ECONOMISTS HAVE LONG RECOGNIZED the gains from international trade; the study of these gains is where modern economics began. Over centuries, international trade has brought together remote parts of the world and different civilizations, helped disseminate knowledge and ideas, and shaped the course of regions and nations. Rapid reductions in transport and communications costs accelerated this trend in the 19th century, and international trade reached unprecedented levels at the beginning of the 20th century. Trade declined, however, following the two World Wars, the 1929 crisis, and the worldwide increase in protectionism.

A reversal in protectionism started after World War II among the industrialized countries, and spread to the developing countries in the 1970s. Trade reforms were further expanded and consolidated in the 1980s and 1990s across the developing world: in South Asia, East Asia, Latin America, Eastern Europe, and, to a lesser extent, in Africa and the Middle East. Yet in the 1990s, the results of trade reform have varied and sometimes fallen short of expectations. Critics of the economic and social effects of globalization have also become more vocal. Why have some trade liberalizations been reversed, and why have others brought prosperity, opportunities, and economic diversification? Is there still a role for the protection of infant industries in growth strategies? Does trade liberalization lead to economic growth? Finally, does trade liberalization improve or reduce poverty?

Drawing on the experience and academic research of the 1990s, this chapter identifies five lessons:

- Openness to trade has been a central element of successful growth strategies. In all countries that have sustained growth the share of trade in gross domestic product (GDP) has increased, and trade barriers have been reduced.
- Trade is an opportunity, not a guarantee. While trade reforms can help accelerate integration in the world economy and strengthen an effective growth strategy, they cannot ensure its success. Other elements that address binding constraints to growth are needed, possibly including sound macroeconomic management, trade-related infrastructure and institutions, and economy-wide investments in human capital and infrastructure.
- There are many possible ways to open an economy. The challenge for policy makers is to identify which best suits their country’s political economy, institutional constraints, and initial conditions. As these vary from country to country, it is not surprising that there is a striking heterogeneity in country experiences regarding the timing and pace of reforms. Different countries have opened up different sectors at different speeds (for example Bangladesh and India); others have achieved partial liberalization through the establishment of export processing zones (for
example China and Mauritius); and yet others have combined unilateral trade reforms with participation in regional trade agreements (for example Estonia).

- The distributive effects of trade liberalization are diverse, and not always pro-poor. Trade reforms were expected to increase the incomes of the unskilled in countries with a comparative advantage in producing unskilled-intensive goods. Yet evidence from the 1990s suggests that even in instances where trade policy has reduced poverty, there are still distributive issues. One important policy lesson is that countries need to help workers affected move out of contracting (import-competing) sectors into expanding (exporting) sectors. This is an issue relevant to both developing and industrialized countries.

- The preservation and expansion of the world trade system hinges on its ability to strike a better balance between the interests of industrialized and developing countries. Global markets are the most hostile to the products produced by the world's poor—such as agricultural products and textiles and apparel. The problems of escalating tariffs, tariff peaks, and quota arrangements systematically deny the poor market access and skew the incentives against adding value in poor countries. These problems can be addressed through collective action, best pursued through the Doha Round and the World Trade Organization. Although there is a role for nonreciprocal preferences and for reciprocal regional approaches, this comes at a cost to excluded countries, is arbitrary and political, and thus is not first best in terms of generating the right incentives for investment.

1. **Trade Reform As a Component of a Successful Growth Strategy**

This chapter begins by reviewing key changes in trade policy, trade volumes, and the composition of trade in the 1990s. One striking fact is that trade—measured as a share of exports in GDP—is now larger in developing than in developed countries. Another important trend is the shift in the composition of developing-country exports toward manufactures. Countries whose incomes were low in 1980 have managed to raise their exports of manufactures from about 20 percent of their total exports to more than 80 percent.¹

Virtually all successful economies have increased their openness to trade. In part because successful trade reforms have been introduced in conjunction with other policy initiatives, it is difficult empirically to identify the growth effect of trade policy alone, compared with the growth effect of other policy initiatives, and to disentangle whether trade causes growth or growth causes trade. As an economy accumulates physical and human capital, shifts its comparative advantage toward more capital-intensive activities, and becomes internationally competitive in a wider range of goods and services, it will inevitably trade more. But is higher trade the result or the cause of its growth? Most likely both processes are at work. This section reviews the evidence on these questions and then argues for the need to pursue trade reform as part of a comprehensive growth strategy. Openness to the global economy has helped efficiency and growth in many cases (East and South Asian countries, Botswana, Chile, Mauritius, Tunisia), but it has failed to do so in many others. These experiences do not necessarily imply that less trade reform would have been desirable, but that trade reform must be done and sequenced sensibly, as part of an effective growth strategy.

**The 1990s: An Overview**

Reforms in the 1980s and 1990s were the origin of a strong expansion in international trade (box 5.1). As detailed in chapter 3, developing countries are now more integrated with the world economy than are high-income countries.

The integration of labor emerged as another important issue on the globalization agenda during the 1990s. In 2001, developing countries received
Protection of domestic industries has a long history. In the 12th century, for example, to maintain the competitive edge of their textile industries, Flanders and England restricted the movement of experienced weavers. In the 13th century, England enacted laws restricting the types and origin of fabrics certain individuals could wear. In 16th and 17th century France, the state promoted selected industries, through import protection, direct ownership, or subsidies, as did Japan later during the Meiji period. While the protection of domestic industries took various forms—such as subsidized capital, or monopoly or monopsony rights—protection from imports was the most widely used and became particularly important after the start of the industrial revolution. During the 1800s and first half of the 1900s, tariffs on imports in industrial countries were as high as 30–50 percent (World Bank, World Development Report 1991).

Many developing countries pursued import substitution industrialization strategies in the three decades that followed World War II, but by the mid-1980s, most developing countries were seeking to reduce their import protection and liberalize trade. Three developments had raised doubts about the long-run effectiveness of strategies based on import protection. First, in the 1960s, the Republic of Korea and Taiwan (China) had begun adopting export-oriented growth strategies that not only yielded superior economic performance, but also helped these two economies to withstand the severe interest rate and oil price shocks of the 1970s. Second, high tariffs, administrative restrictions, and rationing of foreign exchange and of import licenses created high returns to rent seeking, reinforcing vested interests and an environment that stimulated corruption and weakened national institutions. The results, including state capture by vested interests and the misuse of government discretion, discredited import substitution strategies even among economists who believed in the strategic importance of import substitution in the initial phases of industrialization. Third, growth strategies based on import substitution proved difficult to implement in practice, and the practical and political aspects of implementation often negated most of the expected gains (Balassa 1971; Little, Scitovsky, and Scott 1970). High nominal tariffs often provided negative protection to emerging activities and protection to activities with negative value added, and contributed to misallocation and underutilization of capital in capital-scarce economies. Overvaluation of the exchange rate resulting from import restrictions discouraged exports and penalized agriculture—further reducing the size of the market for import-competing industries.

As a result, during the 1980s and 1990s virtually all developing countries followed the examples set by Singapore, Hong Kong (China), Korea, and Taiwan (China): encouraging exports and reducing levels of protection. Industrialization based on import protection was gradually discredited and, starting in the mid-1980s, most developing countries sought to reduce levels of import protection and liberalize trade. Chile and Sri Lanka were among the first liberalizers, having started already in the 1970s. Argentina and Uruguay followed shortly thereafter. By the early 1990s, researchers and policymakers generally accepted the superiority of outward orientation over import substitution as a development strategy. Trade liberalization expanded in the 1990s, leading to increased integration of developing economies in world trade. The fall of communism in Central and Eastern Europe, together with the collapse of the former Soviet Union, reinforced this view. Countries that had not already embarked on liberalization began to do so now, while others scaled up their efforts. They included hitherto very highly protected and inward-looking economies such as India, and countries in Sub-Saharan Africa that looked to integration with the world economy as a key instrument for reversing hitherto dismal growth performance.

