

infant-industry case for protection, governments used the power of the state to push resources out of agriculture and into manufacturing. And, as is the case with Mexico, these policy orientations have changed fundamentally since the late 1980s. Most developing countries have dismantled the protectionist systems they created and maintained in the first 30 years of the postwar period, have become active participants in the WTO, and have abandoned the quest to institute far-reaching changes to international trade rules. Most have greatly reduced the degree of government intervention in the domestic economy, selling state-owned enterprises and deregulating domestic markets.

This chapter and the next examine how political and economic forces have shaped the adoption and evolution of these new trade and development policies. The current chapter examines why so many developing countries' governments intervened deeply in their domestic economies, insulated themselves from international trade, and sought changes in international trade rules. The next chapter focuses on why so many governments have dismantled these policies during the last 20 years. We look first at how economic and political change throughout the developing world brought to power governments supported by import-competing interests. We then examine the economic theory that guided policy during those times. As we shall see, this theory provided governments in the developing world with a compelling justification for transforming the protectionism sought by the import-competing producers that supported them into policies which emphasized industrialization through state leadership. Having built this base, we turn our attention to the specific policies that governments pursued during that period, looking first at their domestic strategy for industrialization and then examining their efforts to reform the international trade system.

Domestic Interests, International Pressures, and Protectionist Coalitions

Developing countries' trade policies underwent a sea change in the first half of the twentieth century. Up until the First World War, those developing countries which were independent, as well as those regions of the world held in colonial empire, adopted liberal trade policies. They produced and exported agricultural goods and other primary commodities to the advanced industrialized countries and imported most of the manufactured goods they consumed. Governments and colonial rulers made little effort to restrict this trade. But by the late 1950s, these liberal trade policies had been replaced by a protectionist approach that dominated the developing countries' trade policies until the late 1980s and whose remnants remain important in many countries today. We begin our investigation of developing countries' trade and development policies by looking at this initial shift to protectionism.

Trade and development policies in developing countries have been strongly shaped by political competition between the country and the city, or, in slightly different terms, between rural-based agriculture and urban-based manufacturing. Political competition between these two groups reflects, in turn, the pattern of comparative advantage generated by the factor endowments common to most developing

Table 6.1
Economic Structure in Developing Countries (Sector as a Percent of GDP)

	Agriculture			Manufacturing			Other Industry*			Services		
	1960	1980	1995	1960	1980	1995	1960	1980	1995	1960	1980	1995
Sub-Saharan Africa	36	24	20	12	12	15	18	24	15	40	38	48
Asia and the Pacific	46	27	18	16	27	32	7	12	12	31	32	38
Latin America	49	39	30	13	15	17	6	9	10	33	35	41
Central America	16	10	10	21	25	21	10	12	12	53	51	55

*Other industry may not sum to 100 because of rounding.

*Other industry includes mining, construction, gas, and water.

Source: Data for 1960 from World Bank, *World Tables*, 3d ed. (Washington, DC: The World Bank, 1983). Data for 1980 and 1995 from World Bank, *World Development Indicators* (Washington, DC: The World Bank, 1997).

In general, developing countries are abundantly endowed with land and poorly endowed with capital (Lal and Myint 1996, 104–110).

The relative importance of land and capital in developing countries' economies can be appreciated by examining the structure of those economies, together with their exports, as presented in Tables 6.1 and 6.2. For the time being, we will focus on the economy, as this will allow us to put to the side the consequences of the development policies that governments adopted during the postwar period. With a few exceptions (particularly in Latin America), between one-third and one-half of all economic activity in developing countries in 1960 was based in the agricultural sector, while less than 10 percent was based in manufacturing. By contrast, agriculture accounted for only 5 percent of GDP in the advanced industrial economies. If we include the "other industry" category, which incorporates mining, then, in 1960, in all regions of the developing world other than Latin America, agriculture and nonmanufacturing industry accounted for more than half of all economic activity.

A similar pattern is evident in the commodity composition of developing countries' exports (Table 6.2). The **commodity composition of exports** measures the types of goods that a country exports. In 1962, developing countries' exports were heavily concentrated in primary commodities: agricultural products, minerals, and raw materials. Roughly speaking, in each developing country, primary commodities accounted for more than 50 percent of exports, and in more than half of the countries listed in Table 6.2, primary commodities accounted for more than 80 percent of exports. In addition, the range of primary commodities each developing country exported was generally quite small. Some countries were **monoexporters**; that is, their exports were almost fully accounted for by one product. In the mid-1980s, for example, more than 80 percent of Burundi's export earnings came from coffee, while copper accounted for 75 percent of Ghana's export earnings (Cypher and Dietz 1997, 10–11).

