CHAPTER 11

# Trade Policy in Developing Countries

So far we have analyzed the instruments of trade policy and its objectives without specifying the context—that is, without saying much about the country undertaking these policies. Each country has its own distinctive history and issues, but in discussing economic policy, one difference between countries becomes obvious: their income levels. As Table 11-1 suggests, nations differ greatly in their per-capita incomes. At one end of the spectrum are the developed or advanced nations, a club whose members include Western Europe, several countries largely settled by Europeans (including the United States), and Japan; these countries have per-capita incomes that in some cases exceed $40,000 per year. Most of the world's population, however, live in nations that are substantially poorer. The income range among these **developing countries**[1] is itself very wide. Some of these countries, such as South Korea, are now considered members of a group of "newly industrialized" nations with de facto developed-country status, both in terms of official statistics and in the way they think about themselves. Others, such as Bangladesh, remain desperately poor. Nonetheless, for virtually all developing countries, the attempt to close the income gap with more advanced nations has been a central concern of economic policy.

Why are some countries so much poorer than others? Why have some countries that were poor a generation ago succeeded in making dramatic progress, while others have not? These are deeply disputed questions, and to try to answer them—or even to describe at length the answers that economists have proposed over the years—would take us outside the scope of this book. What we can say, however, is that changing views about economic development have had a major role in determining trade policy.

For about 30 years after World War II, trade policies in many developing countries were strongly influenced by the beliefs that the key to economic development was the creation of a strong manufacturing sector, and that the best way to create

[1] *Developing country* is a term used by international organizations that has now become standard, even though some "developing" countries have gone through extended periods of declining living standards. A more descriptive but less polite term is *less-developed countries* (LDCs).

| TABLE 11-1 | Gross Domestic Product Per Capita, 2009 (dollars, adjusted for differences in price levels) |
|---|---|
| United States | 46,008 |
| Germany | 36,163 |
| Japan | 34,167 |
| South Korea | 28,443 |
| Mexico | 15,130 |
| China | 8,383 |
| Bangladesh | 1,747 |

**Source:** Conference Board Total Economy Database.

that manufacturing sector was to protect domestic manufacturers from international competition. The first part of this chapter describes the rationale for this strategy of import-substituting industrialization, as well as the critiques of that strategy that became increasingly common after about 1970, and the emergence in the late 1980s of a new conventional wisdom that stressed the virtues of free trade. The second part of the chapter describes the remarkable shift in developing-country trade policy that has taken place since the 1980s.

Finally, while economists have debated the reasons for persistent large income gaps between nations, since the mid-1960s a widening group of Asian nations has astonished the world by achieving spectacular rates of economic growth. The third part of this chapter is devoted to the interpretation of this "Asian miracle," and its (much disputed) implications for international trade policy.

## LEARNING GOALS

After reading this chapter, you will be able to:

- Recapitulate the case for protectionism as it has been historically practiced in developing countries, and discuss import-substitution-led industrialization and the "infant industry" argument.
- Summarize the basic ideas behind "economic dualism" and its relationship to international trade.
- Discuss the recent economic history of the Asian countries, such as China and India, and detail the relationship between their rapid economic growth and their participation in international trade.

# Import-Substituting Industrialization

From World War II until the 1970s, many developing countries attempted to accelerate their development by limiting imports of manufactured goods, in order to foster a manufacturing sector serving the domestic market. This strategy became popular for a number of reasons, but theoretical economic arguments for import substitution played an important role in its rise. Probably the most important of these arguments was the *infant industry argument*, which we mentioned in Chapter 7.

## The Infant Industry Argument

According to the infant industry argument, developing countries have a *potential* comparative advantage in manufacturing, but new manufacturing industries in developing countries cannot initially compete with well-established manufacturing in developed countries. To allow manufacturing to get a toehold, then, governments should temporarily support new industries until they have grown strong enough to meet international competition. Thus it makes sense, according to this argument, to use tariffs or import quotas as temporary measures to get industrialization started. It is a historical fact that some of the world's largest market economies began their industrialization behind trade barriers: The United States had high tariff rates on manufacturing in the 19th century, while Japan had extensive import controls until the 1970s.

**Problems with the Infant Industry Argument** The infant industry argument seems highly plausible, and in fact it has been persuasive to many governments. Yet economists have pointed out many pitfalls in the argument, suggesting that it must be used cautiously.

First, it is not always a good idea to try to move today into the industries that will have a comparative advantage in the future. Suppose that a country that is currently labor-abundant is in the process of accumulating capital. When it accumulates enough capital, it will have a comparative advantage in capital-intensive industries. However, that does not mean it should try to develop these industries immediately. In the 1980s, for example, South Korea became an exporter of automobiles; it would probably not have been a good idea for South Korea to have tried to develop its auto industry in the 1960s, when capital and skilled labor were still very scarce.