(Box continues on the following page.)
movement of labor to provide services. Mode 4 accounts for only 1.4 percent of services trade (figure 5.1). The lack of liberalization in labor services has been particularly costly to developing countries, whose comparative advantage lies in the export of medium- and low-skilled, labor-intensive services.

Trade Reform, Exports, and Economic Growth

For decades, researchers have been debating the merits of economic openness and its association with growth. Academic debates on whether openness to trade causes higher growth are riddled with problems of measurement, reverse causation (faster growing countries tend to open their markets more quickly), and omitted variable bias (countries that successfully lower tariffs also adopt other complementary policies). Notwithstanding difficulties in interpreting country experiences during the 1990s, almost all economists agree that liberal trade is important for growth over the long run (box 5.2).

Research that focuses on the relationship between trade reforms and economic growth in the 1990s also finds that trade reforms are associated

some US$71 billion in migrants’ remittances—a sum that was nearly 40 percent more than all official development assistance and significantly more than net debt flows to developing countries in that year. However, such remittances went to only a few developing countries, and their importance for developing countries as a group declined over the 1990s, from slightly above 4 percent of all foreign exchange receipts to slightly below.

Remittances would provide a much larger share of foreign exchange receipts for developing countries were it not for industrial-country restrictions on labor migration. If rich countries were to permit the temporary immigration of up to 3 percent of their total labor force, developing countries would gain as much as $160 billion a year (Walmsley and Winters 2003).

Virtually all commitments under the General Agreement on Trade in Services have focused mainly on the first three modes of international service delivery rather than on mode 4, the “movement of natural persons,” which involves the temporary

---

**BOX 5.1**
(continued)

While some of the reforms were unilateral, others were accomplished in the context of multilateral trade agreements such as the Uruguay Round. Important components of those reforms included large tariff reductions and the elimination of quotas, as well as the relaxation of restrictions on foreign investment. Looking at the improvement in market access for the developing countries, tariff cuts in industrial countries accounted for about a third of the improvement and tariff cuts in the developing countries themselves accounted for two-thirds (World Bank, Global Economic Prospects 2004).

See Krueger (1997) and Baldwin (2003) for expositions on the evolution of economic thinking over this issue during the second half of the 20th century.

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**FIGURE 5.1**
Temporary Labor Mobility, Underused Mode of Trade in Services
(value of world trade in services by mode; percent)
BOX 5.2
The Trade and Growth Debate

The debate among economists and policy makers over the relationship between trade and growth has risen to prominence during the last few years, owing on the one hand to the mixed growth outcomes of developing countries that have undergone extensive trade liberalization and, on the other hand, to differences over data, econometric techniques, and model specifications among professional economists.

The resurgence of interest in the 1990s among economists on the impact of trade on growth can be attributed to the significant improvements that have taken place in endogenous growth theory as well as to the availability of more comprehensive data and new econometric techniques. According to the new growth theory (attributed to Romer 1986; Lucas 1987; and Grossman and Helpman 1992), whether import protection raises or lowers the growth rate depends on the pattern of imports and exports. Economists on both sides of the debate accept that as a matter of theory the relationship between trade and growth is ambiguous. The issue is hence an empirical one, which has become the focus of the debate in the last few years.

The launching of the debate can be attributed to Rodriguez and Rodrik (2000) (RR) and Harrison and Hanson (1999) (HH) who reviewed a number of empirical studies in the 1990s. While HH showed that the Sachs and Warner (1995) study reflected the gains from macroeconomic stability rather than trade reform, RR reviewed a number of studies, including Dollar (1992), Sachs and Warner (1995), and Edwards (1998). RR expressed doubt “that there is a strong negative relationship in the data between trade barriers and economic growth, at least for levels of trade restrictions observed in practice,” viewing “the search for such a relationship futile.” A unique feature of the HH and RR analyses was their use of the various authors’ actual data sets in testing the robustness of their results. HH and RR criticized the empirical studies on data grounds, on model-specification grounds, and on grounds of econometric techniques. Data problems included, among others, the use of poor measures of trade barriers (including the World Bank’s classification of trade regimes, which they criticized as subjective in Edwards’ paper), and the use of measures that are highly correlated with other sources of bad economic performance such as poor exchange rate management (as in Dollar’s and Sachs and Warner’s papers). Separately, Rodrik also criticized one of the more recent papers on the topic, Dollar and Kraay (2001) on data and model-specification grounds. The data problem arises from the combination of policy measures (tariff averages) with outcome measures (imports as a share of GDP). The model specification problem arises from regressing income on trade shares when both are endogenous (outcome variables).

- Notwithstanding these criticisms, it would be safe to say that most authors agree on the following: First, that trade protection is not good for economic growth. Even RR themselves state in their paper that they have seen no credible evidence to support the notion that trade protection is good for economic growth, at least for the post-1945 period.
- Second, that trade openness by itself is not sufficient for growth. RR argue in their paper that researchers and policy makers have been overstating the systematic evidence in favor of trade openness, when what is really necessary is to further identify the connection between trade and economic growth.
with higher growth, although the strength of the association varies across different studies. Yet trade liberalization by itself is not enough for economic growth. Studies show that trade policy is most likely to be associated with positive outcomes when it is conducted in a favorable economic environment, and that while lack of regulations can undermine the growth effects of trade, in countries with effective regulation the effects of trade reforms are positive for growth.

In developing countries that successfully integrated into the global economy in the 1990s, a variety of factors reinforced each other: a stable investment climate, greater market access, complementary macroeconomic policies, and unilateral or multilateral trade reforms. Table 5.1 illustrates how the trade intensity of economies changed in response to reductions in tariffs. In the countries that began the 1990s with very high tariffs, and reduced them the most, the share of imports plus exports in GDP rose significantly. But in countries that began the decade with more moderate tariffs and lowered them further, the responses varied widely. One possibility—consistent with the evidence presented in table 5.1—is that at more moderate levels of protection, other changes in the economy play a growing role in determining changing trade shares.

One important avenue through which tariff reductions in the 1990s contributed to economic growth is through their impact on exports. Figure 5.2 shows that tariff reductions in the 1990s were positively and significantly associated with developing countries’ export shares. The positive association between tariff reductions and export growth is consistent with so-called Lerner symmetry, whereby taxing imports has the same effect on international trade as does taxing exports. This means that reducing tariffs promotes exports. Cross-country regressions also suggest that in the 1990s real export growth was higher in countries with greater macroeconomic stability, countries that reduced tariffs more, and countries that had more effective government.

### TABLE 5.1

**Tariff Reductions and Changes in Goods Trade Integration, 1990–2000**

<table>
<thead>
<tr>
<th>% changes in tariffs, from late 1980s to late 1990s</th>
<th>Change in integration, 1990–2000</th>
</tr>
</thead>
<tbody>
<tr>
<td>40–70 reduction</td>
<td>India</td>
</tr>
<tr>
<td>20–30 reduction</td>
<td>Pakistan, Burkina Faso, Peru</td>
</tr>
<tr>
<td>10–20 reduction</td>
<td>Egypt, Arab Rep. of, Iran, Mauritania, Mauritius, Zambia</td>
</tr>
<tr>
<td>0–10 reduction</td>
<td>Tanzania, Paraguay, Senegal</td>
</tr>
<tr>
<td>0–2 increase</td>
<td>Mozambique</td>
</tr>
<tr>
<td>2–10 increase</td>
<td>Tunisia</td>
</tr>
<tr>
<td>&gt;10 increase</td>
<td>Syrian Arab Rep.</td>
</tr>
</tbody>
</table>

Note: Trade integration, defined as the share of goods exports plus imports in GDP, is measured in real terms and excludes services trade.*
Detailed case studies reinforce these lessons on the determinants of export activity. Studies using detailed plant-level data have shown that manufacturing firms that move into exporting are frequently the most productive in an economy. Consequently, policies that encourage investments in human and physical capital, and that support technological change, are likely to promote export growth. Evidence for Morocco suggests that many exporters are new enterprises, so that policies that encourage new plant entry and at the same time ease the exit of inefficient enterprises are likely to play an important role. Evidence from Mexican and Indonesian censuses suggests that exporters are likely to use skilled labor, which suggests that policies supporting the development of human capital are important.