Similar patterns were evident in Latin America: in 1950, coffee and cocoa made up about 69 percent of Brazil's exports, and copper and nitrates constituted about 80 percent of Chile's exports (Thorpe 1999, 346). The structure of their economies and

Table 6.2
Developing Countries' Export Composition (Sector as a Percent of Total Exports)

	Fuels, Minerals, and Metals			Other Primary Commodities			Manufactures		
	1962	1980	1993	1962	1980	1993	1962	1980	1993
Sub-Saharan Africa									
Cameroon	21	33	51	75	64	35	4	4	14
Ghana	73	17	25	31	82	52	1	1	23
Kenya	2	36	16	89	52	66	9	13	19
Nigeria	11	97	94	81	2	4	8	0	2
South Africa	23	33	16	47	28	11	26	40	74
Zaire	16	56	69	75	14	13	10	31	18
East Asia and the Pacific									
Hong Kong	2	2	2	3	5	3	93	93	96
Indonesia	37	76	32	63	22	15	0	3	53
Malaysia	n.a.	35	14	n.a.	46	21	n.a.	20	65
Singapore	52	31	14	18	18	6	30	51	80
South Korea	24	1	3	57	9	4	20	90	94
Taiwan	n.a.	2	2	n.a.	10	5	n.a.	88	93
South Asia									
India	9	8	7	47	33	18	44	59	75
Pakistan	0	8	1	75	44	14	25	48	85
Latin America									
Argentina	2	6	11	95	71	57	3	23	32
Bolivia	91	86	56	4	11	25	5	3	19
Brazil	9	11	12	88	50	28	3	39	60
Chile	87	65	43	8	25	38	4	10	19
Mexico	24	73	17	60	15	9	16	12	75

n.a. = not available.

Sources: Data for 1962 from World Bank, *World Tables*, 3d ed. (Washington, DC: The World Bank, 1983). Data for 1980 and 1993 from World Bank, *World Development Indicators* (Washington, DC: The World Bank, 1997).

the composition of their exports thus underline the central point: developing countries are abundantly endowed with land and have little capital.

The specific-factors model allows us to examine how these factor endowments have shaped developing countries' trade politics during the last 100 years. As we learned in Chapter 4, a specific factor is a factor of production that cannot be shifted from one economic sector to another. In the context of developing countries, the specific-factors model leads us to focus on two sectors dealing in traded goods: agriculture and manufacturing. In keeping with the supposition of limited factor mobility, we assume that land is specific to agriculture while capital is specific to manufacturing. We also assume that our third factor—labor—is mobile across sectors. Most labor in developing countries is low skilled and can readily be employed either in low-skilled manufacturing or in agriculture. Such labor is highly mobile among sectors and will move to whichever sector is paying the higher wage. Finally, because land is abundant while capital is scarce, agriculture is the export-oriented sector and manufacturing is

the import-competing sector. The export-oriented sector, landowners in this case, realize rising incomes from open trade and see their incomes fall under protection. The import-competing sector, the manufacturing industry in this case, realizes income gains from protection and incurs losses from trade liberalization.

This simple model allows us to generate some basic expectations about the underlying dynamics of trade politics in developing countries. When agricultural interests dominate politics, trade policy will be open and liberal. Because the returns are higher in agriculture than in manufacturing, most labor will be employed in agriculture. When manufacturing interests dominate politics, trade policy will be protectionist, and because protection raises the return to labor and capital employed in manufacturing relative to agriculture, labor will move out of agriculture and into manufacturing. The specific-factors model suggests, therefore, that trade politics in developing countries will be characterized by competition between agricultural and manufacturing interests.

While this two-sector model highlights political competition between rural agriculture and urban manufacturing, it omits one important element of urban interests: Many urban residents in developing countries are not employed in manufacturing. Instead, they work for the government, in the retail sector, or in other nonmanufacturing activities. We can capture this group's trade policy interests by adding a third sector, called the nontraded-goods sector, to manufacturing and agriculture. The **nontraded-goods sector** encompasses all economic activities that do not enter into international trade, either because the good is too costly to transport, as are houses and concrete, or because, in some cases, the good or service must be performed locally, as are the railway system, many public utilities, health care, auto repair, and the retail sector in general. In addition, government employees, such as civil servants, teachers, and military personnel, work in the nontraded-goods sector. Because nontraded goods do not face international competition, international trade affects incomes in the nontraded good sector primarily through its impact on the prices of the traded goods that people employed in the nontraded-goods sector purchase. People employed in the nontraded-goods sector realize income gains from policies that reduce the prices of traded goods and losses from policies that raise these prices.

Developing countries pursued liberal trade policies prior to World War I because export-oriented agricultural interests dominated those countries' political systems. The precise political form of this domination differed considerably across regions. In Latin America, an indigenous landowning elite dominated domestic politics. In Argentina and Chile, for example, the landowners controlled government, often in an alliance with the military. While these political systems were constitutionally democratic, participation was restricted to the elite, a group that amounted to about 5 percent of the population, in a system that has been characterized as "oligarchic democracy" (Skidmore and Smith 1989, 47). In other Latin American countries such as Mexico, Venezuela, and Peru, dictatorial and often military governments ruled, but they pursued policies that protected the interests of the landowners (Skidmore and Smith 1989, 47). With landowners dominating domestic politics, Latin American governments pursued liberal trade policies that favored agricultural production and export at the expense of manufactured goods (Rogowski 1989, 47). As a result, most Latin American countries were highly open to international trade, producing and exporting

agricultural goods and other primary commodities and importing manufactured goods from Great Britain, Europe, and the United States.