Second, protecting manufacturing does no good unless the protection itself helps make industry competitive. For example, Pakistan and India have protected their manufacturing sectors for decades and have recently begun to develop significant exports of manufactured goods. The goods they export, however, are light manufactures like textiles, not the heavy manufactures that they protected; a good case can be made that they would have developed their manufactured exports even if they had never protected manufacturing. Some economists have warned of the case of the "pseudoinfant industry," in which an industry is initially protected, then becomes competitive for reasons that have nothing to do with the protection. In this case infant industry protection ends up looking like a success, but may actually have been a net cost to the economy.

More generally, the fact that it is costly and time-consuming to build up an industry is not an argument for government intervention unless there is some domestic market failure. If an industry is supposed to be able to earn high enough returns for capital, labor, and other factors of production to be worth developing, then why don't private investors develop the industry without government help? Sometimes it is argued that private investors take into account only the current returns in an industry and fail to take account of the future prospects, but this argument is not consistent with market behavior. In advanced countries at least, investors often back projects whose returns are uncertain and lie far in the future. (Consider, for example, the U.S. biotechnology industry, which attracted hundreds of millions of dollars of capital years before it made even a single commercial sale.)

**Market Failure Justifications for Infant Industry Protection** To justify the infant industry argument, it is necessary to go beyond the plausible but questionable view that industries always need to be sheltered when they are new. Whether infant industry protection is justified depends on an analysis of the kind we discussed in Chapter 10. That is, the argument for protecting an industry in its early growth must be related to some particular set of market failures that prevent private markets from developing the industry

as rapidly as they should. Sophisticated proponents of the infant industry argument have identified two market failures as reasons why infant industry protection may be a good idea: **imperfect capital markets** and the problem of **appropriability**.

The *imperfect capital markets justification* for infant industry protection is as follows: If a developing country does not have a set of financial institutions (such as efficient stock markets and banks) that would allow savings from traditional sectors (such as agriculture) to be used to finance investment in new sectors (such as manufacturing), then growth of new industries will be restricted by the ability of firms in these industries to earn current profits. Thus low initial profits will be an obstacle to investment even if the long-term returns on the investment will be high. The first-best policy is to create a better capital market, but protection of new industries, which would raise profits and thus allow more rapid growth, can be justified as a second-best policy option.

The *appropriability argument* for infant industry protection can take many forms, but all have in common the idea that firms in a new industry generate social benefits for which they are not compensated. For example, the firms that first enter an industry may have to incur "start-up" costs of adapting technology to local circumstances or of opening new markets. If other firms are able to follow their lead without incurring these start-up costs, the pioneers will be prevented from reaping any returns from these outlays. Thus, pioneering firms may, in addition to producing physical output, create intangible benefits (such as knowledge or new markets) in which they are unable to establish property rights. In some cases the social benefits from creation of a new industry will exceed its costs, yet because of the problem of appropriability, no private entrepreneurs will be willing to enter. The first-best answer is to compensate firms for their intangible contributions. When this is not possible, however, there is a second-best case for encouraging entry into a new industry by using tariffs or other trade policies.

Both the imperfect capital markets argument and the appropriability case for infant industry protection are clearly special cases of the *market failure* justification for interfering with free trade. The difference is that in this case, the arguments apply specifically to *new* industries rather than to *any* industry. The general problems with the market failure approach remain, however. In practice it is difficult to evaluate which industries really warrant special treatment, and there are risks that a policy intended to promote development will end up being captured by special interests. There are many stories of infant industries that have never grown up and remain dependent on protection.

## Promoting Manufacturing Through Protection

Although there are doubts about the infant industry argument, many developing countries have seen this argument as a compelling reason to provide special support for the development of manufacturing industries. In principle such support could be provided in a variety of ways. For example, countries could provide subsidies to manufacturing production in general, or they could focus their efforts on subsidies for the export of some manufactured goods in which they believe they can develop a comparative advantage. In most developing countries, however, the basic strategy for industrialization has been to develop industries oriented toward the domestic market by using trade restrictions such as tariffs and quotas to encourage the replacement of imported manufactures by domestic products. The strategy of encouraging domestic industry by limiting imports of manufactured goods is known as the strategy of **import-substituting industrialization**.

One might ask why a choice needs to be made. Why not encourage both import substitution and exports? The answer goes back to the general equilibrium analysis of tariffs in Chapter 6: A tariff that reduces imports also necessarily reduces exports. By protecting import-substituting industries, countries draw resources away from actual or potential export sectors. So a country's choice to seek to substitute for imports is also a choice to discourage export growth.

The reasons why import substitution rather than export growth has usually been chosen as an industrialization strategy are a mixture of economics and politics. First, until the 1970s many developing countries were skeptical about the possibility of exporting manufactured goods (although this skepticism also calls into question the infant industry argument for manufacturing protection). They believed that industrialization was necessarily based on a substitution of domestic industry for imports rather than on a growth of manufactured exports. Second, in many cases, import-substituting industrialization policies dovetailed naturally with existing political biases. We have already noted the case of Latin American nations that were compelled to develop substitutes for imports during the 1930s because of the Great Depression, and also during the first half of the 1940s because of the wartime disruption of trade (Chapter 10). In these countries, import substitution directly benefited powerful, established interest groups, while export promotion had no natural constituency.

