or two vital primary exports can play havoc with development plans when foreign-exchange earnings are largely unpredictable from one year to the next.

Patterns of specialization in the process of economic development are still not fully understood, and theory gives ambiguous answers. On the one hand, traditional theory suggests that developing nations can reach higher levels of income by specializing in the world economy according to comparative advantage and that as globalization proceeds, the opportunity and benefits of doing so increase. On the other hand, as countries develop, they gain a wider range of skills and technologies and can move beyond producing a few primary goods to become competitive in a range of relatively advanced goods. In fact, a careful empirical study by Jean Imbs and Romain Wacziarg found that sectoral concentration generally follows a U-shaped pattern in relation to the level of per capita income: "Countries first diversify, in the sense that economic activity is spread more equally across sectors, but there exists, relatively late in the development process, a point at which they start specializing again."[25] And this pattern goes well beyond the tendency to move from dependence on primary goods alone to manufacturing and services. The policy implications also remain ambiguous. But their results are consistent with the view that development is not driven by a simple process of gains from specialization.

The Absence of National Governments in Trading Relations

In domestic economies, the coexistence of rich and poor regions, of rapidly growing and stagnating industries, and of the persistent disproportionate regional distribution of the benefits of economic growth can all, at least in theory, be counteracted and ameliorated by the intervention of the state. Cumulative processes for inequality within nation-states by which **growth poles** may expand rapidly while other regions stagnate can be modified by government through legislation, taxes, transfer payments, subsidies, social services, regional development programs, and so forth. But since there is no effective international government to play a comparable role across countries, the highly uneven gains from trade can easily become self-sustaining. This result is then reinforced by the uneven power of national governments to promote and protect their own interests. Despite the advice to developing countries, the developed countries protect their own favored industries when they find it advantageous or politically expedient, as in the U.S. bailout of the auto industry in 2009, to name just one high-profile case. The protection of the financial industry in the United States and the United Kingdom protect not just the domestic financial system but an industry that generates high-paying jobs.

Growth poles Regions that are more economically and socially advanced than others around them, such as urban centers versus rural areas or highway corridors in developing countries.

Government has also played a strong role in cases of successful rapid developments. Spectacular export successes such as South Korea were in no small way aided and abetted by government promotion of export industries. (See the case studies in Chapters 4, 12, and 13, respectively.) Governments are often partisan players whose activist interventions in this area of **industrial policy** (guiding the market through strategic coordination of business investments to increase export market shares) are specifically designed to create a comparative advantage where none existed before but where world demand is likely to rise in the future. The history of industrial growth in Japan in the 1950s and 1960s with its famous Ministry of International Trade and Industry (MITI) is a

Industrial policy Deliberate effort by governments to guide the market by coordinating and supporting specific industrial activities.

widely cited example of industrial policy.[26] Yet, for various reasons, a majority of developing countries outside of East Asia have either not attempted, or have tried but failed to achieve, the potential advantages of applying this approach systematically. This approach to industrialization strategy as widely practiced in East Asia is examined later in this chapter.

Governments may also employ various instruments of commercial policy, such as **tariffs**, import **quotas**, and export **subsidies**, and can manipulate commodity prices and thus their trade position vis-à-vis the rest of the world. Moreover, when developed-nation governments pursue restrictive economic policies that are designed to deal with purely domestic issues like inflation or unemployment, these policies can have profound negative effects on the economies of developing nations. The reverse, however, is not true. Developing nations' domestic economic policies generally have little impact on the economies of rich nations.

Governments often serve to reinforce the unequal distribution of resources and **gains from trade** resulting from differences in size and economic power. Rich-country governments can influence world economic affairs by their domestic and international policies, shaped by their often common interests. Despite the growing role of the World Trade Organization, there is no superagency or world government to protect and promote the interests of the weaker parties—especially the least developed countries—in such international affairs. A trade and industrialization strategy must therefore take into account the powerful governmental forces of the developed world.

Tariff A fixed-percentage tax on the value of an imported commodity levied at the point of entry into the importing country.

Quota In international trade, a physical limitation on the quantity of any item that can be imported into a country.

Subsidy A payment by the government to producers or distributors in an industry for such purposes as preventing the decline of that industry, expanding employment, increasing exports, or reducing selected prices paid by consumers.

Gains from trade The increase in output and consumption resulting from specialization in production and free trade with other economic units, including persons, regions, or countries.

Balanced Trade and International Price Adjustments

The theory of international trade, like other perfectly competitive general-equilibrium models in economics, is not only a full-employment model but also one in which flexible domestic and international product and resource prices always adjust instantaneously to conditions of supply and demand. In particular, the terms of trade (international commodity price ratios) adjust to equate supply and demand for a country's exportable and importable products so that trade is always balanced; that is, the value of exports (quantity times price) is always equal to the value of imports. With **balanced trade** and no international capital movements, balance of payments problems never arise in the pure theory of trade. But in some periods, as seen following the rapid increase in international oil prices in the 1970s, balance of payments deficits and the consequent depletion of foreign reserves (or the need to borrow foreign funds to cover commodity deficits) become a major cause of concern for all nations, rich and poor.

Balanced trade A situation in which the value of a country's exports and the value of its imports are equal.

Trade Gains Accruing to Nationals

The sixth and final major assumption of traditional trade theory, that trade gains accrue to nationals in the trading countries, is more implicit than the other five. It is rarely spelled out, nor need it be if we accept the assumption that factors are internationally immobile. But we need to examine the implicit notion that if developing countries benefit from trade, it is the people of these countries who reap the benefits. The issue thus revolves around the question of who owns the land, capital, and skills that are rewarded as a result of trade. Are they nationals or foreigners? If both, in what proportions are the gains distributed?

Enclave economies Small, economically developed regions in developing countries in which the remaining areas have experienced much less progress.

In some **enclave economies** in developing countries, such as those with substantial foreign-owned mining and plantation operations, foreigners often pay very low rents for the rights to use land, bring in their own foreign capital and skilled labor, hire local unskilled workers at subsistence wages, and have a minimal effect on the rest of the economy, even though they may generate significant export revenues. Much depends on the bargaining power of multinational corporations and developing-country governments. There are still some foreign-owned mining and plantation enclaves and many "manufacturing export enclaves" (personal computer assembly, shoe and toy manufacture, etc.) with few linkages to the wider economy, run by or for multinational corporations. The distinction, therefore, between gross domestic product (GDP), which is a measure of the value of output generated within defined geographic boundaries, and gross national income (GNI), which measures the income actually earned by nationals of that country, becomes extremely important. As the 2009 Stiglitz-Sen-Fitoussi ("Sarkozy") Commission on the Measurement of Economic Performance and Social Progress put it, "GDP is the most widely used measure of economic activity.…However, it has often been treated as if it were a measure of economic well-being.…production can expand while income decreases or vice versa when account is taken of…income flows into and out of a country."[27] To the extent that the export sector, or, for that matter, any sector of the economy, is foreign owned and operated, GDP will be that much higher than GNI, and fewer of the benefits of trade will actually accrue to nationals of developing countries.

With the proliferation of multinational corporations and increasing foreign ownership of companies in a wide range of countries, aggregate statistics for developing-country export earnings (and, indeed, GDP) may mask the fact that a country's own citizens, especially those in lower income brackets, may not benefit from these exports. The major gains from trade may instead accrue to nonnationals, who often repatriate large proportions of these earnings. The inter- and intraindustry trade that is being carried out may look like trade between rich and poor nations. But, in reality, such trade may be conducted between rich nations and *other nationals of rich nations* operating in developing countries! Manufactures exports are generally more effective at generating modern-sector enlargement, but some export enclave manufacturing activities in developing countries may merely be masking the fact that a large proportion of the benefits are still being reaped by foreign enterprises. In short, a developing country's export performance can be deceptive unless we analyze the character and structure of export earnings by ascertaining who owns or controls the factors of production that are rewarded as a result of export expansion.

Some Conclusions on Trade Theory and Economic Development Strategy

We can now attempt to provide some preliminary general answers to the five questions posed early in the chapter. We must stress that our conclusions are general and set in the context of the diversity of developing countries.