In Asia and in Africa, export-oriented agricultural interests dominated local politics through colonial structures. In Taiwan and Korea, for example, Japanese colonization led to the development of **enclave agriculture**—that is, export-oriented agricultural sectors that had few linkages to other parts of the local economy (Haggard 1990). Agricultural producers bought little from local suppliers and exported most of their production. In both countries, agricultural production centered on the production and export of rice; in Taiwan, sugarcane was a staple crop as well. In Africa, colonial powers—Britain and France in particular—encouraged the production of cash crops and raw materials that could be exported to the mother country (Hopkins 1979; Ake 1981, 1996). In the Gold Coast (now Ghana), the cocoa industry was a small part of the economy in 1870. British colonists then promoted the development of cocoa production, so that, by 1910, the country had become the world's largest cocoa producer and cocoa accounted for 80 percent of the Gold Coast's exports. In Senegal, France promoted the production of groundnuts, so that production rose from 200,000 tons to 600,000 tons between 1914 and 1937, and close to half of the land cultivated in Senegal was dedicated to groundnut production (Ka and Van de Walle 1994, 296). Similar patterns with other commodities were evident in other African colonies (Hopkins 1979).

These political arrangements began to change in the early twentieth century. As they did, the dominance of export-oriented interests gave way to the interests of import-competing manufacturers. In many instances, the most important triggers for this change originated outside of developing societies. In Latin America, international economic shocks beginning with the First World War and extending into the Second World War played a central role (Thorp 1999, Chapter 4). Government-mandated rationing of goods and primary commodities in the United States and Europe during the two World Wars made it difficult for Latin American countries to import many of the consumer goods they had previously purchased from the industrialized countries. In addition, falling commodity prices associated with the Great Depression and the disruption of normal trade patterns arising from the Second World War reduced the amount of foreign exchange that Latin American countries earned from their primary commodity exports. The interruption of "normal" Latin American trade patterns led governments in many countries to introduce trade barriers and to begin producing many of the manufactured goods that they had previously imported. The rise of domestic manufacturing in turn produced a growing urban middle class as workers and industrialists began to move out of agricultural production and into manufacturing industries.

The emergence of manufacturing industries gave rise to interest groups, industry-based associations, and labor unions to promote economic policies favorable to people working in the import-competing sector. The creation of organized groups to represent the interests of import-competing manufacturing generated its own political logic. On the one hand, the groups that saw their incomes rise from protection had a strong incentive to see protectionist policies continued in the postwar period. (See Rogowski 1989; Haggard 1990.) On the other hand, the emergence of new organized interests and a growing urban middle class created an opportunity for politicians to construct

new political coalitions based on the support of the urban sectors. In Argentina, for example, Juan Peron rose to power in the late 1940s with the support of labor, industrialists, and the military. A similar pattern was evident in Brazil, where Getulio Vargas was elected to the presidency in 1950 with the support of industrialists, government civil servants, and urban labor. Nor were Argentina and Brazil unique: Throughout Latin America, postwar governments were much less tightly linked to landed interests than governments had been before World War I. Instead, governments rose to power on the basis of political support from interest groups whose incomes were derived from import-competing manufacturing (Cardoso and Faletto 1979). Such governments had a clear incentive to maintain trade policies that protected those incomes.

In Asia and Africa, the declining political influence of export-oriented agricultural interests and the growing influence of import-competing manufacturing occurred as a result of decolonization. In Asia—particularly in Korea and Taiwan—political change resulted from the defeat of Imperial Japan in World War II. (See Haggard 1990.) In South Korea, the defeat of Japan transferred power from a foreign colonizer to indigenous groups, and while the South Korean landowning class initially dominated postwar politics, the Korean War of the early 1950s and a series of land reforms implemented during that same decade greatly reduced the power of rural landowners and increased the relative power of the emerging urban sector. On Mainland China, the Japanese defeat was followed by the defeat of the nationalist Chinese government and the migration of the Chinese nationalists to the island of Taiwan. Once installed in Taiwan, the Chinese nationalists instituted land reforms to assert their authority over indigenous landowners and to prevent a repeat of their experience on the mainland, where the rural sectors had supported the Communists. As in South Korea, these land reforms reduced the power of landowners and increased the power of urban-industrial sectors.