It is also worth pointing out that some advocates of a policy of import substitution believed that the world economy was rigged against new entrants—that the advantages of established industrial nations were simply too great to be overcome by newly industrializing economies. Extreme proponents of this view called for a general policy of delinking developing countries from advanced nations; but even among milder advocates of protectionist development strategies, the view that the international economic system systematically works against the interests of developing countries remained common until the 1980s.

The 1950s and 1960s saw the high tide of import-substituting industrialization. Developing countries typically began by protecting final stages of industry, such as food processing and automobile assembly. In the larger developing countries, domestic products almost completely replaced imported consumer goods (although the manufacturing was often carried out by foreign multinational firms). Once the possibilities for replacing consumer goods imports had been exhausted, these countries turned to protection of intermediate goods, such as automobile bodies, steel, and petrochemicals.

In most developing economies, the import-substitution drive stopped short of its logical limit: Sophisticated manufactured goods such as computers, precision machine tools, and so on continued to be imported. Nonetheless, the larger countries pursuing import-substituting industrialization reduced their imports to remarkably low levels. The most extreme case was India: In the early 1970s, India's imports of products other than oil were only about 3 percent of GDP.

As a strategy for encouraging growth of manufacturing, import-substituting industrialization clearly worked. Latin American economies began generating almost as large a share of their output from manufacturing as advanced nations. (India generated less, but only because its poorer population continued to spend a high proportion of its income on food.) For these countries, however, the encouragement of manufacturing was not a goal in itself; rather, it was a means to the end goal of economic development. Did import-substituting industrialization promote economic development? Here serious doubts appeared. Although many economists approved of import-substitution measures in the 1950s and early 1960s, since the 1960s, import-substituting industrialization has come under increasingly harsh criticism. Indeed, much of the focus of economic analysts and of policy makers has shifted from trying to encourage import substitution to trying to correct the damage done by bad import-substitution policies.

## Case Study

### Mexico Abandons Import-Substituting Industrialization

In 1994 Mexico, along with Canada and the United States, signed the North American Free Trade Agreement—an agreement that, as we explain in Chapter 12, has become highly controversial. But Mexico's turn from import-substituting industrialization to relatively free trade actually began almost a decade before the country joined NAFTA.

Mexico's turn toward free trade reversed a half-century of history. Like many developing countries, Mexico turned protectionist during the Great Depression of the 1930s. After World War II, the policy of industrialization to serve a protected domestic market became explicit. Throughout the 1950s and 1960s, trade barriers were raised higher, as Mexican industry became increasingly self-sufficient. By the 1970s, Mexico had largely restricted imports of manufactured goods to such items as sophisticated machinery that could not be produced domestically except at prohibitive cost.

Mexican industry produced very little for export; the country's foreign earnings came largely from oil and tourism, with the only significant manufacturing exports coming from *maquiladoras*, special factories located near the U.S. border that were exempt from some trade restrictions.

By the late 1970s, however, Mexico was experiencing economic difficulties, including rising inflation and growing foreign debt. The problems came to a head in 1982, when the country found itself unable to make full payments on its foreign debt. This led to a prolonged economic crisis—and to a radical change in policy.

Between 1985 and 1988, Mexico drastically reduced tariffs and removed most of the import quotas that had previously protected its industry. The new policy goal was to make Mexico a major exporter of manufactured goods closely integrated with the U.S. economy. The coming of NAFTA in the 1990s did little to reduce trade barriers, because Mexico had already done the heavy lifting of trade liberalization in the 1980s. NAFTA did, however, assure investors that the change in policy would not be reversed.

So how did the policy change work? Exports did indeed boom. In 1980, Mexican exports were only 10.7 percent of GDP—and much of that was oil. By 2008, exports were up to 28.3 percent of GDP, primarily manufactures. Today, Mexican manufacturing, rather than being devoted to serving the small domestic market, is very much part of an integrated North American manufacturing system.

The results for the overall Mexican economy have, however, been somewhat disappointing. Per-capita income has risen over the past 25 years, but the rate of growth has actually been lower than that achieved when Mexico was pursuing a policy of import-substituting industrialization.

Does this mean that trade liberalization was a mistake? Not necessarily. Most (but not all) economists who have looked at Mexican performance blame the relatively low growth on such factors as poor education. But the fact is that Mexico's turn away from import substitution, while highly successful at making Mexico an exporting nation, has not delivered as much as hoped in terms of broader economic progress.