First, with regard to the rate, structure, and character of economic growth, our conclusion is that trade can be an important stimulus to rapid economic growth. This has been amply demonstrated by the successful experiences over the past half century of countries like China, Malaysia, Thailand, Brazil,

Chile, Taiwan, Singapore, and South Korea. Access to the markets of developed nations (an important factor for developing nations bent on export promotion) can provide an important stimulus for the greater utilization of idle human and capital resources. Expanded **foreign-exchange earnings** through improved export performance also provide the wherewithal by which a developing country can augment its scarce physical and financial resources. In short, where opportunities for profitable exchange arise, foreign trade can provide an important stimulus to aggregate economic growth.[28]

Foreign-exchange earnings The sum total of all foreign currency receipts less expenditures during a given fiscal year.

But, as noted in earlier chapters, growth of national output may have little impact on development. An export-oriented strategy of growth, particularly in commodities with few linkages and when a large proportion of export earnings accrue to foreigners, may not only bias the structure of the economy in the wrong directions (by not catering to the real needs of local people) but also reinforce the internal and external dualistic and inegalitarian character of that growth. It all depends on the nature of the export sector, the distribution of its benefits, and its linkages with the rest of the economy and how these evolve over time.

Factors such as the widespread existence of increasing returns, the highly unequal international distribution of economic assets and power, the influence of large multinational corporations, and the combined ability of both governments and businesses to manipulate international prices, levels of production, and patterns of demand are crucial. Together, they lead us to the general conclusion that many developing countries have in the past benefited disproportionately less from their economic dealings with developed nations.

It should be apparent by now that the answer to the third question—the conditions under which trade can help a developing country achieve development aspirations—is to be found largely in the ability of developing nations—for example, as a caucus within WTO negotiations or G20 forums to extract and maintain favorable trade concessions from the developed nations. As we will address shortly, progress through the World Trade Organization and its predecessor, along with bilateral programs, such as the U.S. Africa Growth and Opportunity Act (AGOA) and the European Everything but Arms (EBA) initiative, provided a helpful but still very incomplete start. Also, the extent to which exports can efficiently utilize scarce capital resources while making maximum use of abundant but presently underutilized labor supplies will determine the degree to which export earnings benefit the ordinary citizen in developing countries. Again, links between export earnings and other sectors of the economy are crucial. Finally, much will depend on how well a developing nation can influence and control the activities of private foreign enterprises. The ability to deal effectively with multinational corporations in guaranteeing a fair share of the benefits to local citizens is extremely important. These issues are further examined later in this chapter and in Chapter 14.

The answer to the fourth question—whether developing countries can determine how much they trade—can only be speculative. For small and poor countries, the option of not trading at all, by closing their borders to the rest of the world, is obviously not realistic. Not only do they lack the resources and market size to be self-sufficient, but also their very survival, especially in the area of food production, often depends on their ability to secure foreign goods and resources. Some 32 of the least developed countries face annual threats of severe famine for which international assistance is not a choice but a necessity.

Whether to trade or to remain in isolation is not the issue; the real issue turns out to be the balance between selling for the domestic market and exporting and, if the latter is chosen, whether to encourage exporting across the board or to promote targeted sectors.[29]

Moreover, for most developing nations, the international economic system still offers the only real source of scarce capital and needed technological knowledge. The conditions under which such resources are obtained will greatly influence the character of the development process. Finally, for countries rich in mineral resources and raw materials, especially those that have been able to establish an effective international bargaining stance against the large corporations that purchase their exports (e.g., the members of OPEC), trade has been and continues to be a vital source of development finance.

The fifth question—whether on balance it is better for developing countries to look outward toward the rest of the world or more inward toward their own capacities for development—turns out not to be an either-or question at all.[30] While exploring profitable opportunities for trade with the rest of the world, developing countries can effectively seek ways to expand their share of world trade *and* extend their economic ties with one another. For example, by pooling their resources, small countries can overcome the limits of their small individual markets and their serious resource constraints while retaining an important degree of autonomy in pursuing their individual development aspirations. In this way, groups of small countries may have a better chance of achieving what China has been able to do in recent years: leveraging the bargaining power of its large market to insist on the best deal from potential foreign exporters and investors. Indeed, this strategy has likely been one of the factors helping China realize very high growth rates in recent decades. Benefits are still to be had from further expansion of trade among developing countries themselves.

Although the preceding argument is often overstated, it seems clear that if interregional political rivalries can be transcended, increased regional cooperation among developing nations offers an important component of a trade and industrialization strategy. Explicit developing-country policies, including free-trade areas such as the Association of Southeast Asian Nations (ASEAN) in Southeast Asia and Mercosur in South America, are at least partly responsible for this trend. Of course, the trend also reflects the development successes in Asia, many of whose economies have been growing faster than those in North America and Europe in recent years. Renewed efforts are being made in Africa, through the African Union and the New Partnership for Africa's Development (NEPAD) peer review program, but there is a long way to go.

We turn now to consider the advantages and disadvantages of alternative trade policies for developing countries in more detail.

12.5 Traditional Trade Strategies and Policy Mechanisms for Development: Export Promotion versus Import Substitution

A traditional way to approach the complex issues of appropriate trade policies for development is to set these specific policies in the context of a broader

strategy of looking outward or looking inward.[31] In the words of Paul Streeten, **outward-looking development policies** "encourage not only free trade but also the free movement of capital, workers, enterprises and students…, the multinational enterprise, and an open system of communications." By contrast, **inward-looking development policies** stress the need for nations to evolve their own styles of development and to control their own destiny. This means setting policies to encourage indigenous "learning by doing" in manufacturing and developing technologies appropriate to a country's resource endowments. According to proponents of inward-looking trade policies, greater self-reliance can be accomplished, in Streeten's words, only if "you restrict trade, the movement of people, and communications and if you keep out the multinational enterprise, with its wrong products and wrong want-stimulation and hence its wrong technology."[32]

Outward-looking development policies Policies that encourage exports, often through the free movement of capital, workers, enterprises, and students; a welcome to multinational corporations; and open communications.

Inward-looking development policies Policies that stress economic self-reliance on the part of developing countries, including domestic development of technology, the imposition of barriers to imports, and the discouragement of private foreign investment.

A lively debate regarding these two philosophical approaches has been carried on in the development literature since the 1950s. The debate pits the free traders, who advocate outward-looking export promotion strategies of industrialization, against the protectionists, who are proponents of inward-looking import substitution strategies. The latter predominated into the 1970s; the former gained the upper hand, especially among Western and World Bank economists, in the 1980s and early 1990s.

Basically, the distinction between these two traditional, trade-related development strategies is that advocates of **import substitution** (IS) believe that a developing economy should initially substitute domestic production of previously imported simple consumer goods (first-stage IS) and then substitute through domestic production for a wider range of more sophisticated manufactured items (second-stage IS)—all behind the protection of high tariffs and quotas on these imports. In the long run, IS advocates cite the benefits of greater domestic industrial diversification ("balanced growth") and the ultimate ability to export some previously protected manufactured goods as economies of scale, low labor costs, and the positive externalities of learning by doing cause domestic prices to become more competitive with world prices.

Import substitution A deliberate effort to replace consumer imports by promoting the emergence and expansion of domestic industries.

By contrast, advocates of **export promotion** (EP) of both primary and manufactured goods cite the efficiency and growth benefits of free trade and competition, the importance of substituting large world markets for narrow domestic markets, the distorting price and cost effects of protection, and the tremendous successes of such export-oriented economies as South Korea, Taiwan, Singapore, Hong Kong, China, and others in Asia. They stress that firms in these economies have learned a great deal from the firms in the United States, Japan, and other developed-country economies that have been their long-term customers. Sometimes a distinction is made between "strong export promotion," in which policies are explicitly geared to expansion of exports (in general, such as through a weak currency), rather than production for the domestic market, and "weak export promotion," which emphasizes free trade and a level playing field and is viewed by advocates as likely to promote exports by comparison with previous import substitution policies (which tend to discourage exports in relative terms). Beyond this, many Asian countries also have adopted a more nuanced approach that draws on some elements of both to develop targeted sectors, which will be examined later in the chapter.