Africa's transition came later, as the decolonization of Sub-Saharan Africa occurred only in the 1950s and early 1960s, and it took a slightly different form. The push toward decolonization was led by a coalition of indigenous professional elites who had been educated by the colonial powers and had then acquired positions in the administration of colonial economic and political rule. One factor motivating Africa's push for independence was dissatisfaction with the discriminatory practices of colonial administration. Colonial rulers had tightly restricted the ability of the local population to share in the wealth generated by domestic economic activity. Colonies were run for the profit of the colonists, with colonial economic enterprises staffed and managed by men from the colonial power. The local population had limited opportunities to participate in these economic arrangements other than as workers. The nationalist struggles for independence that emerged in the 1950s and succeeded over the next 15 years sought to transfer control over existing economic practices from the colonial governments to indigenous elites. As a consequence, import-competing manufacturing in Africa played a much smaller role in early postindependence politics than did the nontraded-goods sector. The indigenous elites as Claude Ake (1981, 142) has argued, "wanted to inherit a system rather than to revolutionise it."

The period demarcated by the start of the First World War and the end of decolonization in Sub-Saharan Africa thus brought a fundamental change to patterns of political influence in developing countries. Political structures once dominated by

export-oriented agricultural interests were now largely under the control of import-competing manufacturing interests. Consequently, governments beholden to the import-competing sector had a clear incentive to abandon liberal trade policies and continue the protectionist arrangements that had been put in place during the 1930s. As we will see, the political interest in protectionism was reinforced by an elaborate theoretical structure which argued that protectionism was the only path to the establishment of industrialized economies.

The Structuralist Critique: Markets, Trade, and Economic Development

The adoption of protectionism in most developing countries reflected the interests of the politically influential import-competing manufacturing sector, but it did not represent a coherent strategy for economic development. And most governments were committed, at least rhetorically, to the adoption of policies that would promote economic development. Most governments wanted to shift resources out of agricultural production and into manufacturing industries because they believed that poverty resulted from too heavy a concentration on agricultural production. Higher standards of living could be achieved only through industrialization, and according to what was then the dominant branch of development economics, called **structuralism**, the shift of resources from agriculture to manufacturing would not occur unless the state adopted policies to bring it about. (See Lal 1983; Little 1982.)

The belief that the market would not promote industrialization provided the intellectual and theoretical justification for the two central aspects of the development strategies adopted by most governments throughout much of the postwar era. Because structuralism played such an important role in shaping developing countries' trade and development policies, understanding the policies governments adopted requires us to understand the structuralist critique of the market. We first look at the structuralist critique of the domestic market in developing countries and then turn our attention to the structuralist critique of the international market and the international trade system.

Market Imperfections in Developing Countries

Structuralists argued that imperfections within developing countries' markets posed serious obstacles to industrialization, which would require a substantial reallocation of resources from agricultural production to manufacturing industries. The critical question for industrialization, therefore, was how best to achieve this reallocation. Structuralists argued that the domestic market could not be expected to bring about the necessary shift of resources. They were skeptical about the market because they believed that developing world economies were inflexible: "[Economic] change is inhibited by obstacles, bottlenecks, and constraints. People find it hard to move or adapt, and resources tend to be stuck" in the sectors in which they are currently employed (Little 1982, 20).

Most important, according to the structuralists, was the belief that the market would not promote investment in manufacturing industries. As economist Tibor Scitovsky wrote at the time,

In an economy in which economic decisions are decentralized [that is, in a market economy], a system of communication is needed to enable each person who makes economic decisions to learn about the economic decisions of others and coordinate his decision with theirs. In the market economy, prices are the signaling device that informs each person of other people's economic decisions; and the merit of perfect competition is that it would cause prices to transmit information reliably and people to respond to this information properly. Market prices, however, reflect the economic situation as it is and not as it will be. For this reason, they are more useful for co-ordinating current production decisions, which are immediately effective and guided by short-run considerations, than they are for co-ordinating investment decisions, which have a delayed effect and—looking ahead to a long future period—should be governed not by what the present economic situation is but by what the future economic situation is expected to be. The proper co-ordination of investment decisions, therefore, would require a signaling device to transmit information about present plans and future conditions as they are determined by present plans; and the pricing system fails to provide this (1954, 150).

The structuralists pointed to two coordination problems that would limit investment in manufacturing industries. The first problem, called **complementary demand**, arose in the initial transformation from an economy based largely on subsistence agriculture (agricultural production in which people consume their farm production rather than sell it for cash) to a manufacturing economy (Rosenstein-Rodan 1943). In an economy in which few people earned a money wage, no single manufacturing firm would be able to sell its products, unless a large number of other manufacturing industries were started simultaneously. Suppose, for example, that 100 people are taken out of subsistence agriculture and paid a wage to manufacture shoes, while the rest of the population remains in nonwage agriculture. To whom will the new shoe factory sell its shoes? The only workers earning money are those producing shoes, and it is unlikely that these 100 workers will purchase all of the shoes that they make. In order for this shoe factory to succeed, other factories employing other people must be created at the same time.