## Results of Favoring Manufacturing: Problems of Import-Substituting Industrialization

Import-substituting industrialization began to lose favor when it became clear that countries pursuing import substitution were not catching up with advanced countries. In fact, some developing countries lagged further behind advanced countries even as they developed a domestic manufacturing base. India was poorer relative to the United States in 1980 than it had been in 1950, the first year after it achieved independence.

Why didn't import-substituting industrialization work the way it was supposed to? The most important reason seems to be that the infant industry argument is not as universally valid as many people had assumed. A period of protection will not create a competitive manufacturing sector if there are fundamental reasons why a country lacks a comparative advantage in manufacturing. Experience has shown that the reasons for failure to develop often run deeper than a simple lack of experience with manufacturing. Poor countries lack skilled labor, entrepreneurs, and managerial competence and have problems of social organization that make it difficult for these countries to maintain reliable supplies of everything from spare parts to electricity. These problems may not be beyond the reach of economic policy, but they cannot be solved by *trade* policy: An import quota can allow an inefficient manufacturing sector to survive, but it cannot directly make that sector more efficient. The infant industry argument is that, given the temporary shelter of tariffs or quotas, the manufacturing industries of less-developed nations will learn to be efficient. In practice, this is not always, or even usually, true.

With import substitution failing to deliver the promised benefits, attention turned to the costs of the policies used to promote industry. On this issue, a growing body of evidence showed that the protectionist policies of many less-developed countries badly distorted incentives. Part of the problem was that many countries used excessively complex methods to promote their infant industries. That is, they used elaborate and often overlapping import quotas, exchange controls, and domestic content rules instead of simple tariffs. It is often difficult to determine how much protection an administrative regulation is actually providing, and studies show that the degree of protection is often both higher and more variable across industries than the government intended. As Table 11-2 shows, some industries in Latin America and South Asia were protected by regulations that were the equivalent of tariff rates of 200 percent or more. These high rates of effective protection allowed industries to exist even when their cost of production was three or four times the price of the imports they replaced. Even the most enthusiastic advocates of market failure arguments for protection find rates of effective protection that high difficult to defend.

**TABLE 11-2** **Effective Protection of Manufacturing in Some Developing Countries (percent)**

| | |
|---|---|
| Mexico (1960) | 26 |
| Philippines (1965) | 61 |
| Brazil (1966) | 113 |
| Chile (1961) | 182 |
| Pakistan (1963) | 271 |

**Source:** Bela Balassa, *The Structure of Protection in Developing Countries* (Baltimore: Johns Hopkins Press, 1971), p. 82.

A further cost that has received considerable attention is the tendency of import restrictions to promote production at an inefficiently small scale. The domestic markets of even the largest developing countries are only a small fraction of the size of that of the United States or the European Union. Often, the whole domestic market is not large enough to allow an efficient-scale production facility. Yet when this small market is protected, say, by an import quota, if only a single firm were to enter the market, it could earn monopoly profits. The competition for these profits typically leads several firms to enter a market that does not really have enough room even for one, and production is carried out at a highly inefficient scale. The answer to the problem of scale for small countries is, as noted in Chapter 8, to specialize in the production and export of a limited range of products and to import other goods. Import-substituting industrialization eliminates this option by focusing industrial production on the domestic market.

Those who criticize import-substituting industrialization also argue that it has aggravated other problems, such as income inequality and unemployment.

By the late 1980s, the critique of import-substituting industrialization had been widely accepted, not only by economists but also by international organizations like the World Bank—and even by policy makers in the developing countries themselves. Statistical evidence appeared to suggest that developing countries that followed relatively free trade policies had, on average, grown more rapidly than those that followed protectionist policies (although this statistical evidence has been challenged by some economists).[2] This intellectual sea change led to a considerable shift in actual policies, as many developing countries removed import quotas and lowered tariff rates.

## Trade Liberalization Since 1985

Beginning in the mid-1980s, a number of developing countries moved to lower tariff rates and removed import quotas and other restrictions on trade. The shift of developing countries toward freer trade is the big trade policy story of the past two and a half decades.

After 1985 many developing countries reduced tariffs, removed import quotas, and in general opened their economies to import competition. Figure 11-1 shows trends in tariff rates for an average of all developing countries and for two important developing countries, India and Brazil, which once relied heavily on import substitution as a development strategy. As you can see, there has been a dramatic fall in tariff rates in those two countries. Similar if less drastic changes in trade policy took place in many other developing countries.

Trade liberalization in developing countries had two clear effects. One was a dramatic increase in the volume of trade. Figure 11-2 plots exports and imports of developing countries, measured as percentages of GDP, since 1970. As you can see, the share of trade in GDP has tripled over that period, with most of the growth happening after 1985.

The other effect was a change in the nature of trade. Before the change in trade policy, developing countries mainly exported agricultural and mining products. But as

[2] See Francisco Rodriguez and Dani Rodrik, "Trade Policy and Economic Growth: A Skeptic's Guide to the Cross-National Evidence," in Ben Bernanke and Kenneth S. Rogoff, eds., *NBER Macroeconomics Annual 2000*. Cambridge, MA: MIT Press for NBER, 2001.