Export promotion Governmental efforts to expand the volume of a country's exports through increasing export incentives, decreasing disincentives, and other means in order to generate more foreign exchange and improve the current account of its balance of payments or achieve other objectives.

In practice, the distinction between IS and EP strategies is much less pronounced than many advocates would imply. Most developing economies have employed both strategies with different degrees of emphasis at one time or another. For example, in the 1950s and 1960s, the inward-looking industrialization strategies of the larger Latin American and Asian countries such as Chile, Peru, Argentina, India, Pakistan, and the Philippines were heavily IS-oriented. By the end of the 1960s, some of the key sub-Saharan African countries like Nigeria, Ethiopia, Ghana, and Zambia had begun to pursue IS strategies, and some smaller Latin American and Asian countries also joined in.[33] However, since the mid-1970s, the EP strategy has been increasingly adopted by a growing number of countries. The early EP adherents—South Korea, Taiwan, Singapore, and Hong Kong—were thus joined by the likes of Brazil, Chile, Thailand, and Turkey, which switched from an earlier IS strategy. It must be stressed, however, that most successful East Asian export promoters have pursued protectionist IS strategies sequentially and simultaneously in certain industries, so it is inaccurate to call them free traders, even though they are outward-oriented.[34]

Against this background, we can now examine the issue of outward-looking export promotion versus inward-looking import substitution in more detail by applying the following fourfold categorization:

1. Primary outward-looking policies (encouragement of agricultural and raw-materials exports)
2. Secondary outward-looking policies (promotion of manufactured exports)
3. Primary inward-looking policies (mainly agricultural self-sufficiency)
4. Secondary inward-looking policies (manufactured commodity self-sufficiency through import substitution)

Then we turn our attention to eclectic strategies, particularly export-oriented strategic industrialization, and South-South economic integration.

Export Promotion: Looking Outward and Seeing Trade Barriers

The promotion of primary or secondary exports has long been considered a major ingredient in any viable long-run development strategy. The colonial territories of Africa and Asia, with their foreign-owned mines and plantations, were classic examples of primary outward-looking regions. It was partly in reaction to this enclave economic structure and partly as a consequence of the industrialization bias of the 1950s and 1960s that most developing countries put great emphasis on the production of manufactured goods initially for the home market (secondary inward) and then for export (secondary outward).

Primary-Commodity Export Expansion: Limited Demand As noted earlier in this chapter, many low-income countries still rely on primary products for a majority of their export earnings. With the notable exception of petroleum exports and a few needed minerals, primary-product exports have grown more slowly than total world trade.

On the demand side, there appear to be at least five factors working against the rapid expansion of primary-product and especially agricultural exports. First, the income elasticities of demand for agricultural foodstuffs and raw materials are relatively low compared with those for fuels, certain minerals, and manufactures. For example, the income elasticities of demand for sugar, cacao, tea, coffee, and bananas have all been estimated at less than 1, with most in the range of 0.3–0.6. Inelastic demand means that only a sustained high rate of per capita income growth in the developed countries can lead to even modest export expansion of these particular commodities from the developing countries. (Many primary exporters have benefited from the boom in China since about 2002—excepting the 2008–2009 debacle—and this will be followed carefully.)

Second, developed-country population growth rates are now at or near the replacement level, so little expansion can be expected from this source. Third, the price elasticity of demand for most primary commodities is relatively low. When relative agricultural prices are falling, as they have been during most of the past five decades, such low elasticities mean less total revenue for exporting nations.

With the exception of oil and a few minor commodities, **international commodity agreements** have not fared well. Such agreements are intended to set overall output levels, stabilize world prices, and assign quota shares to various producing nations for such items as coffee, tea, copper, lead, and sugar. To work effectively, they require cooperation and compromise among participants. Commodity agreements can also provide greater protection to individual exporting nations against excessive competition and the overexpansion of world production. Such overexpansion of supply tends to drive down prices and curtail the growth of earnings for all countries. In short, commodity agreements attempt to guarantee participating nations a relatively fixed share of world export earnings and a more stable world price for their commodity. But proposals by the United Nations Conference on Trade and Development (UNCTAD) for the establishment of a common fund to finance "buffer stocks" to support the prices of some 19 primary commodities (including sugar, coffee, tea, bauxite, jute, cotton, tin, and vegetable oil) produced by various developing nations have made little progress. Most existing non-oil commodity agreements have either failed (tin) or been largely ignored by producers (coffee, sugar). Even in the best scenarios, such agreements cannot be effective for perishable commodities. Imagine trying to operate a buffer stock of bananas!

International commodity agreement A formal agreement by sellers of a common internationally traded commodity (e.g., coffee, sugar) to coordinate supply to maintain price stability.

The fourth and fifth factors working against the long-run expansion of primary-product export earnings—the development of synthetic substitutes and the growth of agricultural protection in the developed countries—are perhaps the most important. Synthetic substitutes for commodities like cotton, rubber, sisal, jute, hide, skins, and copper (replaced by glass fiber optics for communication networks) act both as a brake against higher commodity prices and as a direct source of competition in world export markets. The synthetic share of world market export earnings has generally risen over time, while the share of natural products has fallen. In the case of agricultural protection, which usually takes the form of tariffs, quotas, and, increasingly, nontariff barriers such as sometimes arbitrary sanitary laws regulating food and fiber imports, or

cryptic rules of origin, the effects can be devastating to developing countries' export earnings. Such nontariff barriers can all but negate the otherwise promising moves by rich countries to nearly abolish conventional exports for most developing-country exports. The common agricultural policy of the European Union (EU), for example, has resulted in greater subsidies that have harmed the competitiveness of developing countries.

On the supply side, a number of factors also work against the rapid expansion of primary-product export earnings. The most important is the structural rigidity of many rural production systems in developing countries. We discussed rigidities—such as limited resources; poor climate; bad soils; antiquated rural institutional, social, and economic structures; and nonproductive patterns of land tenure—in Chapter 9. Whatever the international demand situation for particular commodities (which will differ from commodity to commodity), little export expansion can be expected when rural economic and social structures militate against positive supply responses from peasant farmers who are averse to risk. Furthermore, in developing nations with markedly dualistic farming structures (i.e., large, corporate capital-intensive farms existing side by side with thousands of fragmented, low-productivity peasant holdings), any growth in export earnings is likely to be distributed very unevenly among the rural population. Small farmers have been further disadvantaged in countries (mostly in Africa) in which agricultural marketing boards act as middlemen between the farmers and export markets. These boards—or at least their practices of significantly suppressing prices that farmers can receive—have been largely dismantled in recent years.

Primary export growth has remained modest, partly due to the pernicious effects of developed-country trade policies (such as the United States' sugar and cotton subsidies) and foreign-aid policies that depress agricultural prices in the least developed countries and discourage production. For example, the EU's policy of selling subsidized beef to the nations of West Africa in the guise of foreign assistance has devastated cattle prices in those countries. As summarized by Kevin Watkins and Joachim von Braun of the International Food Policy Research Institute:

> Small farmers in developing countries suffer on several counts from rich-country farm policies. Northern production subsidies lower prices for farm produce. Unable to compete against subsidized competition, the world's poorest farmers are often pushed out of international and even domestic markets. The upshot is an agricultural trading system in which success depends less on comparative advantage than on comparative access to subsidies. Small farmers are efficient, innovative, and potentially competitive, and creatively combine farming with off-farm work. But the world's poorest farmers cannot compete against the world's richest treasuries, nor should they have to.[35]