Suppose instead, then, that 500,000 workers are taken out of subsistence agriculture and simultaneously employed in a large number of factories producing a variety of different manufactured goods; some make shoes, others make clothing, and still others produce refrigerators or processed foods. With this larger number of wage earners, manufacturing enterprises can easily sell their goods. Shoe workers can buy refrigerators and clothes, workers in the clothing factory can purchase shoes, and so on. Thus, a manufacturing enterprise will be successful only if a large number of other manufacturing firms are started at the same time.

This coordination problem arises because no single entrepreneur has an incentive to create a manufacturing enterprise, unless he or she is certain that others will invest as well. Thus, no one will invest in a manufacturing industry unless the potential investors can somehow coordinate their behavior to ensure that all will invest in manufacturing industries at the same time. Structuralists argued that the market, which

encouraged autonomous investment decisions by independent economic actors, would not promote the necessary coordination. The problem of complementary demand thus meant that if investment were left to the market, there would be little investment in manufacturing industries.

The second coordination problem, called **pecuniary external economies**, arose from interdependencies among market processes (Scitovsky 1954). Think about the economic relationship between a steel plant and an automobile factory. Suppose that the owners of a steel factory invest to increase the amount of steel they can produce. As steel production increases, steel prices begin to fall. The automobile factory, which uses a lot of steel in producing cars, begins to realize rising profits as the price of one of its most important inputs falls. These increasing profits in the automobile industry could induce the owners of the car plant to invest to expand their own production capacity. Such a simultaneous expansion of the steel and auto industries would raise national income.

The two firms face a coordination problem, however. On the one hand, the owners of the steel plant will not increase steel production unless they are sure that the auto industry will increase car production. On the other hand, the owners of the auto plant will not increase auto production unless they are certain that the steel producer will make the investments needed to expand steel output. Thus, unless investment decisions in the steel and auto industry are coordinated and taken together, neither firm will invest to increase the amount it can produce. Once again, structuralists argued, the market could not be expected to solve this coordination problem.

The market's inability to coordinate investment decisions was a serious problem for governments intent on transforming the structure of their economies. If the market would not coordinate investment decisions, then investments in manufacturing industries necessary to drive the process of industrialization would not be made. Structuralists argued that the way to overcome these coordination problems and initiate industrialization was with a state-led **big push**. The state would engage in economic planning and either make necessary investments itself or help coordinate the investments of private economic actors. Thus, what the market could not bring about, the state could achieve through intervening in the economy. The structuralist critique of the market therefore provided a compelling theoretical justification for state-led strategies of industrialization.

Market Imperfections in the International Economy

Structuralists also argued that international trade provided few benefits to developing countries. This argument was formulated during the 1950s, principally by Raul Prebisch, an Argentinean economist who worked for the United Nations Economic Commission for Latin America (ECLA), and Hans Singer, an academic development economist. According to the **Singer–Prebisch theory**, participation in the GATT-based trade system would actually make it harder for developing countries to industrialize by depriving them of critical resources.

The Singer–Prebisch theory divides the world into two distinct blocks—the advanced-industrialized **core** and the developing-world **periphery**—and then focuses on the terms of trade between them. The **terms of trade** relate the price of a coun-

try's exports to the price of its imports. An improvement in a country's terms of trade means that the price of the goods it exports is rising relative to the price of the goods it imports, while a decline in a country's terms of trade means that the price of the goods it exports is falling relative to the price of the goods it imports. As a country's terms of trade decline, it must exchange a larger volume of domestic production (it must export more) for a given amount of foreign production (imports). As a country's terms of trade improve, it can acquire a given amount of imports for a smaller quantity of exports. Thus, an improvement in its terms of trade makes a country richer, while a decline in its terms of trade makes it poorer.

Because the typical developing country exports primary commodities and imports manufactured goods, income in developing countries is sensitive to the terms of trade between primary commodities and manufactured goods. A fall in the price of primary commodities relative to that of manufactured goods lowers developing countries' incomes. A rise in the price of primary commodities relative to that of manufactured goods raises their incomes.

The Singer–Prebisch theory argues that developing countries' terms of trade deteriorate steadily over time. Two mechanisms are seen as the cause of this secular decline. First, the periphery's terms of trade deteriorate due to the different consequences of productivity improvements in the core and periphery. (See Lewis 1954; United Nations 1964; Gilpin 1987, 275–276.) An improvement in productivity reduces the cost of producing a single good, and such a cost reduction allows the firm to either reduce the price of the good or pay higher wages. Core-country economies are characterized by full employment and strong labor unions. Labor in those countries is thus in a strong position when bargaining with firms; consequently productivity improvements are transformed into rising wages and stable prices.

Developing countries, by contrast, have large amounts of underemployed labor and weak labor unions. Labor in developing countries is thus in a weak position when bargaining with firms; consequently productivity improvements are transformed into stable wages and falling prices (United Nations 1964, 15). Because productivity gains yielded stable prices for core-country manufactured goods and falling prices for periphery-country commodities, the amount that developing countries must export to acquire a given volume of imports rises continuously over time.

