Togo	3.2	9.9	8.8	1.5
Fiji	3.0	7.6	7.7	0.4
Mauritania	3.0	11.3	7.7	1.0
Kenya	3.0	3.3	3.6	8.6

^{*}Non-oil-exporting developing countries with per-capita GDP growth rate of 3 percent or more (33 countries with a combined population of 356.5 million people in 1961).

Source: Author's calculations based on the World Bank GDN database.

Table 2: Debacles of 1961-81*

	Growth	Rates		
	GDP per			Population in
Country	capita	Exports	Imports	Million (1961)
Central African	-0.1			1.6
Zambia	-0.3	1.0	0.4	3.2
Somalia	-0.4			2.9
Madagascar	-0.4	1.2	1.8	5.5
Dominica	-0.4			0.1
Ghana	-0.4	-2.7	-3.0	7.1
Guinea-Bissau	-0.5			0.5
Niger	-0.5	3.5	7.8	3.1
Senegal	-0.6	-0.1	1.2	3.3
Iran, Islamic Rep.	-0.7			22.1
Congo, Dem. Rep.	-0.9	2.8	5.7	15.7
United Arab Emirates	-1.0			0.1
Chad	-1.9	1.4	0.8	3.1
Kuwait	-3.6			0.3

^{*}All developing countries with negative growth rates (14 countries with a total population of 68.6 million). Exports and imports include goods and services and are measured at constant prices.

Source: Author's calculations from the World Bank GDN databases.

Table 3: Miracles of 1980-99*

		Growth Rate	es	
	GDP per			Population in
Country	capita	Exports	Imports	Million (1980)
China	8.3	10.4	8.0	981.2
Korea, Rep.	6.6	12.9	10.5	38.1
Equatorial Guinea	6.4			0.2
Taiwan, China	6.1			17.6
Singapore	5.9			2.3
St. Kitts and Nevis	5.9	2.9	2.9	0.0
Thailand	5.5	11.9	8.0	46.7
Indonesia	4.7	2.6	3.7	148.3
Botswana	4.7			0.9
Hong Kong, China	4.5	11.0	10.8	5.0
Antigua and Barbuda	4.4	5.4	4.8	0.1
Dominica	4.2	9.1	1.8	0.1
Bhutan	4.1			0.5
Malta	4.1			0.4
Chile	3.9	7.7	5.5	11.1
Malaysia	3.9	11.1	9.6	13.8
India	3.8	8.5	6.5	687.3
St. Vincent and the	ne 3.7	4.4	2.6	0.1
St. Lucia	3.7	4.0	3.1	0.1
Mauritius	3.7	7.4	6.8	1.0
Grenada	3.4	6.0	3.8	0.1
Maldives	3.3			0.2
Vietnam	3.2			53.7

Cape Verde	3.1			0.3
Pakistan	3.0	5.8	1.4	82.7

^{*} Non-oil-exporting developing countries with per-capita GDP growth rate of 3 percent or more (26 countries with combined population of 2106.5 million in 1980). Exports and imports include goods and services and are measured at constant prices.

Source: Author's calculations based on the World Bank GDN database.

Table 4: Debacles of 1980-99*

		Growth Rate		
	GDP per			Population in
Country	capita	Exports	Imports	Million (1980)
Afghanistan	-0.1			16.0
Gambia, The	-0.1	2.7	-1.1	0.6
Estonia	-0.1			1.5
Guatemala	-0.2	1.5	3.4	6.8
Ecuador	-0.2	4.9	-1.7	8.0
Samoa	-0.2			0.2
Namibia	-0.2	2.5	2.6	1.0
El Salvador	-0.3	3.6	5.7	4.6
Latvia	-0.3			2.5
Gabon	-0.3	2.8	0.1	0.7
South Africa	-0.4	2.9	2.5	27.6
Honduras	-0.5	0.8	1.6	3.6
Bolivia	-0.5	2.7	4.3	5.4
Netherlands Antilles	-0.5			0.2
Croatia	-0.5			4.6
Togo	-0.5	-0.8	0.0	2.6
Yemen, Rep.	-0.6			8.5
Sao Tome and	-0.6			0.1
Rwanda	-0.7	-1.0	5.5	5.2
Albania	-0.7			2.7
Algeria	-0.7	3.5	-2.1	18.7
Suriname	-0.7	-5.6	-6.4	0.4
Cameroon	-0.7	4.8	4.0	8.7
Romania	-0.8			22.2