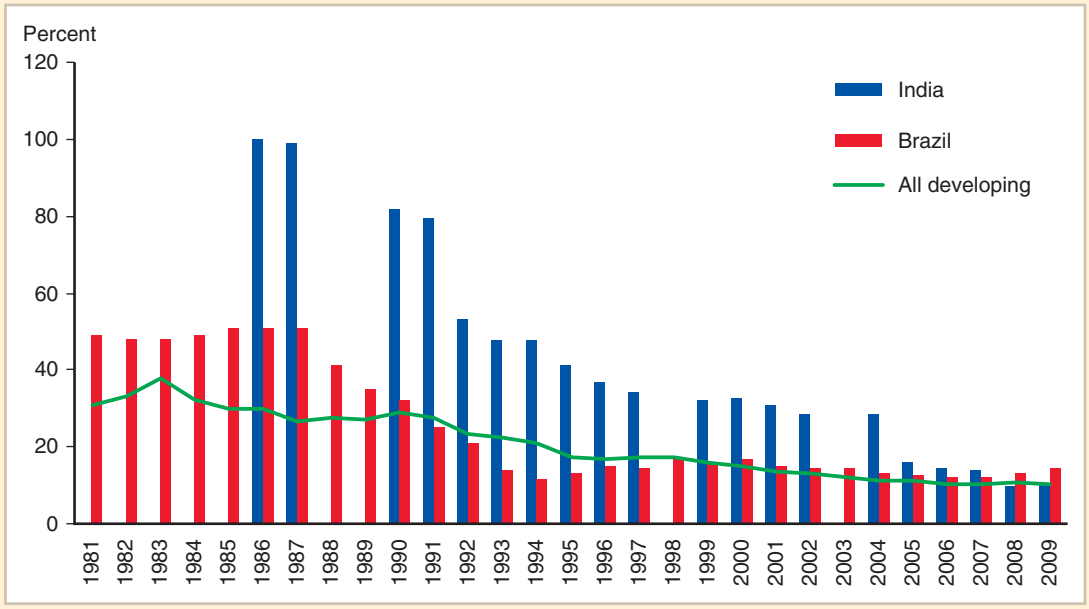


**Figure 11-1**

**Tariff Rates in Developing Countries**

One measure of the shift away from import-substituting industrialization is the sharp drop in tariff rates in developing countries, which have fallen from an average of more than 30 percent in the early 1980s to only about 10 percent today. Countries that once had especially strong import-substitution policies, like India and Brazil, have also seen the steepest declines in tariff rates.

**Source:** World Bank.

we saw in Figure 2-6, that changed after 1980: The share of manufactured goods in developing-country exports surged, coming to dominate the exports of the biggest developing economies.

But trade liberalization, like import substitution, was intended as a means to an end rather than a goal in itself. As we've seen, import substitution fell out of favor as it became clear that it was not delivering on its promise of rapid economic development. Has the switch to more open trade delivered better results?

The answer is that the picture is mixed. Growth rates in Brazil and other Latin American countries have actually been slower since the trade liberalization of the late 1980s than they were during import-substituting industrialization. India, on the other hand, has experienced an impressive acceleration of growth—but as we'll see in the next section of this chapter, there is intense dispute about how much of that acceleration can be attributed to trade liberalization.

In addition, there is growing concern about rising inequality in developing countries. In Latin America at least, the switch away from import-substituting industrialization seems to have been associated with declining real wages for blue-collar workers, even as earnings of highly skilled workers have risen.

One thing is clear, however: The old view that import substitution is the only path to development has been proved wrong, as a number of developing countries have achieved extraordinary growth while becoming more, not less, open to trade.