Structuralists also emphasized differences in the income elasticity of demand for primary commodities versus industrial goods. The **income elasticity of demand** is the degree to which a change in income affects demand for a particular good. Low income elasticity of demand means that a large increase in per capita income produces little change in demand for a particular good. High income elasticity of demand means that a small increase in income produces a large change in demand for a particular good. Structuralists argued that the income elasticity of demand for primary commodities was quite low. **Engel's law**, which informed the structuralists, holds that people spend smaller percentages of their total income on food and other primary commodities as their incomes rise.

Thus, as incomes rise in the core countries, a smaller and smaller percentage of those countries' income will be spent on imports of primary commodities. But as income rises in the periphery countries, a larger percentage of *those* countries' income will be spent on manufactured imports from the core. Falling demand for primary

commodities will cause the periphery countries' export prices to fall, while rising demand for manufactured goods will cause the periphery countries' import prices to rise. Rising import prices relative to export prices yields deteriorating terms of trade.

Stripped of all the economic terminology, the structuralists' point was remarkably simple: in contrast to classical trade theory's claim that free trade provides clear benefits to all countries, the structuralists argued that developing countries did not necessarily benefit from international trade. In a world in which developing countries exchange primary commodities for manufactured goods, core countries capture most, if not all, of the gains from trade. According to the structuralists, therefore, the GATT-based multilateral trade system was highly disadvantageous for developing countries.

Moreover, the income losses caused by the secular decline in their terms of trade constrained the ability of developing countries to industrialize. In order to industrialize, developing countries had to import **capital goods**—that is, machines used to produce other goods, as well as many intermediate inputs. The ability of developing countries to import capital and intermediate goods, however, was determined in large part by their export earnings. Yet, the purchasing power obtained from their export earnings was falling over time. Thus, the secular decline in the terms of trade made it harder for developing countries to import things that were critical for industrialization.

The validity of the Singer–Prebisch theory has been questioned. Most controversial has been the claim that developing countries face a continuous decline in their terms of trade. Measuring the long-term trend in a country's terms of trade is complicated by the fact that developing countries experience frequent terms-of-trade shocks. A **term-of-trade shock** is a sudden and unanticipated, but usually temporary, change in a country's terms of trade caused by factors outside the country's direct control. In the mid-1970s, for example, a severe frost in Brazil, one of the world's largest coffee producers, destroyed a significant portion of the Brazilian coffee crop and coffee trees. As a result, the world price of coffee rose steeply. By April 1977, the world price of coffee had risen to more than six times the price that had prevailed in June 1975 (Deaton 1999, 28). Thus, the terms of trade for other coffee-exporting nations, such as Colombia, Kenya, and Tanzania, improved suddenly and dramatically for reasons fully exogenous to their economies. Other shocks are negative. The decline in world economic activity during the late 1990s and early 2000s, for example, reduced the global demand for petroleum, and lower demand was associated with falling oil prices in world markets.

When terms-of-trade shocks are frequent, a country will experience a decline in its terms of trade in some years and a rise in others. The conclusion we reach about the general trend over a longer period of time will be sensitive to when we begin and end our measurement. If, for example, you compare a country's terms of trade following a positive shock in 1960 with its terms of trade 40 years later immediately following a large negative shock, you are likely to conclude that the country's terms of trade have declined over the entire period. Conversely, if you compare a country's terms of trade following a negative shock in 1960 and a positive shock in 2000, you may conclude that the country's terms of trade have generally improved over the intervening 40 years. Still, even taking into account the measurement problems, recent research does lend some support to the structuralists' claim (Borensztein et al. 1994; see also Bloch and Sapsford 2000). Between 1957 and 1987, prices of primary commodities other than oil

fell by about three-quarters of 1 percent per year relative to prices of manufactured goods, while between 1968 and 1987, the deterioration increased to 1.57 percent per year. (See Cypher and Dietz 1997, 180.)

While structuralism's critique of markets within developing countries and of the international trade system has been severely criticized, the objective validity of structuralism is not our central concern. What matters for our purposes is that developing countries *believed* that the structuralist critique was correct. Governments of developing countries were convinced that industrialization would not occur if left to markets at home or if those countries participated in the GATT-based international trade system. This conviction played an important role in shaping the trade and development policies that developing countries adopted.

Domestic and International Elements of Trade and Development Strategies

Structuralism enabled governments to transform the protectionist trade policies that benefited their principal political supporters into comprehensive state-led development strategies. The trade and development policies that most governments adopted following World War II had both a domestic and an international dimension. At home, the desire to promote rapid industrialization led governments to adopt state-led development strategies that were sheltered by high protectionist barriers. In the international arena, concern about the distributional implications of international trade led developing countries to seek far-reaching changes to the GATT-based trade system. This reform effort was characterized by a concerted attempt to shift the international trade system away from the market-based liberalism embodied in GATT and toward an alternative set of rules and institutions that the developing countries believed would better enable them to industrialize. We examine each dimension in turn.