We may conclude, therefore, that the successful promotion of primary-product exports in low-income countries and for the benefit of the poor cannot occur unless there is a reorganization of rural social and economic structures along the lines suggested in Chapter 9 to raise total agricultural productivity and distribute the benefits more widely. The primary objective of any rural development strategy is widely accepted to be *first* to provide sufficient food to feed local people and only then to be concerned about export expansion. Given the structure of world demands for primary products, the threat of local

food shortages and thus the desire of potential importers to focus on agricultural self-sufficiency, the inevitability of the development of further synthetic substitutes, and the (tragic) unlikelihood of significantly lower levels of agricultural protection among developed nations in light of the stalled trade talks, the real scope for primary-product export expansion in individual developing nations seems limited.[36]

Expanding Exports of Manufactured Goods

The expansion of manufactured exports has been encouraged by the spectacular export performances of countries like South Korea, Singapore, Hong Kong, Taiwan, and China. For example, for decades, Taiwan's total exports grew at an annual rate of over 20%, and exports from South Korea grew even faster. In both cases, this export growth was led by manufactured goods, which contributed over 80% of both nations' foreign-exchange earnings. For the developing world as a whole, manufactured exports grew from 6% of their total merchandise exports in 1950 to almost 64% by 2000. Taken together, by 2011, the low- and middle-income countries accounted for about 29% of the world's manufactured exports; China commanded a fast-growing share. However, the low-income countries accounted for just under 1% of the world total.[37]

The export successes of recent decades, especially among the Asian Tigers, have provided impetus for arguments by market fundamentalists (see Chapter 3) that economic growth is best served by allowing market forces, free enterprise, and open economies to prevail while minimizing government intervention. However, evidence from East Asia does not support this view of how export success was achieved. In South Korea, Taiwan, and Singapore (as in Japan earlier and to a large degree China more recently), the production and composition of exports was not left to the market but resulted from planned intervention by the government while making ample use of the profit incentive.[38] We return to this consideration later in the chapter.

The demand problems for export expansion of many manufactured goods, though different in basic economic content from those for primary products, can still pose similar problems for developing countries. For many years, there was widespread protection in developed nations against the manufactured exports of developing countries, which was in part the direct result of the successful penetration of low-cost, labor-intensive manufactures from countries like Taiwan, Hong Kong, and South Korea during the 1960s and 1970s. And as noted earlier, relative prices of the most basic manufactured goods have also fallen.

Industrial-nation trade barriers have been extensive. During the 1980s, for example, 20 of the 24 industrialized countries *increased* their protection against developing countries' manufactured or processed products. Moreover, their rates of protection were considerably higher against developing-country exports than against those of high-income countries. Then there are the nontariff barriers, which came to form the main protection against manufactured exports from developing countries, affecting at least one-third of them. A major example was the **Multifiber Arrangement (MFA)**, in effect until 2005, a complex system of mostly bilateral quotas against exports of cotton, wool, and synthetic fiber products. The United Nations Development Programme

Multifiber Arrangement (MFA) A set of nontariff quotas established by developed countries on imports of cotton, wool, synthetic textiles, and clothing from individual developing countries.

estimated that the MFA cost the developing world $24 billion a year in lost textile and clothing export earnings. The end of the MFA has benefited China most, though some other developing countries, notably Bangladesh, have been able to hold their market share. Much-publicized initiatives for opening markets to the least developed countries, most prominently through the African Growth and Opportunities Act in the United States and Everything but Arms in the European Union, noted earlier, are bilateral offers that can later be withdrawn. These programs also have impediments such as a time horizon that is too short to be effective at encouraging investment or requiring costly and cumbersome documentation, which creates a high hurdle for low-income countries.[39]

Whether displaced high-wage workers in developed-country manufacturing (and now services) will continue to permit the unimpeded entry of low-wage products remains to be seen. WTO rules have eliminated many formal barriers, but many implicit barriers remain. The encouraging pace of tariff reductions at the time of the Uruguay Round and the early years of the WTO has in recent years slowed almost to a halt. Antidumping "investigations" increased significantly, reaching a peak in 1999, with the United States the largest user of these protectionist measures. Although the number of new investigations subsequently declined in the early years of the new century, they remain an important weapon in the protectionist arsenal. For example, as the global recession got underway in 2007, antidumping investigations surged until the end of 2009. Countervailing duty investigations are also on the rise: "Buy American" and analogous legislation that garnered much publicity in stimulus packages following the 2008 crisis are of dubious legality but can have major impacts on developing-country investments, at least for as long as they remain in place, and can also function in the protectionist arsenal as a deterrent. Regional trading agreements, including the North American Free Trade Agreement (NAFTA) and the EU, may also have the effect of discriminating against exports from nonmember developing countries.[40] Analysts also questioned how long the United States could continue to act as the "consumer of last resort" in the wake of its large and chronic **trade deficits** and how developing countries would respond to the apparently inevitable decline in the value of the U.S. dollar; the rebounding U.S. trade deficit after the financial crisis surprised many analysts, but at some point, this export opportunity for developing nations might well be reduced. It was also widely doubted how many other developed-country markets would open to the extent seen in the United States during this period (this topic is discussed further in Chapter 13).

Trade deficit An excess of import expenditures over export receipts measured on the current account.

As in the case of agricultural and other primary production, the uncertain export outlook should be no cause for curtailing the needed expansion of manufacturing production to serve local markets. There is also great scope for mutually beneficial trade in manufactures among developing countries themselves within the context of the gradual economic integration of their national economies. South-South trade in minerals and agriculture has been rising much more quickly than South-South manufactures trade. China's primary-goods investments in, and exports from, Africa are the most visible, but the emergence of manufacturing zones in Africa working under contract with Chinese firms is also significant. On the other hand, antidumping and other trade complaints against China by other developing nations are rising rapidly.

Import Substitution: Looking Inward but Still Paying Outward

Observing weak world markets for their primary products and subscribing to the widespread belief in the magic of industrialization and the Prebisch-Singer hypothesis, developing nations turned to an import substitution strategy of urban industrial development in the post–World War II decades. Some countries still follow this strategy for both economic and political reasons, although pressure from the WTO, IMF, and World Bank imposes high opportunity costs on such endeavors. As noted earlier, import substitution entails an attempt to replace commodities that are being imported, usually manufactured consumer goods, with domestic sources of production and supply. The typical strategy is first to erect tariff barriers or quotas on certain imported commodities and then to try to set up a local industry to produce these goods—items such as radios, bicycles, or household appliances. Typically, this involves joint ventures with foreign companies, which are encouraged to set up their plants behind the wall of tariff protection and given all kinds of tax and investment incentives. Although initial costs of production may be higher than former import prices, the economic rationale put forward for the establishment of import-substituting manufacturing operations is either that the industry will eventually be able to reap the benefits of large-scale production and lower costs (the so-called **infant industry** argument for tariff protection) or that the balance of payments will be improved as fewer consumer goods are imported. Often a combination of both arguments is advanced. Eventually, it is hoped, the infant industry will grow up and be able to compete in world markets. It will then be able to generate net foreign-exchange earnings once it has lowered its average costs of production. Let us see how the theory of protection can be used to demonstrate this process.