Plant-level studies and anecdotal evidence also point to the importance of foreign investors in helping developing-country exporters to break into new markets. Recent studies control for the possibility of reverse causality, taking into account the fact that foreign firms may create or take over the most efficient firms. Even if the importance of foreign investment is difficult to identify in cross-country studies, plant-level studies provide ample evidence that foreign ownership has been associated with export activity (box 5.3). Studies on Indonesia, Mexico, and Morocco show that joint ventures and foreign-owned plants are significantly more likely to export than other types of enterprises. Although the mechanism is not completely clear, foreign firms are likely to provide knowledge of foreign markets and customer preferences, as well as access to new technology and financing opportunities.

The Need for Effective Growth Strategies

While trade integration opens new opportunities and can strengthen an effective growth strategy, it cannot ensure that the strategy is effective. Liberalization of trade in Argentina in the 1980s and 1990s, and in Chile in the early 1980s, for example, was accompanied by an appreciation of the real exchange rate, which reduced the competitiveness of domestic industries and incentives to export—with adverse consequences for the balance of payments and real economy. In many countries of the former Soviet Union and some in Eastern Europe in the 1990s, trade was liberalized while property rights were not well defined and the institutional base for a market economy was not well developed. These, and other institutional issues preventing the
Foreign direct investment (FDI) has been an important force in the global integration of national economies. Countries welcome FDI for many reasons. Capital-scarce countries benefit from the infusion of a less volatile source of capital. Greater investment financed by incoming FDI should also translate into higher growth. Foreign investors are expected to provide employment opportunities, better wages and working conditions, and more training. Many countries give foreign firms and joint ventures special treatment in the expectation that these firms will transfer new technology and knowledge to domestic workers and firms.

The cross-country evidence on the relationship between FDI and growth is mixed, in part because incoming FDI as a share of GDP is typically quite small. A cross-country study using data for 72 countries for 1960–95 (Carkovic and Levine 2002) finds no evidence that FDI exerts a positive impact on economic growth independent of other growth determinants (openness, black market premium, financial development, initial income, years of schooling). However, Bosworth and Collins (1999) find that FDI, by raising total factor productivity, raises a country’s rate of output growth. Borensztein et al. (1998) find that FDI adds to capital accumulation and raises the efficiency of investment, but only where the host country has a minimum level of human capital—an indicator of absorptive capacity. The Borensztein study is consistent with evidence that suggests FDI can promote growth if the country has complementary institutions such as developed financial markets (Alfaro et al. 2000) or is open to trade (Balasubramanyam, Salisu, and Dapsoford 1996).

A number of studies use micro-data to analyze the role of FDI in promoting technology transfer and raising host country wages (see, for example, World Bank, Global Development Finance 2000; Aitken and Harrison 1999; Haddad and Harrison 1993; Djankov and Hoekman 2000; Konings 2000; and Damijan et al. 2003). They provide a mixed picture. However, they all agree that affiliates of foreign firms are more productive than indigenous firms. While part of these results could reflect the fact that foreign firms acquire more efficient domestic enterprises, anecdotal evidence also suggests that local firms acquired by foreign investors undergo restructuring and improve their performance as a result of the takeover. This direct effect should not be ignored, because its magnitude may be significant. Other evidence also suggests that foreign enterprises pay higher wages (Aitken, Hanson, and Harrison 1997) and are more likely to comply with local labor standards (Harrison and Scorse 2003).

In sum, while quite a lot of evidence suggests that FDI is positively associated with growth, there is no consensus on the issue, and in particular no consensus on the direction of causality. Regardless of whether FDI independently contributes to growth, it is clear that policies and institutions that are important for growth would also be the ones that would attract FDI as well as enhance the impact of FDI on growth. Therefore, countries should focus on such policies and institutions rather than narrowly on how to attract FDI.
ponent of an overall growth strategy. In addition to freeing markets and ensuring the institutional foundation of a market economy, governments may also need to address market failures that impede a supply response. Identifying which industries warrant special treatment is highly risky, and the experience of the last few decades is riddled with attempts to correct market failures that became more costly than the failures themselves. At the same time, however, governments have learned how to structure interventions in a manner that can reduce the risks of capture and failure.

Although many factors contributed to the rise in trade integration in the 1990s, as discussed above, for brevity the following discussion is selective. It focuses on two critical complementary areas: macroeconomic stability and trade-related infrastructure and institutions.

**Macroeconomic Stability**
Macroeconomic stability is an important element in successful outcomes from trade reforms. Macroeconomic stability entails low levels of inflation and a stable and competitive exchange rate. Exchange rate volatility creates a risky business environment in which future profits and payments are uncertain, and these risks are higher in the many developing countries that have not developed financial instruments for hedging against foreign exchange risk.

Successful exchange rate management requires, among other things, appropriate sequencing of trade reforms and capital account liberalization. Experience has shown that capital account liberalization should follow, not precede, the liberalization of trade, because the large inflows of capital that generally follow the freeing of the capital account could cause a large appreciation of the real exchange rate, leading to large import surges that destabilize domestic industries and the balance of payments.

India’s appropriate sequencing of trade reforms, as well as its maintenance of a stable macroeconomic framework, contributed to its impressive export and growth performance in the 1990s (World Bank 1994b). Before starting to liberalize trade, in the early 1990s India allowed a significant depreciation of the real exchange rate, which served to increase export incentives and cushion the impact of lower import barriers on domestic industry. Trade liberalization preceded the opening of the capital account. Since 1992, India’s real effective exchange rate has remained at more or less the same level, facilitating trade reforms.

In Zambia, by contrast, macroeconomic instability undermined the potentially positive effects of structural reforms. Trade and other structural reforms in the early 1990s gave Zambia one of the most liberal trade regimes in Africa, but export performance has been lackluster. An important reason is macroeconomic instability, with high inflation and high real interest rates, as well as a highly volatile real exchange rate. The latter reflected Zambia’s unsuccessful management of the large declines that took place in 1995 and 1997 in the prices of copper, its main export (World Bank 2003n). In Malawi, too, macroeconomic instability undermined export and growth performance. During the 1990s, high and volatile inflation, averaging 31 percent, resulted in an overvalued and highly volatile real exchange rate, seriously undermining domestic production, investment, and exports. Malawi’s manufacturing sector contracted by 9 percent during 1995–96. These developments hindered Malawi’s efforts to diversify its exports out of tobacco, where they remain highly concentrated (World Bank 2003h).

**Trade-Related Infrastructure and Institutions**
Successful trade integration requires supportive infrastructure and institutions—the so-called behind-the-border agenda. A comparison of Jamaica and Mauritius illustrates the importance of institutions, as well as macroeconomic stability (box 5.4). Two other important constraints are transport infrastructure and institutional capacity for meeting product standards. Globally, improvements in transport and communications, in conjunction with developing-country reforms, have allowed the production chain to be broken up into components, with some developing countries playing a key role in global production sharing, as noted in chapter 3.
BOX 5.4
Jamaica and Mauritius: Institutions and Macroeconomic Stability Make the Difference

Jamaica and Mauritius had nearly the same per capita GDP in 1984. But between 1984 and 2000, real per capita GDP grew at about 4.8 percent a year in Mauritius, compared with only 0.7 percent in Jamaica. This is a dramatic difference in performance, given the many similarities between the two countries.

Both countries have similar natural endowments and historical legacies. Both are island economies, have tropical climates, are subject to natural shocks (hurricanes in Jamaica and cyclones in Mauritius), and are former British colonies with English as the official language. Their economic structures are similar, with about 6 percent of GDP from agriculture, about one-third from industry, and the remaining 60 percent or so from services. Sugarcane is widely grown in both countries, and both enjoy preferential access to the European Union and the United States for sugar exports. Both established export-processing zones centered on garment manufacturing, with the primary impetus provided by East Asian investors.