Import Substitution Industrialization

Industrialization required a shift of resources out of agriculture and into manufacturing. Skepticism about the ability of the market to promote this necessary reallocation of resources implied that industrialization would occur only if the state played a leading role. States played this leading role by adopting a development strategy called **import substitution industrialization**, or ISI. The strategy of ISI was based on a simple logic: countries would industrialize by substituting domestically produced goods for manufactured items they had previously imported.

The approach was conceptualized as a two-stage strategy. (See Table 6.3.) Its initial stage was “wholly a matter of imitation and importation of tried and tested procedures” (Hirschman 1968, 7). **Easy ISI**, as this first stage was often called, focused on developing domestic manufacturing industries that would be capable of producing relatively simple consumer goods, such as soda, beer, apparel, shoes, and furniture. The rationale behind the focus on simple consumer goods was threefold. First, there was a large domestic demand for them that was currently satisfied by imports. Second,

Table 6.3
Stages of Industrialization in Mexico and Brazil, 1880-1970

	Commodity Exports, 1880-1930	Primary ISI, 1930-1955	Secondary ISI, 1955-1968
Main Industries	Mexico: Precious metals, minerals, oil Brazil: Coffee, rubber, cocoa, cotton	Mexico and Brazil: Textiles, food, cement, iron and steel, paper, chemicals, machinery	Mexico and Brazil: Automobiles, electrical and nonelectrical machinery, petrochemicals, pharmaceuticals
Major Economic Actors	Mexico: Foreign investors Brazil: National private firms	Mexico and Brazil: National private firms	Mexico and Brazil: State- owned enterprises, transnational corporations, and national private firms
Orientation of the Economy	World market	Domestic market	Domestic market

Source: Gereffi 1990, 19.

because these items were mature products, the technology and machines necessary to produce them could be easily acquired from the advanced industrialized countries. Third, the production of relatively simple consumer goods relies heavily on low-skilled labor, allowing developing societies to draw their populations into manufacturing activities without making large investments to upgrade their skills.

Governments expected to realize two broad benefits from this first stage. Initially, the expansion of manufacturing activities, particularly if a portion of the resulting profits was reinvested, would increase wage-based employment as underutilized labor was drawn out of agriculture and into manufacturing. In addition, the experience gained in these manufacturing industries would allow domestic workers to develop skills, collectively referred to as **general human capital**, that could be subsequently applied to other manufacturing businesses. Of particular importance were the management and entrepreneurial skills that would be gained by the people who worked in and managed the manufacturing enterprises established in this stage. Success in the easy stage would therefore create many of the ingredients necessary to make the transition to the second, harder stage of ISI.

Easy ISI would eventually cease to bear fruit. The domestic market's capacity to absorb the kinds of simple consumer goods produced at this stage would quickly be exhausted, and the range of such goods that could be produced would be limited. At some point, therefore, developing countries would need to shift from easy ISI to a second-stage strategy that pushed them into more complex manufacturing activities. One possibility would be to shift to what some have called an **export substitution strategy**, in which the labor-intensive manufactured industries developed in easy ISI begin to export rather than continue to produce exclusively for the domestic market. This strategy is called export substitution because manufactured goods begin to substitute for primary commodities in the country's exports.

The second alternative, and the one actually adopted by many governments in Latin America and Africa, was called **secondary ISI**. In this approach, emphasis shifts from the manufacture of simple consumer goods to the production of consumer durable goods, intermediate inputs, and the capital goods needed to produce consumer durables. In Argentina, Brazil, and Chile, for example, governments decided to promote domestic automobile production as a central component of secondary ISI. Each country imported cars in pieces, called "complete knockdowns," and assembled the pieces into a car for sale in the domestic market. Domestic auto firms were required to gradually increase the percentage of locally produced parts used in the cars they assembled. In Chile, for example, 27 percent of a locally produced car's components had to be manufactured domestically in 1964. The percentage rose to 32 percent in 1965 and then to 45 percent in 1966 (Johnson 1967).

By increasing the percentage of local components of cars and other goods in this manner, governments hoped to promote the development of backward linkages throughout the economy (Hirschman 1958). **Backward linkages** arise when the production of one good, such as a car, increases demand in industries that supply components for that good. Thus, increasing the percentage of locally produced components of cars, by in turn increasing the demand for individual car parts, would increase domestic part production. The latter would in turn increase demand for inputs into part production: steel, glass, and rubber, for example. Industrialization, therefore,

would spread backwards from final goods, to intermediate inputs, to capital goods as backward linkages multiplied.

Governments promoted secondary ISI by relying heavily on three policy instruments: trade barriers, government planning, and investment policy. The justification for trade barriers was provided by the infant-industry argument and by recurrent shortages of foreign exchange. Because export earnings were limited, while many elements critical to industrialization—many of the intermediate inputs, as well as almost all of the capital goods (at least at first)—had to be imported, governments controlled foreign trade tightly. Governments managed trade to ensure that expenditures of scarce foreign exchange were consistent with overall development objectives (Bhagwati 1978, 20–33). Protection also allowed infant industries to gain experience needed to compete against established producers. In Brazil and India, for instance, the state prohibited imports of any good for which there was a domestic substitute, regardless of price differences and, to a large extent, of quality differences as well.