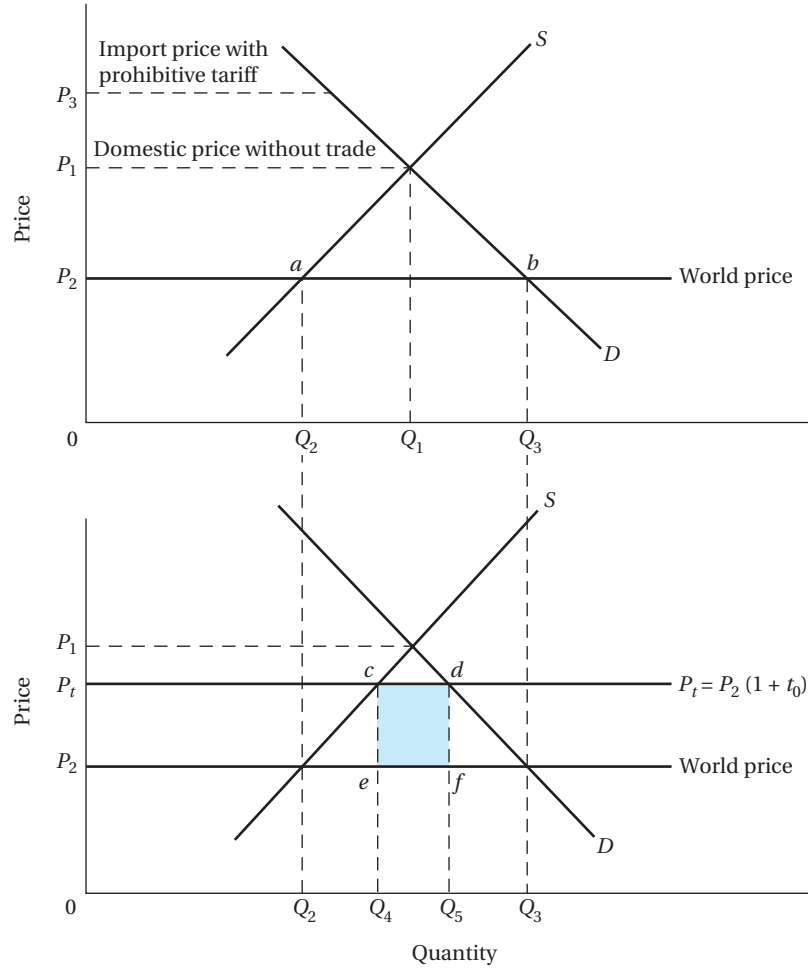
Infant industry A newly established industry, usually protected by a tariff barrier as part of a policy of import substitution.

Tariffs, Infant Industries, and the Theory of Protection

A principal mechanism of the import substitution strategy is the erection of protective tariffs (taxes on imports) or quotas (limits on the quantity of imports) behind which IS industries are permitted to operate. The basic economic rationale for such protection is the infant-industry argument. Tariff protection against the imported commodity is needed, so the argument goes, in order to allow the now higher-priced domestic producers enough time to learn the business and to achieve the economies of scale in production and the external economies of learning by doing that are necessary to lower unit costs and prices. With enough time and sufficient protection, the infant will eventually grow up, be directly competitive with developed-country producers, and no longer need this protection. Ultimately, as actually seen in the case of many formerly protected IS industries in South Korea and Taiwan, domestic producers hope to be able not only to produce for the domestic market without a tariff wall or government subsidies but also to export their now lower-cost manufactured goods to the rest of the world. Thus, for many developing-country industries, in theory, an IS strategy becomes the prerequisite for an EP strategy. It is for this reason, among others (including the desire to reduce dependence and attain greater self-reliance, the need to build a domestic industrial base, and the ease of raising substantial tax revenue from tariff collections),[41] that import substitution has been appealing to so many governments.

The basic theory of protection is an old and controversial issue in the field of international trade. It is relatively simple to demonstrate. Consider Figure 12.3. The top portion of the figure shows standard domestic supply and demand curves for the industry in question (say, shoes) if there were no international trade—that is, in a closed economy. The equilibrium home price and quantity would be P_1 and Q_1. If this country were then to open its economy to world trade, its small size in relation to the world market would mean that it would face a horizontal, perfectly elastic demand curve. In other words, it could sell (or buy) all it wanted at a lower world price, P_2. Domestic consumers would benefit from the lower price of imports and the resultant greater quantity purchased, while domestic producers and their employees would clearly suffer as they lost business to lower-cost foreign suppliers. Thus, at the lower world price, P_2, the quantity demanded would rise from Q_1 to Q_3, whereas the

FIGURE 12.3 Import Substitution and the Theory of Protection



quantity supplied by domestic producers would fall from Q_1 to Q_2. The difference between what domestic producers would be willing to supply at the lower P_2 world price (Q_2) and what consumers would want to buy (Q_3) would be the amount that would be imported—shown as line *ab* in Figure 12.3.

Facing the potential loss of domestic production and jobs as a result of free trade and desiring to obtain infant-industry protection, local producers will seek tariff relief from the government. The effects of a tariff (equal to t_0) are shown in the lower half of Figure 12.3. The tariff causes the domestic price of shoes to rise from P_2 to P_t—that is, $P_t = P_2\ (1 + t_0)$. Local consumers now have to pay the higher price and will reduce their quantity demanded from Q_3 to Q_5. Domestic producers can now expand production (and employment) up to quantity Q_4 from Q_2. The rectangular area *cdfe* measures the amount of the tariff revenue collected by the government on imported shoes.

Clearly, the higher the tariff, the closer to the domestic price the sum of the world price plus the import tax will be. In the classic infant-industry IS scenario, the tariff may be so high that it raises the price of the imported product above P_1 to, say, P_3 in the upper diagram of Figure 12.3 so that imports are effectively prohibited and the local industry is allowed to operate behind a fully protective tariff wall, once again selling Q_1 output at P_1 price. In the short run, it is clear that the impact of such a prohibitive tariff is to penalize consumers, who are in effect subsidizing domestic producers and their employees through higher prices and lower consumption. Alternatively, we can say that a tariff redistributes income from consumers to producers. However, in the longer run, advocates of IS protection for infant industries argue that everyone will benefit as domestic and other shoe manufacturers reap the benefits of economies of scale and learning by doing so that ultimately the domestic price falls below P_2 (the world price). Production will then occur for *both* the domestic and world markets, domestic consumers as well as domestic producers and their employees will benefit, protective tariffs can be removed, and the government will be able to replace any lost tariff revenue with taxes on the now very much higher incomes of domestic manufactures. It all sounds logical and persuasive in theory. But how has it performed in practice?

The IS Industrialization Strategy and Results

Most observers agree that the import-substituting strategy of industrialization has been largely unsuccessful.[42] Specifically, there have been five undesirable outcomes. First, secure behind protective tariff walls and immune from competitive pressures, many IS industries (both publicly and privately owned) remain inefficient and costly to operate. Second, the main beneficiaries of the import substitution process have been the foreign firms that were able to locate behind tariff walls and take advantage of liberal tax and investment incentives. After deducting interest, profits, and royalty and management fees, much of which are remitted abroad, the little that may be left over usually accrues to the wealthy local industrialists with whom foreign manufacturers cooperate and who provide their political and economic cover.

Third, most import substitution has been made possible by the heavy and often government-subsidized importation of capital goods and intermediate products by foreign and domestic companies. In the case of foreign companies,

much of this is purchased from parent and sister companies abroad. There are two immediate results. On the one hand, capital-intensive industries are set up, usually catering to the consumption habits of the rich while having a minimal employment effect. On the other hand, far from improving the developing nation's balance of payments situation and alleviating the debt problem, indiscriminate import substitution often worsens the situation by increasing a need for imported capital-good inputs and intermediate products while, as just noted, a good part of the profits is remitted abroad in the form of private transfer payments.

A fourth detrimental effect of many import substitution strategies has been their impact on traditional primary-product exports. To encourage local manufacturing through the importation of cheap capital and intermediate goods, **official exchange rates** (the rates at which the central bank of a nation is prepared to purchase specific foreign currencies) have often been artificially overvalued. This has had the effect of raising the price of exports and lowering the price of imports in terms of the local currency. For example, if the free-market exchange rate between Pakistani rupees and U.S. dollars was 20 to 1 but the official exchange rate was 10 to 1, an item that cost $10 in the United States could be imported into Pakistan for 100 rupees (excluding transport costs and other service charges). If the **free-market exchange rate** (the exchange rate determined by the supply and demand for Pakistani rupees in terms of dollars) prevailed, that item would cost 200 rupees. Thus, by means of an **overvalued exchange rate**, developing-country governments have effectively lowered the domestic currency price of their imports. At the same time, their export prices have increased—for example, at an exchange rate of 10 to 1, U.S. importers would have to pay 10 cents for every 1-rupee item rather than the 5 cents they would pay if the hypothetical free-market ratio of 20 to 1 were in effect.

Official exchange rate Rate at which the central bank will buy and sell the domestic currency in terms of a foreign currency such as the U.S. dollar.

Free-market exchange rate Rate determined solely by international supply and demand for domestic currency expressed in terms of, say, U.S. dollars.