The disparate growth performance cannot be attributed to differences in trade: between 1985 and 2000, real annual growth of exports was 3.9 percent in Mauritius and 3.6 percent in Jamaica, and by 2000, trade accounted for a larger share of GDP in Jamaica than in Mauritius. Jamaica has geographic advantages for trade, being much closer to the United States and the European Union than Mauritius is to either. Jamaica surpasses Mauritius in education enrollment indicators. And through the 1990s, Jamaica enjoyed higher FDI as a share of GDP than Mauritius.

Two factors that may explain the difference in growth performance are institutional quality and macroeconomic stability. Subramanian and Roy (2001) point to Mauritius’s superior institutions (democracy and strong participatory institutions), and ethnic diversity, which provided important links to the rest of the world (68 percent of the population is Indian), and the need for participatory political institutions that were important for maintaining stability, rule of law, and mediating conflict. Looking at indicators of institutional quality (Kaufman, Kraay, and Zoido-Lobaton 2002), Mauritius outperforms Jamaica in all but one (regulatory quality): Mauritius does better in government effectiveness, political stability, rule of law, control of corruption, and voice. The rule of law is a particular problem in Jamaica, with crime and violence costing at least 4 percent of GDP (excluding dynamic costs) (World Bank 2003g). Unlike Mauritius, Jamaica has lacked a social/political compact; though recently the labor unions have agreed with the government to limit their wage increases in response to the grave economic situation.

Mauritius outperformed Jamaica in macroeconomic stability for the two decades from 1980 to 2000, in terms of the level of inflation and the stability and competitiveness of the real exchange rate. In the 1990s, Jamaica’s poor management of adverse macroeconomic developments seemed to more than offset the potentially positive effects of a substantial trade (and capital account) liberalization. Financial crisis in the mid-1990s worsened the already deteriorating fiscal performance, and dramatically enlarged the ratio of debt to GDP. This has dampened private sector confidence, government investment, interest rates, and growth.

In many other countries, however, transport remains a key bottleneck. Markets that are isolated may feature little competition and may fail to realize economies of scale or scope. The result is typically a vicious cycle of low productivity and low profitability. Such constraints severely limit the growth potential of the poorest countries, where agriculture supplies 15 to 52 percent of GDP. In addition, since most of the poor reside in rural areas, these constraints have serious negative effects on poverty. For exporters in some developing countries, transport is the single most important compo-
The main issues related to transport are lack of competition and inadequate investments. Transport costs are further raised by formal and informal fees and checkpoints. Poor transport particularly affects agricultural producers (mainly smallholder farmers and herders) who have difficulty accessing markets both domestic and external. In Malawi, for example, high transport costs have weakened the competitiveness and profitability of firms and farmers. Malawi is an efficient producer of sugar, but domestic transport costs account for 15 percent or more of local consumer prices, and for sugar exports, regional and international transport costs add nearly 50 percent to the ex-mill production costs (World Bank 2003i). Lack of competition in road transport (where Malawi has restrictions on foreign operators) and high transport taxes add substantially to transport costs.

Product standards in international trade have proliferated and become more stringent in recent years. Consumers in developed countries are demanding stricter food standards, while major food retailers, food manufacturers, and restaurant chains have been adopting codes of practice, standards, and other forms of supply-chain governance as part of their commercial strategies of differentiation. Increasingly, middle-income and some low-income countries are also raising their product standards, in part through the investments undertaken by multinational supermarket or restaurant chains and competitive responses by local firms.

Prospects are dim for “special and differential treatment” that would require less stringent standards from poorer countries (Jaffee and Henson 2004). Developing countries need to develop and improve their food safety and agricultural health management systems to position themselves competitively and to enhance their export performance. Building such capacity is not beyond the reach of developing countries, and some very poor countries are meeting exacting international standards. Examples include Peruvian exports of asparagus to the United States and the European Union, and low-income African countries’ exports of fish products that meet EU hygiene standards. Countries that meet strict export standards are generally those where the private sector is well organized and the public sector well focused to meet exporters’ needs, such as through outgrower programs for smallholder farmers, systems of training and oversight for small and medium-size enterprises through associations and groups, and twinning and regional networking for small countries.

2. Different Paths to Trade Reform

This section discusses issues related to the path of liberalization, including the success of different partial approaches to trade liberalization, managing the political economy of trade reform, whether there is a limited role for infant industry protection, and the pros and cons of regional trade agreements.

One element is common to almost all of the success stories: despite the diversity of approaches to trade reform, all successful liberalizations either explicitly or implicitly promoted export growth. Exporters were given incentives to ensure that selling on international markets was as attractive as domestic sales. This required establishing a regime that offset the anti-export bias. In turn, this required an effectively functioning bureaucracy to implement the offsetting regulation—as with the “indirect duty drawbacks” in Korea. This proactive approach is not generally prescribed. Since most countries lack the institutional capacity that is required to implement offsetting regulation, classic trade liberalization—through low, uniform tariffs and the elimination of quantitative restrictions—has been the more conventional recommendation.

**Partial Trade Liberalization:**

**China and India**

China opted for partial trade liberalization, pursued through a dual-track approach. Special economic zones (SEZs)—one of the drivers in China’s export and growth success—were set up in the 1980s to give the firms established within them access to duty-free imported inputs. Firms outside the SEZs faced much higher tariffs on imports, at 56 percent

China established its first four SEZs in 1980 in two coastal provinces (Guangdong and Fujian), selected for their location. The success of the initial zones led to the addition four years later of 14 coastal cities (including Shanghai) as “coastal open cities,” with authority similar to that of the SEZs. By 1992, most cities along the Yangtze River and the borders of China had been granted special privileges as coastal cities, with Shanghai being granted even more autonomy. These developments, in turn, spurred the establishment of “development zones” in many inland cities that extended tax benefits and autonomy to foreign and domestic investments. In many cases, such zones were established without the approval of the central government.

In 1993 China became the world’s second-largest destination for FDI, next to the United States. Compared with other regions, the SEZs enjoy lower tax rates and greater authority in approving foreign investment projects. The removal of administrative barriers had nearly as great an effect in spurring trade as China’s tariff reductions, which did not really begin until the 1990s. Exports grew at an annual average of 15 percent in the 1980s, and at 19 percent in the 1990s.

India followed a different model of partial liberalization, liberalizing trade across all regions of the country but relaxing protection one sector at a time. After piecemeal efforts at liberalizing trade during the 1980s, India launched a coherent trade reform program in 1991, with some faltering during 1997–2001. The reforms entailed concurrent reductions of some of the highest tariff and nontariff barriers (NTBs) in the world. A large reduction in NTBs and the streamlining of a very complex import licensing regime came early in the reform program, while tariffs were reduced in a phased manner, with reductions continuing today. Currently, the maximum customs tariff for nonagricultural goods is 30 percent, scheduled to be reduced to 20 percent or less in the near future. Capital and intermediate goods imports were liberalized first, and consumer goods (which were effectively banned) not until several years later. It was not until 2001 that all consumer goods imports were liberalized.

India’s sequencing of trade liberalization, which entailed earlier liberalization of capital and intermediate goods than for consumer goods, and much steeper reduction in tariffs for some of them, was intended to discourage the deferment of investments that might occur if domestic producers expected further reductions in capital goods tariffs. The response was rapid: in dollar terms, exports were growing by 20 percent annually within three years of the start of the reform program. The strong export supply response provided impetus for a continued response, not least because the new export receipts alleviated the pressures on the balance of payments.

Factors that were clearly important for the trade reforms adopted by China and India were the credibility of reforms and the importance of strong institutions. Some ways to achieve reform credibility are discussed below.

Political Economy of Trade Reforms

The success of trade reforms is not automatic. Political economy considerations need to be taken into account at the design stage if reforms are to be sustainable. The key elements on the political economy front are ensuring that the costs of adjustment arising from reforms are eased, and that reforms are credible.