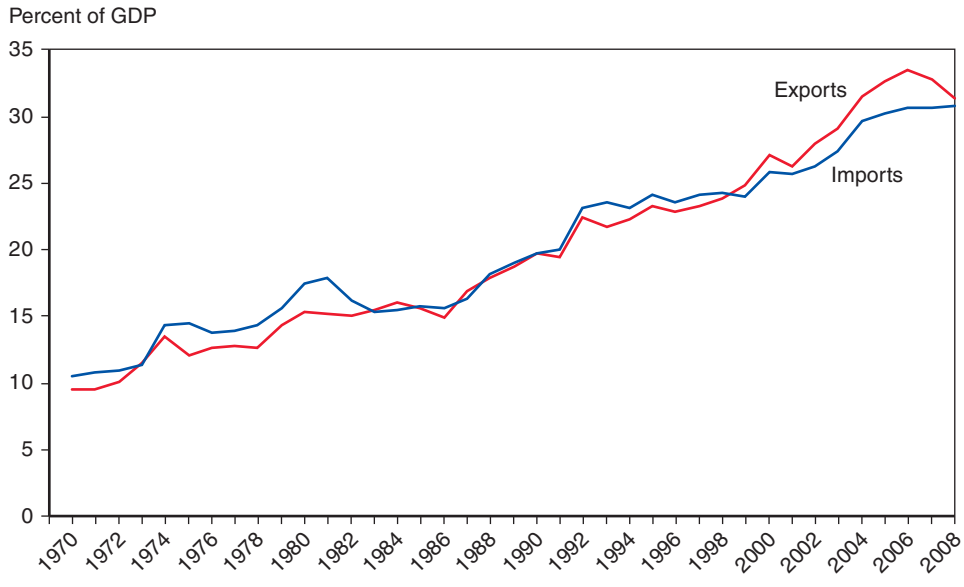


**Figure 11-2**

**The Growth of Developing-Country Trade**

Beginning in the 1980s, many developing countries began shifting away from import-substitution policies. One result has been a large rise in both exports and imports as a percentage of GDP.

# Trade and Growth: Takeoff in Asia

As we have seen, by the 1970s there was widespread disillusionment with import-substituting industrialization as a development strategy. But what could take its place?

A possible answer began to emerge as economists and policy makers took note of some surprising success stories in the developing world—cases of economies that experienced a dramatic acceleration in their growth and began to converge on the incomes of advanced nations. At first, these success stories involved a group of relatively small East Asian economies: South Korea, Taiwan, Hong Kong, and Singapore. Over time, however, these successes began to spread; today, the list of countries that have experienced startling economic takeoffs includes the world's two most populous nations, China and India.

Figure 11-3 illustrates the Asian takeoff by showing the experiences of three countries: South Korea, the biggest of the original group of Asian "tigers"; China; and India. In each case, we show per-capita GDP as a percentage of the U.S. level, an indicator that highlights the extent of these nations' economic "catchup." As you can see, South Korea began its economic ascent in the 1960s, China at the end of the 1970s, and India circa 1990.

What caused these economic takeoffs? Each of the countries shown in Figure 11-3 experienced a major change in its economic policy around the time of its takeoff. This new policy involved reduced government regulation in a variety of areas, including a move

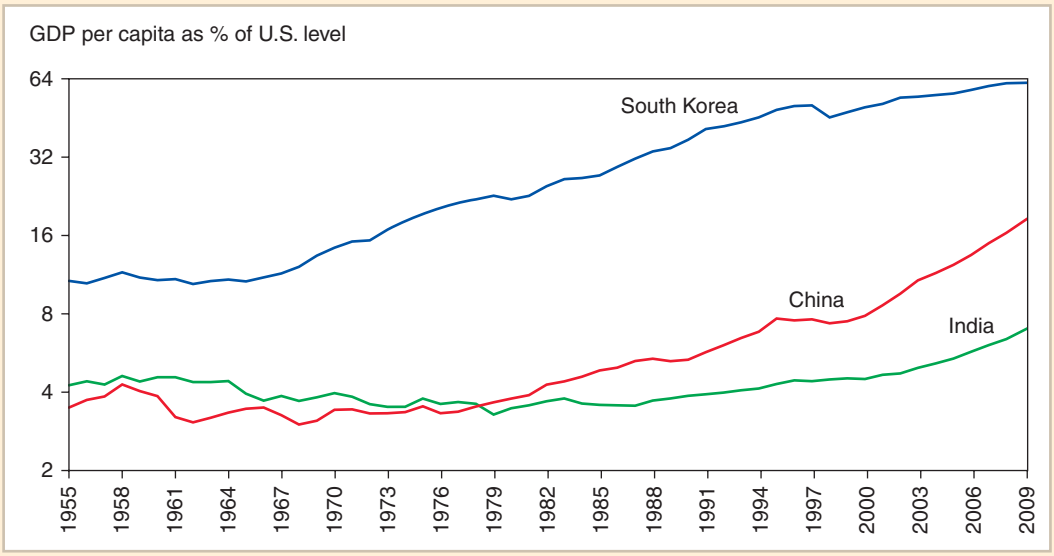


**Figure 11-3**

**The Asian Takeoff**

Beginning in the 1960s, a series of economies began converging on advanced-country levels of income. Here we show GDP per capita as a percentage of its level in the United States, using a proportional scale to highlight the changes. South Korea began its ascent in the 1960s, China at the end of the 1970s, and India about a decade later.

**Source:** Total Economy Database.

toward freer trade. The most spectacular change was in China, where Deng Xiaoping, who had taken power in 1978, converted a centrally planned economy into a market economy in which the profit motive had relatively free rein. But as explained in the box on page 267, policy changes in India were dramatic, too.

In each case, these policy reforms were followed by a large increase in the economy's openness, as measured by the share of exports in GDP (see Figure 11-4). So it seems fair to say that these Asian success stories demonstrated that the proponents of import-substituting industrialization were wrong: It is possible to achieve development through export-oriented growth.