Overvalued exchange rate An official exchange rate set at a level higher than its real or shadow value.

The net effect of overvaluing exchange rates in the context of import substitution policies is to encourage capital-intensive production methods still further (because the price of imported capital goods is artificially lowered) and to penalize the traditional primary-product export sector by artificially raising the price of exports in terms of foreign currencies. This overvaluation, then, causes local farmers to be less competitive in world markets. In terms of its income distribution effects, the outcome of such government policies may be to penalize the small farmer and the self-employed while improving the profits of the owners of capital, both foreign and domestic. Industrial protection thus has the effect of taxing agricultural goods in the home market as well as discouraging agricultural exports. Import substitution policies have in practice often worsened the local distribution of income by favoring the urban sector and higher-income groups while discriminating against the rural sector and lower-income groups.

Fifth and finally, import substitution, which may have been conceived with the idea of stimulating infant-industry growth and self-sustained industrialization by creating "forward" and "backward" linkages with the rest of the economy, has often inhibited that industrialization. Many infant industries never grow up, content to hide behind protective tariffs and governments loath to force them to be more competitive by lowering tariffs. In fact, governments themselves often operate protected industries as state-owned enterprises.

Moreover, by increasing the costs of inputs to potentially forward-linked industries (those that purchase the output of the protected firm as inputs or intermediate products in their own productive process, such as a printer's purchase of paper from a locally protected paper mill) and by purchasing their own inputs from overseas sources of supply rather than through backward linkages to domestic suppliers, inefficient import-substituting firms may in fact block the hoped-for process of self-reliant integrated industrialization.[43]

Tariff Structures and Effective Protection Because import substitution programs are based on the protection of local industries against competing imports primarily through the use of tariffs and physical quotas, we need to analyze the role and limitations of these commercial policy instruments in developing nations. As we have already discussed, governments impose tariffs and physical quotas on imports for a variety of reasons. For example, tariff barriers may be erected to raise public revenue. In fact, given the administrative and political difficulties of collecting local income taxes, fixed-percentage taxes on imports collected at a relatively few ports or border posts often constitute one of the cheapest and most efficient ways to raise government revenue. In many developing countries, these foreign-trade taxes are thus a central feature of the overall fiscal system. **Nontariff trade barriers**, such as physical quotas on imports like automobiles and other luxury consumer goods, though more difficult to administer and more subject to delay, inefficiency, and rent-seeking corruption (e.g., with regard to the granting of import licenses), provide an effective means of restricting the entry of particularly troublesome commodities. Tariffs, too, may serve to restrict the importation of non-necessity products (usually expensive consumer goods). By restricting imports, both quotas and tariffs can improve the balance of payments. And like overvaluing the official rate of foreign exchange, tariffs may be used to improve a nation's terms of trade. However, in a small developing country that is unable to influence world prices of its exports or imports, this argument for tariffs (or devaluation) has little validity. Finally, as noted, tariffs may form an integral component of an import substitution policy of industrialization.

Nontariff trade barrier A barrier to free trade that takes a form other than a tariff, such as quotas or (possibly arbitrary) sanitary requirements.

Whatever the means used to restrict imports, such restriction always protects domestic firms from competition with producers from other countries. To measure the degree of protection, we need to ask by how much these restrictions cause the domestic prices of imports to exceed what their prices would be if there were no protection. There are two basic measures of protection: the nominal rate and the effective rate.

The **nominal rate of protection** shows the extent, in percentages, to which the domestic price of imported goods exceeds what their price would be in the absence of protection. Thus, the nominal (ad valorem) tariff rate, t, refers to the final prices of commodities and can be defined simply as

Nominal rate of protection An ad valorem percentage tariff levied on imports.

$$t = \frac{p' - p}{p} \tag{12.1}$$

where p' and p are the unit prices of industry's output with and without tariffs, respectively.

For example, if the domestic price, p', of an imported automobile is $5,000 whereas the CIF (cost plus insurance and freight) price, p, when the automobile arrives at the port of entry is $4,000, the nominal rate of tariff protection, t, would be 25%. This is the kind of tariff depicted as t_0 in Figure 12.3.

Effective rate of protection The degree of protection on value added as opposed to the final price of an imported product—usually higher than the nominal rate of protection.

Value added Amount of a product's final value that is added at each stage of production.

By contrast, the **effective rate of protection** shows the percentage by which the **value added** at a particular stage of processing in a domestic industry can exceed what it would be without protection. In other words, it shows by what percentage the sum of wages, interest, profits, and depreciation allowances payable by local firms could, as a result of protection, exceed what this sum would be if these same firms had to face unrestricted competition (no tariff protection) from foreign producers.[44] The effective rate, ρ, can therefore be defined as the difference between value added (percent of output) in domestic prices and value added in world prices, expressed as a percentage of the latter, so that

$$\rho = \frac{v' - v}{v} \tag{12.2}$$

where v' and v are the value added per unit of output with and without protection, respectively. The result can be either positive or negative, depending on whether v' is greater or less than v. For most developing economies, it is highly positive.

The important difference between nominal and effective rates of protection can be illustrated by means of an example.[45] Consider a nation without tariffs in which automobiles are produced and sold at the international or world price of $10,000. The value added by labor in the final assembly process is assumed to be $2,000, and the total value of the remaining inputs is $8,000. Assume for simplicity that the prices of these nonlabor inputs are equal to their world prices. Suppose that a nominal tariff of 10% is now imposed on imported automobiles, which raises the domestic price of cars to $11,000 but leaves the prices of all the other importable intermediate units unchanged. The domestic process of automobile production can now spend $3,000 per unit of output on labor inputs, as contrasted with $2,000 per unit before the tariff. The theory of effective protection therefore implies that under these conditions, the nominal tariff of 10% on the final product (automobiles) has resulted in an effective rate of protection of 50% for the local assembly process in terms of its value added per unit of output. It follows that for any given nominal tariff rate, the effective rate is greater the smaller the value added of the process; that is, $\rho = t/(1-a)$, where t is the nominal rate on final product and a is the proportionate value of the importable inputs in a free market where these inputs are assumed to enter the country duty-free.

Most economists argue that the effective rate of protection is the more useful concept (even though the nominal or ad valorem rate is simpler to measure) for ascertaining the degree of protection and encouragement afforded to local manufacturers by a given country's tariff structure. This is because effective rates of protection show the net effect on a firm or industry of restrictions on the imports of both its outputs and its inputs. For most countries, developing and developed, the effective rate of protection normally exceeds the nominal rate of protection, sometimes by as much as 200%. For example, average levels of effective protection have exceeded 300% for Pakistan and Uruguay, 100% for Argentina and Brazil, 50% for the Philippines, and 25%

for Mexico.[46] However, effective rates of protection have fallen substantially since the mid-1980s.

Among the many implications of analyzing effective versus nominal tariff structures with regard to developing countries, two stand out as particularly noteworthy. First, it is clear that most developing countries have pursued import-substituting programs of industrialization with emphasis on the local production of final consumer goods for which a ready market was presumed to exist. Moreover, final goods production is generally less technically sophisticated than intermediate capital-goods production. The expectation was that in time, rising demand and economies of scale in finished-goods production would create strong backward linkages leading to the creation of domestic intermediate-goods industries. It is also clear that for most developing countries, the record of performance has been disappointing. Part of the reason for this lack of success has been that developing-country tariff structures have afforded exceedingly high rates of effective protection to final-goods industries while granting considerably less effective protection to intermediate and capital goods. The net result is an attraction of scarce resources away from intermediate-goods production and toward the often inefficient production of highly protected final consumer goods. Backward linkages do not develop, intermediate-good import costs rise, and the development of an indigenous capital-goods industry focusing on efficient, low-cost, labor-intensive techniques is severely impeded.