Easing the Costs of Adjustment

Easing the costs of adjustment is clearly important to generate social and political support for reforms. One way to ease adjustment costs is to ensure that safety nets are adequate to compensate losers. But, as discussed earlier, a more efficacious way is to design a reform program that minimizes adjustment costs.

China and Mauritius provide good examples in this regard, by creating new profit opportunities at the margin while leaving old opportunities undisturbed. The upshot was that there were no identifiable losers. In China, few vested interests opposed the SEZs because these were set up outside the
scope of central planning and did not disrupt planned production and allocation. China’s approach also maximized political support for the reforms as the number of winners grew over time. Mauritius partially liberalized trade by establishing export processing zones (EPZs) and segmenting the labor market (Subramanian and Roy 2001). Labor market rules were much less stringent in the EPZs than elsewhere in the economy. Until the mid- to late 1980s, employers had greater flexibility in dismissing workers in the EPZ sector, and in the 1980s, EPZ wages were about 36–40 percent lower than wages in the rest of the economy, with the differentials narrowing to 7–20 percent in the 1990s. Aside from acting as a subsidy to exports, the segmentation of the labor market also prevented the expansion of the EPZs from driving up wages in the rest of the economy and disadvantaging the import-substituting industries.

Ensuring Credibility
At the very least, reforms should be publicly communicated so that economic agents are aware of them and can respond accordingly. Mozambique lifted export restrictions on cashew nuts but with very little communication to those directly affected by the reforms, so that few cashew nut farmers were aware that substantial reforms had been undertaken.21 As a result, much of the price increase that resulted from the reforms went to the traders, and the supply response was constrained. Had farmers been told of the reforms, they could have strengthened their bargaining power in relation to the traders, making it difficult for the latter to pay low prices. Public communication of reforms also diminishes the possibility of reform reversals, boosting their credibility.

Another way to boost the credibility of reforms is to undertake measures that are less easy to reverse than price changes. In Mozambique, another reason why the supply response was poor was that cashew nut processors did not make investments to improve their efficiency, in part because they expected the reforms to be reversed. The overall reform program would have been more credible had the price reforms been accompanied by non-price reforms, such as government investment in transport, better access to credit, promotion of competition in cashew marketing, and the creation of incentives to adopt improved technologies for cashew growing. Such nonprice interventions strengthen credibility by signaling to the public a government’s commitment to the reforms.

Further ways to promote credibility include the establishment of institutions such as India’s Tariff Commission, which is charged with the design and implementation of the trade reform program and has a tenure that outlasts governments. Such long tenure helps to enhance the credibility of reforms, as it diminishes private sector expectations that the reform program will be reversed by successive governments. Finally, credibility can also be achieved through signing on to regional trade arrangements that lock in reforms.

Should Emerging Industries Be Protected?
Although import substitution policies have been largely discredited, the need to address market failures that prevent the development of internationally competitive industries has continued to provoke debate. Suggestions have been made to grant temporary modest levels of import protection where there is a demonstrated need (Williamson 2004a). Other authors have focused on choosing the right form of protection, advocating subsidies to the initial entrants rather than the use of import duties (Baldwin 2003).

Another suggestion is to approach development as a process of “self discovery,” since the key challenge that a modernizing economy faces is learning what it is good at producing (Hausmann and Rodrik 2002). The entrepreneur who first discovers what the country should specialize in can capture only a small part of the social value that this knowledge generates, because other entrepreneurs will quickly emulate such discoveries. Thus this type of entrepreneurship will typically be undersupplied and economic transformation delayed. There may be a role for government involvement to provide incentives to induce such investments, as well as to
exert discipline in pruning investments that turn out to be costly.

A key challenge for countries that choose to pursue such a strategy is to structure the right combination of incentives (inducements) and discipline (competitive pressures, resistance against special interests). Some of the world’s most successful economies during the last four decades (Korea and Taiwan, China since the early 1960s; China since the late 1970s) prospered by pursuing policies that gave inducements for investment and risk taking while expanding competitive pressures that ensured efficient allocation by investors. During their industrial drives in the 1960s and the 1970s, Korea and Taiwan (China) provided export subsidies contingent on export performance. This strategy allowed policy makers to distinguish firms and sectors that were highly productive from those that were not. The subsidies included supplying inputs, providing working capital, imposing import restrictions, and— in Taiwan’s (China) textile industry in the 1950s— buying the resulting output. Local production grew spectacularly as a result. But the government also pruned nonproductive firms subsequently.

Asia’s successful experiences in this regard contrast with the generally failed experiences of Latin America. Pursuing import substitution strategies in the 1960s and the 1970s, Latin American governments provided incentives without sufficient discipline, with the result that too many low-productivity firms operated alongside the high performers. When trade openness and domestic competition brought discipline in the 1990s, producers received too little support (Hausmann and Rodrik 2002). Without a good balance between promotion and discipline, Latin American countries’ industrial performance fell short of that in East Asian countries during these decades.

Chile has often been touted as a miracle of free-market economics. In fact, public-private collaboration strategies have played a key role in fostering structural change and stimulating nontraditional activities (box 5.5). Yet identifying the conditions for successfully assisting new activities is not easy. Rodrik and Hausmann (2003) emphasize the importance of creating an institutional architecture that resists the pull of special interests, and the importance of political leadership from the top. Whatever institutions are employed to support new activities, they must be transparent and accountable, or selective support is likely to evolve into a new mechanism for supporting private interests in the name of public gain. The promotion of new activities should conform to a set of design principles that include the following: (1) incentives should be provided only for new, “sunrise” activities, not sunset ones; (2) there should be clear benchmarks for success or failure; (3) support must have a predetermined end (a so-called sunset clause); (4) public support should target activities such as worker training or infrastructure investment, rather than sectors such as electronics; (5) subsidized activities should provide clear potential for externalities; and (6) agencies involved in these activities should be autonomous enough to avoid capture by private interests, but should maintain links with the private sector to maximize economywide gains. This is not a prescription for creating new state enterprises, promoting existing activities, or giving governments authority to expand their bureaucratic reach. Clearly, the institutional and administrative requirements for success are formidable.

A Role for Regional Agreements?

Some countries have achieved greater integration and strong growth by adopting unilateral or multilateral trade reforms combined with participation in regional trade agreements. Signing on to regional trade agreements provides countries with access to the markets of fellow members, and can help improve their domestic institutions. But evidence suggests that as many as half of regional trade agreements are substantially trade-diverting. Trade and investment diversion cause significant economic losses to the countries excluded from the agreements.

Regional integration has yielded good results for Central and Eastern European countries that signed Europe Agreements in the 1990s with the European Union, and for Mexico, which joined the
For the Central and Eastern European countries, the institutional harmonization aspect of the Europe Agreements has been very important for successful trade integration and growth (World Bank 2000d); agreements on harmonization of investment policies, regulatory rules, and institutions with those of EU members have encouraged export-oriented foreign direct investment into the Central and Eastern European countries. In Mexico, NAFTA has had positive effects on trade, foreign direct investment, technology transfer, and growth, and is also associated with productivity improvements in manufacturing. But although NAFTA has contributed to institutional harmonization between Mexico and the United States in the areas that it covers—in particular intellectual property rights, investor protection, and environmental standards—it has not helped to narrow other institutional gaps, especially in the areas of rule of law and corruption, which are nonetheless important for income convergence between the two countries (Perry et al. 2003).

Evidence suggests that for developing countries, signing on to regional trade agreements with developed countries, particularly large developed countries, is most useful. Agreements should also strive to ensure that barriers that apply to nonagreement countries are kept low. Signing such agreements will not generate positive export and growth responses unless the countries themselves also pursue other necessary economic, political, and social reforms. Among the EU accession countries in the 1990s, benefits only accrued to those countries that were also undertaking the necessary economic, political, and institutional reforms to transform their
How much of the decline in poverty rates and increasing within-country inequality can be attributed to the trade reforms of the 1990s?