What is less clear is the extent to which trade liberalization explains these success stories. As we have just pointed out, reductions in tariffs and the lifting of other import restrictions were only part of the economic reforms these nations undertook, which makes it difficult to assess the importance of trade liberalization per se. In addition, Latin American nations like Mexico and Brazil, which also sharply liberalized trade and shifted toward exports, did not see comparable economic takeoffs, suggesting at the very least that other factors played a crucial role in the Asian miracle.

So the implications of Asia's economic takeoff remain somewhat controversial. One thing is clear, however: The once widely held view that the world economy is rigged against new entrants and that poor countries cannot become rich have been proved spectacularly wrong. Never before in human history have so many people experienced such a rapid rise in their living standards.

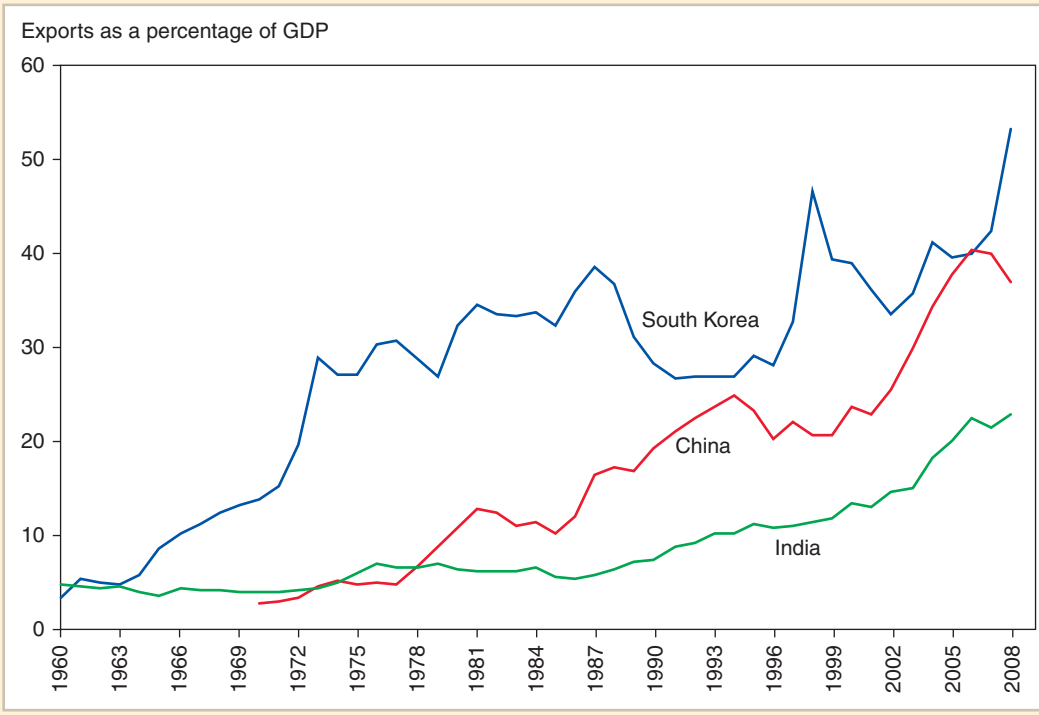


**Figure 11-4**
**Asia's Surging Trade**

## *India's Boom*

India, with a population of more than 1.1 billion people, is the world's second-most-populous country. It's also a growing force in world trade—especially in new forms of trade that involve information rather than physical goods. The Indian city of Bangalore has become famous for its growing role in the global information technology industry.

Yet a generation ago, India was a very minor player in world trade. In part this was because the country's economy performed poorly in general: Until about 1980, India eked out a rate of economic growth—sometimes mocked as the "Hindu rate of growth"—that was only about 1 percentage point higher than population growth.

This slow growth was widely attributed to the stifling effect of bureaucratic restrictions. Observers spoke of a "license Raj": Virtually any kind of business initiative required hard-to-get government permits, which placed a damper on investment and innovation. And India's sluggish economy participated little in world trade. After the country achieved independence in 1948, its leaders adopted a particularly extreme form of import-substituting industrialization as the country's development strategy: India imported almost nothing that it could produce domestically, even if the domestic product was far more expensive and of lower quality than what could be bought abroad. High costs, in turn, crimped exports. So India was a very "closed" economy. In the 1970s, imports and exports averaged only about 5 percent of GDP, close to the lowest levels of any major nation.

Then everything changed. India's growth accelerated dramatically: GDP per capita, which had

risen at an annual rate of only 1.3 percent from 1960 to 1980, has grown at close to 4 percent annually since 1980. And India's participation in world trade surged as tariffs were brought down and import quotas were removed. In short, India has become a high-performance economy. It's still a very poor country, but it is rapidly growing richer and has begun to rival China as a focus of world attention.