Second, even though nominal rates of protection in developed countries on imports from the developing countries may seem relatively low, effective protection rates can be quite substantial. As noted earlier in the cases of cacao and sugar, raw materials are usually imported duty-free, whereas processed products such as roasted and powdered coffee, coconut oil, and cocoa butter appear to have low nominal tariffs. The theory of effective protection suggests that in combination with zero tariffs on imported raw materials, low nominal tariffs on processed products can represent substantially higher effective rates of protection. For example, if a tariff of 10% is levied on processed coconut oil whereas copra (dried coconut) can be imported duty-free, and if the value added in making oil from copra is 5% of the total value of coconut oil, the *process* is actually being protected at 200%! This greatly inhibits the development of food and other raw-materials-processing industries in developing nations and ultimately cuts back on their potential earnings of foreign exchange.

Effective rates of protection are also considerably higher than of nominal rates protection in the developed countries, especially in goods where low-income countries can be most competitive. For example, until recently, the effective rate of protection on thread and yarn, textile fabrics, clothing, wood products, leather, and rubber goods has averaged more than twice the nominal rate of protection on these same items in the United States and the European Union. In the EU, effective rates of protection on coconut oil have been 10 times the nominal rate of protection (150% compared with 15%), and those on processed soybeans have been 16 times the nominal rate of protection (160% as opposed to 10%).

To sum up, the standard argument for tariff protection in developing countries has four major components:

1. Duties on trade are a major source of government revenue in a majority of developing countries because they are a relatively easy form of taxation to impose and even easier to collect.

2. Import restrictions represent an obvious response to chronic balance of payments and debt problems.
3. Protection against imports is said to be an appropriate means for fostering economies of scale, positive externalities, and industrial self-reliance as well as overcoming the pervasive state of economic dependence in which many or most developing countries understandably perceive themselves.
4. By pursuing policies of import restriction, developing countries can gain greater control over their economic destinies while encouraging foreign business interests to invest in local import-substituting industries, generating high profits and thus the potential for greater saving and future growth. They can also obtain imported equipment at relatively favorable prices and reserve an already established domestic market for local or locally controlled producers. Eventually, they may even become competitive enough to export to the world market.

Although these arguments can sound convincing and some protective policies have proved highly beneficial to the developing world, many have failed to bring about their desired results. Protection is a tool of economic policy that must be employed selectively and wisely, not as a panacea to be applied indiscriminately and without consideration of both short- and long-term ramifications.

Foreign-Exchange Rates, Exchange Controls, and the Devaluation Decision

We have already briefly discussed the question of foreign-exchange rates. Remember that a country's official exchange rate is the rate at which its central bank is prepared to transact exchanges of its local currency for other currencies in approved foreign-exchange markets. Official exchange rates are usually quoted in terms of U.S. dollars—so many pesos, reals, pounds, euros, rupees, bhat, or yen per dollar. For example, the official exchange rate of the South African rand for U.S. dollars in 1998 was approximately 5 rand per dollar, and the Indian rupee was officially valued at approximately 40 rupees per dollar. If a South African manufacturer wished to import fabrics from an Indian textile exporter at a cost of 40,000 rupees, he would need 5,000 rand to make the purchase. However, since most foreign-exchange transactions are conducted in U.S. dollars, the South African importer would need to purchase $1,000 worth of foreign exchange from the central bank of South Africa for his 5,000 rand and then transmit these dollars through official channels to the Indian exporter. Currently, few major economies operate traditional fixed exchange rates except those pegged to the Euro; China moved from a fixed exchange rate to a managed float (giving more flexibility) in 2005. Note that many developing countries with managed floats still use intervention to maintain significant control over their exchange rates.

Official foreign-exchange rates are not necessarily set at or near the economic equilibrium price for foreign exchange—that is, the rate at which the domestic demand for a foreign currency such as dollars would just equal its supply in the absence of governmental regulation or intervention. In fact, as noted earlier, historically the currencies of most developing countries have

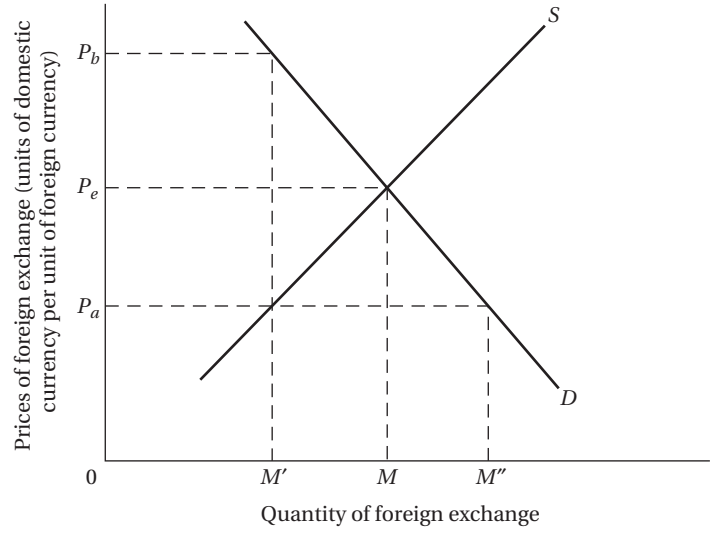
been overvalued by the exchange rate. Whenever the official price of foreign exchange is established at a level that in the absence of any governmental restrictions or controls would result in an excess of local demand over the available supply of foreign exchange, the domestic currency in question is said to be overvalued.

In situations of excess demand, developing-country central banks have three basic policy options to maintain the official rate of exchange. First, they can attempt to accommodate the excess demand by running down their reserves of foreign exchange (as Mexico did from 1991 to 1994 and Thailand, Malaysia, Indonesia, and the Philippines did from 1995 to 1997) or by borrowing additional foreign exchange abroad and thereby incurring further debts (as many African countries did in the 1980s and Indonesia and South Korea did in the 1990s). Second, they can attempt to curtail the excess demand for foreign exchange by pursuing commercial policies and tax measures that are designed to lessen the demand for imports (e.g., tariffs, physical quotas, licensing). Third, they can regulate and intervene in the foreign-exchange market by rationing the limited supply of available foreign exchange to "preferred" customers.[47] Such rationing is more commonly known as **exchange control**. The policy has been widely used throughout the developing world, although it is much less common than it once was.

Exchange control A governmental policy designed to restrict the outflow of domestic currency and prevent a worsened balance of payments position by controlling the amount of foreign exchange that can be obtained or held by domestic citizens.

The mechanism and operation of exchange control can be illustrated diagrammatically with the aid of Figure 12.4. Under free-market conditions, the equilibrium price of foreign exchange would be P_e, with a total of M units of foreign exchange demanded and supplied. If, however, the government maintains an artificially low price of foreign exchange (i.e., an overvaluation of its domestic currency) at P_a, the supply of foreign exchange will amount to only M' units because exports are overpriced. But at price P_a, the demand

FIGURE 12.4 Free-Market and Controlled Rates of Foreign Exchange



for foreign exchange will be M'' units, with the result that there is an "excess demand" equal to $M'' - M'$ units. Unless foreigners are willing to lend to or invest in the country to make up the difference, some mechanism will have to be devised to ration the available supply of M'. If the government were to auction this supply, importers would be willing to pay a price of P_b for the foreign exchange. In such a case, the government would make a profit of $P_b - P_a$ per unit. However, such open auctions are rarely carried out, and limited supplies of foreign exchange are allocated through some administrative quota or licensing device. Opportunities for corruption, evasion, and the emergence of black markets are thus made possible because importers are willing to pay as much as P_b per unit of foreign exchange.

Why have a majority of developing-country governments at one time or another opted for an overvalued official exchange rate? Many have done so as part of widespread programs of rapid industrialization and import substitution. As mentioned earlier, overvalued exchange rates reduce the domestic currency price of imports below the level that would exist in a free market for foreign exchange (i.e., by the forces of supply and demand). Cheaper imports, especially capital and intermediate producer goods, are needed to fuel the industrialization process. But overvalued exchange rates also lower the domestic currency price of imported consumer goods, especially expensive luxury products. Developing countries wishing to limit such unnecessary and costly imports often need to establish import controls (mostly physical quotas) or to set up a system of **dual** or **parallel exchange rates**, with one rate, usually highly overvalued and legally fixed, applied to capital and intermediate-good imports and the other, much lower and illegal (or freely floating), for luxury consumption good imports. Such dual exchange-rate systems make the domestic price of imported luxury goods very high while maintaining the artificially low and thus subsidized price of producer good imports. Needless to say, dual exchange-rate systems, like exchange controls and import licenses, present serious problems of administration and can promote black markets, corruption, evasion, and rent seeking (see Chapter 11).[48]

Dual exchange rate (parallel exchange rate) Foreign-exchange-rate system with a highly overvalued and legally fixed rate applied to capital- and intermediate-goods imports and a second, illegal (or freely floating) rate for imported consumption goods.