Effects of Trade Reform on Aggregate Growth and Poverty

Direct Effects
If opening up to trade is associated with higher growth, it may be associated with a decline in poverty as well. This argument rests on two assumptions: first that opening up to trade leads to higher growth and second, that growth raises the incomes of the poor as much as the incomes of the rich.

What actually occurred? There is widespread evidence that GDP growth reduces poverty. In other words, evidence suggests that growth benefits those at the lower end of the income distribution. If trade liberalization contributes to growth—as discussed earlier in this chapter—it should be associated with reductions in poverty. China and India, for example, have both experienced tremendous increases in trade integration and growth, as well as large reductions in poverty. From 1980 to 2000, real per capita GDP grew at an annual average of 8.3 percent in China and 3.6 percent in India, while trade integration (trade in goods and services in real terms as a share of GDP) rose from 23 to 46 percent of GDP in China, and from 19 to 30 percent in India. Over this period, both countries massively reduced the incidence of poverty—from 28 to 9 percent between 1978 and 1998 in China, and from 51 to 27 percent between 1977–78 and 1999–2000 in India. Since a large share of the world’s poor lives in these two countries, these large reductions have served to reduce or mitigate overall inequality in the world, even though inequality has risen within both countries (Ravallion 2003b; Sala-i-Martin 2003).

Nevertheless, Harrison (2005) suggests that policy makers need to be cautious about expecting large gains in poverty reduction from trade reforms. Many economists expected that developing countries with a comparative advantage in

3. Trade Liberalization, Poverty, and Income Distribution

Despite expected gains for the economy in the longer term, trade reform generates both winners and losers in the short run. The critical question is whether the short-run costs of trade reform fall disproportionately on the poor. Economists in the 1990s expected trade and foreign investment reforms to help developing countries reduce poverty. Trade liberalization was expected to increase demand for goods produced by developing countries’ poor or low-skilled workers, leading to higher wages for unskilled workers and ameliorating poverty. Trade reforms were also expected to raise the prices of the agricultural products produced by the poor and to reduce prices of goods that the poor consume. Is the emerging evidence from the 1990s consistent with these expectations?
unskilled labor would benefit from liberalization of trade through increased demand for their unskilled labor-intensive goods, which in turn should reduce inequality and poverty. However, the evidence in this volume—which includes 15 separate studies of the links between poverty and globalization—suggests that the story is more complex. One reason is that labor is not nearly as mobile as simple trade models assume. If comparative advantage is to increase the incomes of unskilled workers, they need to be able to move out of contracting sectors and into expanding ones. A second reason is that developing countries have historically protected their unskilled-intensive sectors, so that trade reforms may lead to less protection for unskilled workers relative to skilled. A third reason is that even firms in countries with a comparative advantage in producing goods that use unskilled labor need to use skilled workers in order to compete in global markets.

**Indirect Effects**

Trade reforms can also affect poverty indirectly, for example by influencing (1) the job opportunities and wages of the poor, (2) the prices that poor consumers pay for the goods that they buy, (3) government revenues and in turn social expenditures that particularly affect the poor, and (4) income instability as well as workers’ chances of becoming poor (Winters et al. 2004). Even if aggregate poverty falls or remains constant, many households may move into or out of poverty as a result of trade liberalization.

*Effects on jobs and wages.* Some studies have found that trade reforms reduce employment in the short run, but others have found that trade reforms increase employment over the long run, as expanding sectors create new employment opportunities. Trade explains much of the decline in Singapore’s unemployment rate, from more than 9 percent in the 1960s to close to 2 percent in the late 1990s. A study of 18 countries in Latin America and the Caribbean over the period 1970–96 found that trade liberalization had a negative, though small, direct effect on employment. The negative effect was greater in countries where the real exchange rate appreciated as a result of capital inflows that followed the economic reforms. Similarly, in Brazil during 1990–97, trade liberalization slightly reduced employment in the short run, but the more labor-intensive output mix that resulted over the long run increased employment. Much larger negative effects on output and employment have been found in some African countries. One study for Kenya, Tanzania, and Zimbabwe found that most firms responded to import competition pressure by contracting rather than upgrading aggressively. Among the suggested reasons for such behavior are the firms’ lack of preparation for competition, absence of policies to promote technological improvement (especially among small and medium enterprises), and poor technological and human infrastructure.

Trade reforms of the 1990s in Latin America and the Caribbean reduced employment in previously protected industries and augmented it in others (De Ferranti et al. 2001). Argentina lost much of its automobile industry while seeing an expansion in more sophisticated chemicals and capital- and labor-intensive manufactures. Brazil lost much of its cereals industry to Argentina under Mercosur, and its manufacturing industry suffered more generally. Costa Rica lost much of its labor-intensive manufacturing to Mexico after NAFTA, but it also substantially increased its manufacturing of computer chips. In each case, substantial numbers of workers lost their jobs, and some experienced very long periods of unemployment or large wage losses, or both.

As emphasized by De Ferranti et al. (2001), such dislocations are transitional and do not imply a permanent increase in the unemployment rate. Chile, for example, experienced double-digit rates of unemployment for several years after liberalization, but from 1986 to 1997 its unemployment rates were among the lowest in the region. Mexico’s present rate of unemployment is roughly at its traditional level, despite that country’s dramatic economic integration with the United States.

Although most studies find that the unemployment effects of trade liberalization tend to be temporary, even short-term costs can be high in human
terms. Such costs must be addressed through a variety
of policy approaches, including stronger social safety
nets, in order to ensure that trade reforms succeed.

Effects on prices. An emerging literature using
household-level data suggests that, via changes in
factor and goods prices, trade liberalization can lead
to poverty reduction. For instance, a recent study of
trade liberalization in Argentina using household
survey data found that Mercosur has benefited the
average Argentine household across the spectrum of
income distribution. The same study also finds that
Mercosur has had a pro-poor bias, benefiting poor
households more than middle-income households,
and that its impact on rich families is positive but
not statistically significant. The reason behind these
results is that Argentine trade policy protected the
rich over the poor prior to the reforms, and granted
some protection to the poor after the reforms.

Effects on social spending. Social spending is
another avenue through which liberalization may
affect income distribution, but there is no direct
evidence for such a relationship. The available evi-
dence, relating mostly to the 1980s, suggests that
many trade reforms had no revenue costs. Some of
the main reasons were that temporary tariff sur-
charges were introduced when quantitative restric-
tions were removed, and that changes in the
import/export base arising from the trade reforms
enhanced revenues. For example, Kenya’s trade lib-
eralization between 1989 and 1999 (which entailed
halving the simple average import duty rate over
the period and abolishing import licensing require-
ments and foreign exchange controls) led to
increases both in duty as a share of imports, and in
import duty revenues as a share of GDP. The
increase in revenues reflected the expansion of the
revenue base, tighter exemption management,
higher duty rates on certain products, a shift in
imports to the higher duty classes, and possibly also
improvements in customs administration and the
introduction of a preshipment program (Glenday

Even in cases in which revenues are cut, avail-
able evidence suggests that public spending impor-
tant to the poor can be protected. There are
alternative sources of revenues—though caution
needs to be exercised to ensure that replacement
taxes do not hurt the poor. And, with political will,
social spending, particularly that oriented toward
the poor, may be shielded.

Effects on vulnerability and income volatility. When
Indonesia, Korea, and Thailand opened up to trade
in the late 1980s and early 1990s, no strong negative
effects on poverty and vulnerability resulted. It
remains an open question whether openness made
the 1997–98 Asian financial crisis much more seri-
ous than the shocks that had hit the three countries
in the 1980s. It is clear, however, that financial crises
are very costly to the poor. In Indonesia, the finan-
cial crisis of 1997 led to a 50 percent reduction in
real wages. In Mexico, the peso crisis of the mid-
1990s led to a stagnation in real wages that lasted
nearly a decade. A recent study of financial deregul-
lation across countries emphasizes the need for
complementary policies, such as the creation of reli-
able institutions and macroeconomic stabilization
policies (Prasad et al. 2004). While financial crises
resulting from unrestricted capital flows are associ-
ated with a higher likelihood of poverty, foreign
direct investment inflows are associated with a
reduction in poverty. The poverty-reducing effects
of FDI are clearly documented in several recent
studies on India and Mexico.