The big question, of course, is why India's growth rate has increased so dramatically. That question is the subject of heated debate among economists. Some have argued that trade liberalization, which allowed India to participate in the global economy, was crucial.* Others point out that India's growth began accelerating around 1980, whereas the big changes in trade policy didn't occur until the beginning of the 1990s.†

Whatever caused the change, India's transition has been a welcome development. More than a billion people now have much greater hope for a decent standard of living.

*See Arvind Panagariya, "The Triumph of India's Market Reforms: The Record of the 1980s and 1990s." Policy Analysis 554, Cato Institute, November 2005.

†See Dani Rodrik and Arvind Subramanian, "From 'Hindu Growth' to Productivity Surge: The Mystery of the Indian Growth Transition," *IMF Staff Papers* 55 (2, 2005), pp. 193–228.

## SUMMARY

1. Trade policy in less-developed countries can be analyzed using the same analytical tools used to discuss advanced countries. However, the particular issues characteristic of *developing countries* are different from those of advanced countries. In particular, trade policy in developing countries is concerned with two objectives: promoting industrialization and coping with the uneven development of the domestic economy.
2. Government policy to promote industrialization has often been justified by the infant industry argument, which says that new industries need a temporary period of protection against competition from established industries in other countries. However, the infant industry argument is valid only if it can be cast as a market failure argument for intervention. Two usual justifications are the existence of *imperfect capital markets* and the problem of *appropriability* of knowledge generated by pioneering firms.
3. Using the infant industry argument as justification, many less-developed countries have pursued policies of *import-substituting industrialization* in which domestic industries are created under the protection of tariffs or import quotas. Although these policies have succeeded in promoting manufacturing, by and large they have not delivered the expected gains in economic growth and living standards. Many economists are now harshly critical of the results of import substitution, arguing that it has fostered high-cost, inefficient production.
4. Beginning about 1985, many developing countries, dissatisfied with the results of import-substitution policies, greatly reduced rates of protection for manufacturing. As a result, developing-country trade grew rapidly, and the share of manufactured goods in exports rose. The results of this policy change in terms of economic development, however, have been, at best, mixed.
5. The view that economic development must take place via import substitution, and the pessimism about economic development that spread as import-substituting industrialization seemed to fail, have been confounded by the rapid economic growth of a number of Asian economies. These Asian economies have grown not via import substitution but via exports. They are characterized both by very high ratios of trade to national income and by extremely high growth rates. The reasons for the success of these economies are highly disputed, with much controversy over the role played by trade liberalization.

## KEY TERMS

appropriability, p. 259
developing countries, p. 256
imperfect capital markets, p. 259
import-substituting industrialization, p. 259

## PROBLEMS


1. Which countries appear to have benefited the most from international trade during the last few decades? What policies do these countries seem to have in common? Does their experience lend support for the infant industry argument or help to argue against it?[3]
2. "Japan's experience makes the infant industry case for protection better than any theory. In the early 1950s Japan was a poor nation that survived by exporting textiles and toys. The Japanese government protected what at first were inefficient, high-cost steel and automobile industries, and those industries came to dominate world markets." Discuss critically.
3. A country currently imports automobiles at $8,000 each. Its government believes that, given time, domestic producers could manufacture autos for only $6,000 but that there would be an initial shakedown period during which autos would cost $10,000 to produce domestically.
   a. Suppose that each firm that tries to produce autos must go through the shakedown period of high costs on its own. Under what circumstances would the existence of the initial high costs justify infant industry protection?
   b. Now suppose, on the contrary, that once one firm has borne the costs of learning to produce autos at $6,000 each, other firms can imitate it and do the same. Explain how this can prevent development of a domestic industry and how infant industry protection can help.
4. India and Mexico both followed import-substitution policies after World War II. However, India went much further, producing almost everything for itself, while Mexico continued to rely on imports of capital goods. Why do you think this difference may have emerged?
5. What were some of the reasons for the decline in the import-substituting industrialization strategy in favor of a strategy that promotes open trade?

## FURTHER READINGS

W. Arthur Lewis. *The Theory of Economic Development*. Homewood, IL: Irwin, 1955. A good example of the upbeat view taken of trade policies for economic development during the import-substitution high tide of the 1950s and 1960s.

I. M. D. Little, Tibor Scitovsky, and Maurice Scott. *Industry and Trade in Some Developing Countries*. New York: Oxford University Press, 1970. A key work in the emergence of a more downbeat view of import substitution in the 1970s and 1980s.

Barry Naughton. *The Chinese Economy: Transitions and Growth*. Cambridge: MIT Press, 2007. A good overview of the radical changes in Chinese policy over time.

Dani Rodrik. *One Economics, Many Recipes*. Princeton: Princeton University Press, 2007. Views on trade and development from a leading skeptic of prevailing orthodoxies.

T. N. Srinivasan and Suresh D. Tendulkar. *Reintegrating India with the World Economy*. Washington: Institute for International Economics, 2003. How India shifted away from import substitution, and what happened as a result.

[3] This question is intended to challenge students and extend the theory presented in this chapter.