Mali	-0.9	6.9	4.0	6.6
Somalia	-0.9			5.9
Nigeria	-0.9	0.0	-3.0	71.1
Vanuatu	-0.9			0.1
Comoros	-1.0	11.3	0.1	0.3
Lithuania	-1.0			3.4
Micronesia, Fed. Sts.	-1.0			0.1
Belarus	-1.0			9.6
Russian Federation	-1.1			139.0
Bahrain	-1.1			0.3
Burundi	-1.2	7.7	2.6	4.1
Venezuela, RB	-1.2	3.3	2.1	15.1
Uzbekistan	-1.2			16.0
Central African	-1.3			2.3
Angola	-1.4			7.0
Kuwait	-1.5			1.4
Zambia	-1.6	-0.1	-2.3	5.7
Djibouti	-1.6			0.3
Madagascar	-1.9	0.8	-1.9	8.9
Nicaragua	-1.9	2.7	3.2	2.9
Kyrgyz Republic	-1.9			3.6
Cote d'Ivoire	-1.9	2.9	0.1	8.2
Liberia	-2.0			1.9
Marshall Islands	-2.1			0.0
Armenia	-2.2			3.1
Haiti	-2.2	2.7	5.6	5.4
United Arab Emirates	-2.4			1.0
Kiribati	-2.4			0.1
Kazakhstan	-2.5			14.9

Saudi Arabia	-2.6			9.4
Niger	-2.6	0.1	-5.1	5.6
Brunei	-2.8			0.2
Sierra Leone	-2.9	-4.8	-5.2	3.2
Moldova	-3.6			4.0
Tajikistan	-4.1			4.0
Ukraine	-4.3			50.0
Libya	-4.5			3.0
Congo, Dem. Rep.	-4.5			27.0
Georgia	-4.7			5.1
Azerbaijan	-5.1			6.2
Iraq	-9.5			13.0

^{*}Developing and Transition economies with negative growth rates (65 countries with combined population of 621.4 million). Exports and imports include goods and services and are measured at constant prices.

Source: Author's calculations from the World Bank GDN database.

Table 5: Growth Rates in Fifteen Fastest growing Developing Countries During 1960-73

		Imports of Goods and	Exports of Goods and
Country	Per-capita GDP	Services in Real Terms	Services in Real Terms
Oman	10.5	N.A.	N.A.
Taiwan	8.1	25.8*	31.4*
Singapore	6.9	10.6*	11.3*
Swaziland	6.7	13.7	6.9
Korea	6.7	18.0	30.6
Hong Kong	6.2	9.3	10.3
Botswana	6.2	N.A.	N.A.
Cote d'Ivoire	5.6	9.4	8.6
Malta	5.2	10.6**	18.1**
Barbados	5.2	11.2*	6.5*
Israel	5.0	13.9	13.5
Lesotho	4.9	12.0	6.3
Brazil	4.7	8.9	7.8
Gabon	4.7	11.3	11.0
Thailand	4.5	11.2	10.0

^{*}Growth rate of merchandise exports or imports during 1962-73.

Source: Growth rates of per-capita GDP are from Rodrik (1999) and those of exports and imports are authors' calculations from the IMF and the U.N. data.

^{**} Growth rate of merchandise exports or imports during 1964-73.

Table 6: Brazil: Growth Rates of per-capita GDP

1962	7.1	1969	8.6	1976	2.8
1963	2.1	1970	7.0	1977	7.2
1964	-2.1	1971	6.1	1978	2.2
1965	0.5	1972	8.7	1979	0.8
1966	0.2	1973	9.4	1980	4.3
1967	1.4	1974	11.4		
1968	2.2	1975	6.5		
1962-68	1.6	1969-75	8.3	1976-80	3.5