Summarizing the Links between Trade Reforms
and Poverty

What lessons emerge from cross-country and more
detailed case studies using household data? First, the
poor are more likely to share in the gains from global-
alization where complementary policies in place.
Case studies of India and Colombia in Harrison
(2005) suggest that globalization is more likely to
benefit the poor if trade reforms are implemented
in conjunction with labor market deregulation. In
Zambia, poor farmers are only expected to ben-
efit from greater access to export markets if they
also have access to credit, technical know-how, and
other complementary inputs. The same volume
also points to the importance of social safety nets. In
Mexico, trade reforms in the 1990s hurt the poor-
est corn farmers; without support from the government, these farmers’ real incomes would have been halved. The same result has been found more recently in Ethiopia.

Second, while financial crises are associated with increasing poverty, reforms in trade and foreign investment in a number of countries have helped to reduce poverty. In Mexico, the poor in the most globalized regions have weathered the macroeconomic crises the best. In India, opening up to foreign investment was associated with a decline in poverty. In Colombia, increasing export activity was associated with an increase in compliance with labor legislation and a fall in poverty. In Poland, unskilled workers—who are the most likely to be poor—have gained from the country’s accession to the European Union.

Clearly, globalization produces both winners and losers among the poor. Winters, McCulloch, and McKay (2004); Ravallion and Lokshin (2004); and Harrison (2005) all emphasize this heterogeneity in outcomes. It should not be surprising that the results defy easy generalization. The poor can gain from one set of policy reforms, if those lower the prices they pay for consumption goods, and lose from other trade reforms that lower the prices of the goods they produce. Poor wage earners in exporting sectors or in sectors with incoming foreign investment gain from trade and investment reforms; conversely, workers in previously protected sectors are likely to lose.

This emerging evidence on the links between trade reforms and poverty points to the need for carefully targeted social safety nets and complementary policies to ease the transition of workers from contracting to expanding sectors.

*Trade Liberalization and Inequality*

Though inequality has been increasing in both rich and poor countries we still lack a comprehensive understanding of why. A popular explanation is that technological change—which may or may not be associated with opening up to trade—has led employers to demand more skilled labor. This phenomenon, referred to as skill-biased technical change, has occurred in both developed and developing countries. Some economists argue that the demand for more skilled workers is unrelated to trade liberalization, since the same trend has been documented in services that are not traded on world markets, but others argue that skill-biased technical change is itself an outcome of globalization.

One reason why trade reforms may be associated with increasing inequality is that many countries—Colombia, Mexico, Morocco, and Poland, for example—have traditionally protected the sectors that use mainly unskilled labor.

Another possible reason is that exporters—who benefit from trade reforms—need to hire skilled workers to succeed in world markets. A number of studies have shown that exporters are more likely to use a high proportion of skilled workers, suggesting that as countries turn to exporting, the demand for skilled workers will rise, pushing up their wages relative to those of unskilled workers. Foreign firms in developing countries tend to hire more skilled workers than do domestic firms. In Mexico, increasing inequality is most evident in the border region—the region most affected by increasing trade with the United States.

Nevertheless, the evidence on trade liberalization and wage inequality remains inconclusive. In Argentina, Brazil, Costa Rica, the Dominican Republic, and Mexico, the industries that are most exposed to international competition pay the highest wages. It is difficult to distinguish the impact of globalization from that of technical change, since the adoption of new technologies could be stimulated by external competition via trade. In Mexico, for example, the tripling of manufactured exports during the 1990s has been associated with increased rates of adoption of modern production technologies, an acceleration of productivity growth, a relative increase in the demand for skilled labor, and an increase in inequality.

There is no evidence that trade liberalization permanently worsens income distribution. As noted above, however, there is evidence that trade liberalization has been associated with—at times significant
and prolonged—adjustment costs in the form of employment losses. In Mexico, trade integration through NAFTA, while reducing poverty, has also increased income inequality between regions: regions with lower per capita GDP and higher telephone density grew faster, while regions with high public employment grew more slowly (Perry et al. 2003).

Governments need to help the disadvantaged by strengthening social safety nets and by providing education and training for the unskilled. As attested by the industrialized countries, it is a daunting task to build up the administrative and institutional capacity required to design and implement safety nets that are well targeted and that avoid leakages. More innovative approaches to trade reforms and trade reform assistance packages may be needed.

4. Issues of Differential Market Access

After the reforms of the 1990s the world trade system has been more supportive of development. But it remains strongly biased against the poor. Global markets are most hostile to the products the world’s poor produce—agriculture, textiles, and labor-intensive manufactures. Escalating tariffs, tariff peaks, and quota arrangements maintained by both developed and developing countries systematically deny the poor market access and skew incentives against adding value in poor countries. In both rich and poor countries, protection remains heavily concentrated in the most politically sensitive areas—textiles, clothing, other labor-intensive manufactures, and agriculture.

Differential treatment by developed countries still constrains the expansion of trade by developing countries, particularly the poorest. In developed countries, the relatively low average tariffs mask the sometimes high protection in the form of tariff peaks, tariff escalation, specific duties, and production subsidies.

Developed-country protection is much more pronounced in agriculture than in manufacturing (World Bank, Global Economic Prospects 2004). Since most of the world’s poor live in rural areas and work in agriculture, rich-country subsidies combined with trade protection to domestic agriculture worsen world poverty. Farm production subsidies in the United States, for example, are distributed overwhelmingly to the richest farmers, exacerbating income inequality in agriculture and favoring wealthy landowners. Developed countries impose higher tariffs on agricultural imports from developing countries than from other industrial countries (table 5.2). Developed countries impose an average tariff of 15 percent on agricultural imports from other industrial countries, but average tariffs ranging from 20 percent (for Latin America) to 35 percent (for Europe and Central Asia) on agricultural imports from developing countries. The issue of agricultural protection, in particular in cotton, has risen in prominence in multilateral trade talks, and was one of the main reasons for the failure of the most recent round of WTO talks in Cancun in September 2003. Since then, Brazil has gone to the WTO with charges that U.S. subsidies on cotton are inconsistent with WTO obligations, and the WTO ruling on April 2004 affirmed Brazil’s charges.42

On manufactured goods, tariffs are on average lower in developed than in developing countries, but the types of goods exported by poor countries face higher tariffs in the rich countries. For example, while exporters of manufactures from industrial countries face, on average, a tariff of 1 percent on their sales to other industrial countries, exporters from developing countries pay anywhere from 2 percent if they are from Latin America (where NAFTA weighs heavily) to 8 percent if they are from South Asia.

Overall, rich countries collect from developing countries about twice the tariff revenues per dollar of imports that they collect from other rich countries. Protection also takes forms other than tariffs—among them quotas, specific duties, and contingent protection measures such as antidumping duties. As with tariffs, these measures tend to be used more frequently against labor-intensive products from developing countries. Antidumping duties are on average 7 to 10 times higher than tariffs in industrial countries, and around 5 times higher in devel-
Developing countries are also hampered in other critical areas, including access for their agricultural and textile exports, and restrictions on international labor migration.

To continue the momentum toward greater global integration, high-income countries must further open their markets to developing-country exports. Industrial countries' unfair tariff treatment of developing countries must be addressed in the upcoming Doha round of trade negotiations.

**Notes**

1. These changes were not just due to declines in the prices of agricultural and resource commodities relative to manufactures—the strong shift in the composition of exports shows up even when price changes are removed. Further, it was not just due to a few, large high-growth exporters such as China and India. Excluding China and India, the share of manufactures in developing-country exports grew from one-tenth in 1980 to almost two-thirds in 2001. It increased sharply, but not equally, in all regions. The laggards included Sub-Saharan Africa and the Middle East and North Africa, which have yet to reach 30 percent. Many countries, particularly the poorest, remain dependent on exports of agricultural and resource commodities.