However, overvalued currencies reduce the return to local exporters and to import-competing industries that are not protected by heavy tariffs or physical quotas. Exporters receive less domestic currency for their products than would be forthcoming if the free-market exchange rate prevailed. Moreover, in the absence of export subsidies to reduce the foreign-currency price of exports, exporters, mostly farmers, become less competitive in world markets because the price of their produce has been artificially elevated by the overvalued exchange rate. In the case of import-competing but unprotected local industries, the overvalued rate artificially lowers the domestic currency price of foreign imports of the same product (e.g., radios, tires, bicycles, or household utensils).

Hence, in the absence of effective government intervention and regulation of the foreign-exchange dealings of its nationals, overvalued exchange rates have a tendency to exacerbate balance of payments and foreign-debt problems simply because they cheapen imports while making exports more costly. Chronic payments deficits resulting primarily from current account transactions (exports and imports) can possibly be ameliorated by a currency **devaluation**. Simply defined, a country's currency is devalued when the official rate at which its

Devaluation A lowering of the official exchange rate between one country's currency and all other currencies.

central bank is prepared to exchange the local currency for dollars is abruptly increased. A currency **depreciation**, by contrast, refers to a gradual decrease in the purchasing power of a domestic currency in foreign markets relative to domestic markets; *appreciation* refers to a gradual increase.[49] For example, when these currencies were pegged, a devaluation of the South African rand and the Indian rupee would occur if their official exchange rates of approximately 5 rand and 40 rupees to the dollar were changed to, say, 8 rand and 50 rupees per dollar. Following these devaluations, U.S. importers of South African and Indian goods would pay fewer dollars to obtain the same products. But U.S. exports to South Africa and India would become more expensive, requiring more rand or rupees to purchase than before. In short, by lowering the *foreign*-currency price of its exports (and thereby generating more foreign demand) while raising the *domestic*-currency price of its imports (and thereby lowering domestic demand), developing countries that devalue their currency hope to improve their trade balance vis-à-vis the rest of the world. This is a principal reason why devaluation is always a key component of IMF stabilization policies when currencies are "pegged."

Depreciation (of currency) The decline over time in the value or price of one currency in terms of another as a result of market forces of supply and demand.

An alternative to a currency devaluation is to allow foreign-exchange rates to fluctuate freely in accordance with changing conditions of international demand and supply. Freely fluctuating or **flexible exchange rates** in the past were not thought to be desirable, especially in developing nations heavily dependent on exports and imports, because they are extremely unpredictable, subject to wide and uncontrollable fluctuations, and susceptible to foreign and domestic currency speculation. Such unpredictable fluctuations can wreak havoc with both short- and long-range development plans. Nevertheless, during the global balance of payments and debt crises of the 1980s, many developing countries, including Mexico, Argentina, Chile, and the Philippines, were heavily influenced by the IMF to let their exchange rates float freely in order to correct sizable payments imbalances and to prevent continued capital flight. The same phenomenon occurred again for Mexico in 1994 and for Thailand, the Philippines, South Korea, Malaysia, and Indonesia in 1997 and 1998 during the Asian currency crisis. In a matter of several months during 1997, the Thai baht lost one-third of its value against the dollar, and the Philippine peso, South Korean won, Malaysian ringgit, and Indonesian rupiah fell by almost 30%. In a recent if less consequential example, the Indian rupee suddenly fell beginning in May 2013, losing as much as 20% of its value against the U.S. dollar (9% in August 2013 alone); the central bank responded by raising interest rates, which temporarily reversed about half of the 2013 decline but at an apparent cost of economic growth, which was already slowing. Some analysts viewed this as a potential harbinger of a new set of crises involving more countries such as Brazil, as the "ultra-loose" U.S. monetary policy tightens; we return to related topics in Chapters 13 and 15.

Flexible exchange rate The exchange value of a national currency that is free to move up and down in response to shifts in demand and supply arising from international trade and finance.

The present international system of floating exchange rates, formally legalized at an IMF meeting in 1976, represents a compromise between a fixed (artificially pegged) and a fully flexible exchange-rate system. Under this "managed" floating system, major international currencies are permitted to fluctuate freely, but erratic swings are limited through central bank intervention. The trend for most developing countries is toward a **managed float** of their currencies.

Managed float A fluctuating exchange rate that allows central bank intervention to reduce erratic currency fluctuations.

One final point that should be made about currency devaluations concerns their probable effect on domestic prices. Devaluation has the immediate effect

of raising prices of imported goods in terms of the local currency. Imported shirts, shoes, radios, records, foodstuffs, and bicycles that formerly cost x rupees now cost $(1 + d)x$ rupees, depending on the percentage magnitude of the devaluation, d. If, as a result of these higher prices, domestic workers seek to preserve the real value of their purchasing power, they are likely to initiate increased wage and salary demands. Such increases, if granted, will raise production costs and tend to push local prices up even higher. A **wage-price spiral** of domestic inflation can be thereby set in motion. For example, following the widespread IMF-induced currency devaluations during the 1997 Asian crisis, rates of inflation shot up in 1998 from 11% to 35% in Indonesia, from 6% to 12% in Thailand, and from 5% to 10% in the Philippines. Unemployment rates doubled, and workers took to the streets, demanding an end to the layoffs and a rise in wages to offset their lost purchasing power.

Wage-price spiral A vicious cycle in which higher consumer prices (e.g., as a result of devaluation) cause workers to demand higher wages, which in turn cause producers to raise prices and worsen inflationary forces.

As for the distributional effects of a devaluation, it is clear that by altering the domestic price and returns of "tradable" goods (exports and imports) and creating incentives for the production of exports as opposed to domestic goods, devaluation will benefit certain groups at the expense of others. In general, urban wage earners, people with fixed incomes, the unemployed, and the small farmers and rural and urban small-scale producers and suppliers of services who do not participate in the export sector stand to be financially hurt by the domestic inflation that typically follows a devaluation. Conversely, large exporters (often large landowners and foreign-owned corporations) and medium- to large-size local businesses engaged in foreign trade stand to benefit the most.[50] For this reason and others, international commercial and financial problems (e.g., chronic balance of payments deficits) cannot be divorced from developing countries' domestic problems (e.g., poverty and inequality). Policy responses to alleviate one problem can either improve or worsen others.

Finally, note that while a neutral exchange rate favors producing for neither the export market nor the domestic market, and free-market economists tend to favor it because of its "level playing field" in that respect, in contrast, an **undervalued exchange rate** is strongly export promoting. This is because it raises the local prices that firms receive for goods that can be exported *relative to* prices of nontradable goods that are sold only to domestic buyers, thus motivating a reorientation of firms toward the export market. If exports stimulate growth and if that growth is widely shared, many development economists expect that in the longer term, devaluation—and perhaps even undervaluation of exchange rates—can provide important development advantages. Proponents of industrial policy (and critics who consider it unfair currency manipulation) point to the long-term undervaluation of the Chinese renminbi and the earlier undervaluation of other East Asian currencies, particularly those of South Korea and Taiwan during their rapid catch-up phase; we return to this topic in the end-of-chapter case studies on Taiwan and South Korea in Chapters 12 and 13, respectively.

Undervalued exchange rate An official exchange rate set at a level lower than its real or shadow value.

Trade Optimists and Trade Pessimists: Summarizing the Traditional Debate

We are now in a position to summarize the major issues and arguments in the great debate between advocates of free-trade, outward-looking development