2. World Bank (Global Economic Prospects 2004, 139). These statistics are based on remittances sent through official channels. Existing payment systems make remittances difficult and costly, especially in and to Africa and Central America. To many parts of the world, unofficial remittances far outweigh official ones.

3. From 1990 to 2000, income from migrant workers overseas (including workers’ remittances and employees’ compensation) as a share of foreign exchange receipts (measured as exports of goods, services, and workers’ income) fell from 4.3 to 3.8 percent for all developing countries. Conceptually it makes sense to compare income from migrant workers with receipts from exports of goods and services since labor could be viewed as one form of a country’s service exports. Almost all of the drop for the developing world as a whole can be attributed to

### Table 5.2

<table>
<thead>
<tr>
<th>Exporting region</th>
<th>Agricultural Tariffs</th>
<th>Nonagricultural Tariffs</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>East Asia</td>
<td>Europe and Central Asia</td>
</tr>
<tr>
<td>Industrial countries</td>
<td>33.3</td>
<td>43.7</td>
</tr>
<tr>
<td>East Asia</td>
<td>31.0</td>
<td>30.3</td>
</tr>
<tr>
<td>Europe and Central Asia</td>
<td>24.2</td>
<td>36.4</td>
</tr>
<tr>
<td>Latin America and the Caribbean</td>
<td>42.1</td>
<td>36.0</td>
</tr>
<tr>
<td>Middle East</td>
<td>23.0</td>
<td>43.4</td>
</tr>
<tr>
<td>South Asia</td>
<td>16.6</td>
<td>34.6</td>
</tr>
<tr>
<td>Sub-Saharan Africa</td>
<td>26.7</td>
<td>20.3</td>
</tr>
</tbody>
</table>

Source: Weighted averages calculated using GTAP Version 5 Database (www.gtap.org). Most-favored-nation rates except for major free-trade blocs such as the European Union and the North American Free Trade Area.
the decline in migrant workers’ income in the Arab Republic of Egypt, which in 1990 had enjoyed the largest amount of this income in nominal terms in the developing world. The decline in migrant workers’ income in Egypt during the 1990s was related to the Gulf War. Excluding Egypt, the ratio fell from 3.7 to 3.6 percent over the decade. Countries where incomes from migrant workers have become quite important—ranging between 20 to 46 percent of total foreign exchange receipts in 2000—and where such income increased significantly over the 1990s (increases ranging from 10 to 46 percent) include Albania, Ecuador, Jamaica, Jordan, Nicaragua, Sudan, and Uganda. At the same time, however, countries including Benin, Cape Verde, Egypt, Lesotho, and Pakistan experienced declines in such incomes, ranging from 10 to 30 percent.

4. Properly identifying the causal impact of changes in trade policies on growth needs to take into account other factors associated with GDP growth, and the possibility of reverse causality (that is, if GDP growth causes changes in trade policies). This means that the variable for trade policy should be “instrumented” or represented with measures that affect trade policy but are not correlated with GDP growth. Since most reforms are driven by initial protection levels, one way to get around the problem is to instrument the changes in tariffs in the 1990s with the initial tariffs that prevailed during 1986–90. The initial tariffs were found to explain 36 percent of the changes in tariffs during the decade: countries with high tariffs in the late 1980s and early 1990s reduced tariffs by a higher percentage, while countries with already low tariffs reduced them less. The results also control for some other policies that affected growth in the 1990s, including exchange rate policies, government consumption, and inflation.

5. For example, Dollar and Kraay (2001, 2003); Lee, Ricci, and Rigobon (2004); and Alcala and Ciccone (2004) all show a positive relationship between trade and growth, whereas Rigobon and Rodrik (2004) get mixed results. Wacziarg and Welch (2003) find a positive relationship between a composite measure of economic reforms and economic growth, but that relationship is not significant for the 1990s; nor do they isolate the role of trade policy per se, but look at the composite measure including exchange rate reforms. Their analysis is done in a panel context, since they measure the impact of changes in trade policy on economic growth.


7. See Bolaky and Freund (2004). The authors measure excessive regulation using a World Bank survey on labor regulations and business entry regulations. They find that the benefits of expanding trade (as measured by trade shares) are offset by excessive regulations in the most regulated economies in the 1990s.

8. Lerner symmetry in the two-good case can be illustrated as follows: \[ \frac{P_x}{P_m}(1 + \tau) = \frac{P_x/(1 + \delta)}{P_m}, \] where \( P_x \) = price of exports; \( P_m \) = price of imports; \( \tau \) = tariff.

9. Macroeconomic stability refers to the stability of the real effective exchange rate, as measured by the standard deviation, and average inflation. Government effectiveness refers to combined perceptions of the quality of public service provision, the quality of the bureaucracy, the competence of civil servants, the independence of the civil service from political pressures, and the credibility of the government’s commitment to policies. The government effectiveness indicator is taken from Kaufman, Kraay, and Mastruzzi (2003), and based on 17 separate sources of subjective data on perceptions of governance constructed by 15 different organizations.

10. See Aitken, Hanson, and Harrison (1997).


12. Tsikata (2003). This study summarizes the findings of diagnostic trade integration studies undertaken during 2001–03 for 12 least developed countries (Burundi, Cambodia, Ethiopia, Guinea, Lesotho, Madagascar, Malawi, Mali, Mauritania, Nepal, Senegal, and the Republic of Yemen).

13. The discussion in this paragraph is based on Jaffee and Sutherland (2003).


15. The autonomy given to local governments in China is a very important factor in this development. This autonomy is provided in the form of the “fiscal contracting system” introduced between 1980 and 1993, under which provincial governments are provided incentives to build up local economies and their own revenue bases. Specifically, the incentives arise from allowing the provinces to keep the lion’s share of the increases in revenues at the margin. Data from the reform period of 1982–91 show that the correlation coefficient between the provincial budgetary revenue and expenditure is 0.75, compared to 0.17 in the prereform period of 1970–79 (Qian 2002). Another study (Jin, Qian, and Weingast 2001) found that such incentives were indeed significant—for the growth of employment of nonstate enterprises and in the reform of state enterprises.


17. A result of the increasing import competition from East and Southeast Asian countries that devalued their currencies in the aftermath of the Asian financial crisis.

18. These tariffs underestimate true import competition since there are also specific tariffs.

19. However, imports of several agricultural goods, making up 40 percent of Indian agricultural GDP, continue to be controlled by state trading enterprises.
22. Much of the benefits came in the form of export-oriented FDI from the EU member countries (World Bank 2000d).
23. This discussion is taken from World Bank (2004d); see also Stiglitz and the Initiative for Policy Dialogue (2004).
24. See Harrison (forthcoming); Winters, McCulloch, and McKay (2004); Goldberg and Pavcnik (2005, forthcoming) for comprehensive surveys.
25. See, for example, the survey papers by Berg and Krueger (2003); Winters, McCulloch, and McKay (2004); and Dollar and Kraay (2001, 2003). The general conclusion of these papers is that growth increases the incomes of the poor, although whether or not the effect is neutral across different incomes is subject to debate.
27. Papers from this volume, which was commissioned by the National Bureau of Economic Research, can be viewed online at www.nber.org.
29. Moreira and Najberg (2000). The appreciation of the real exchange rate during the period contributed to the negative employment effect by encouraging imports and undermining exports.
32. See Winters et al. (2004) for studies cited.
34. See Thomas (2004).
35. For the study on India, see Topalova (2005). For the study on Colombia, see Goldberg and Pavcnik (2005).
41. For a review of recent evidence on these links, see Hanson (2004); Goldberg and Pavcnik (2004a).
42. U.S. subsidies on cotton amounted to $3.7 billion in 2002 (three times the U.S. aid to Africa).