The scale and the structure of protection that governments used to promote industrialization are illustrated in Table 6.4, which focuses on Latin America in 1960. In all but two of the countries listed in the table, nominal protection on nondurable consumer goods was well over 100 percent, and for all but three countries, the nominal tariffs on consumer durables were also over 100 percent. While Mexico and Uruguay stand out as clear exceptions to this pattern, this has more to do with those countries' extensive use of import quotas in place of tariffs than with an unwillingness to protect domestic producers (Bulmer-Thomas 1994, 279). It is also clear that tariffs were lower for semi-manufactured goods, industrial raw materials, and capital goods (all of which were items that developing countries needed to import in connection with industrialization) than they were for consumer goods. This pattern of tariff escalation was common in much of the developing world (Balassa and Associates 1971).

Most governments also relied heavily on explicit five-year plans. Developed by government agencies, these plans were designed to "serve as guidelines for public expenditures and for economic policies" (Little 1982, 35). Planning was used to determine which industries would be targeted for development and which would not, to fig-

ure out how much should be invested in a particular industry, and to evaluate how investment in one industry would influence the rest of the economy. The plan thus served as the coordination device that governments believed was necessary, given the belief that the market could not itself coordinate investment decisions.

With a plan in place, governments used investment policies to promote targeted industries. Most governments either nationalized or heavily controlled the financial sector. While we will look at this in greater detail in Chapter 14, here it is important to note that state control of the financial system enabled the government to direct financial resources to targeted industries. Governments also invested directly in those economic activities in which they thought the private sector would not invest. Much of the infrastructure necessary for industrialization—things such as roads and other transportation networks, electricity, and telecommunications systems—it was argued, would not be created by the private sector. In addition, the private sector lacked access to the large sums of financial support needed to make huge investments in a steel or auto plant. Moreover, it was claimed that private sector actors lacked the technical sophistication required for the large-scale industrial activity involved in secondary ISI.

Governments invested in these areas by creating **state-owned enterprises**—firms that were fully owned by the state—or by creating mixed-ownership enterprises that combined state and private-sector participation. In Brazil, for example, state-owned enterprises controlled more than 50 percent of total productive assets in the chemical, telecommunications, electricity, and railways industries and slightly more than one-third of all productive assets in metal fabrication (Treat 1983). In Africa, governments in Ghana, Mozambique, Nigeria, and Tanzania each created more than 300 state-owned enterprises, and in many African countries, state-owned enterprises accounted for 20 percent of total wage-based employment (World Bank 1994b, 101). In India, state-owned enterprises made up for 27 percent of total employment and 62 percent of all productive capital (Krueger 1993a, 24–5).

While the import-competing manufacturing industry benefited from ISI policies, export-oriented agriculture bore many of the costs. (See Krueger 1992; Krueger, Schiff, and Valdes 1991; Binswanger and Deininger 1997.) Governments taxed agricultural exports (Krueger 1992, 16), frequently through government-owned marketing boards that controlled the purchase and export of agricultural commodities. Often established as the sole entity with the legal right to purchase, transport, and export agricultural products, marketing boards set the price that farmers received for their crops. In the typical arrangement, the marketing board would purchase crops from domestic farmers at prices well below the world price and then sell the commodities in the world market at the world price. The difference between the price paid to domestic farmers and the world price represented a tax on agricultural incomes that the state could use to finance government-favored projects in industry (Amsden 1979; Bates 1988; Krueger 1992). The trade barriers used to protect domestic manufacturing firms from foreign competition also represented a tax on the incomes of people working in agriculture. Tariffs and quantitative restrictions raised the domestic price of manufactured goods well above the world price. People employed in the agricultural sector, who were consumers rather than producers of these manufactured goods, therefore paid a much higher price for them than they would have in the absence of tariffs and quantitative restrictions (Krueger 1992, 9).

Table 6.4
Nominal Protection in Latin America, circa 1960 (percent)

	Nondurable Consumer Goods	Durable Consumer Goods	Semi- manufactured Goods	Industrial Raw Materials	Capital Goods
Argentina	176	266	95	55	98
Brazil	260	328	80	106	84
Chile	328	90	98	111	45
Colombia	247	108	28	57	18
Mexico	114	147	28	38	14
Uruguay	23	24	23	14	27
European Economic Community	17	19	7	1	13

Source: Bulmer-Thomas, 1994, Table 9.1, p. 280.

A CLOSER LOOK

Import Substitution Industrialization in Brazil

In the late 19th and early 20th century, Brazil was the classic case of a country that exported primary commodities. Its principal crop, coffee, accounted for a large share of its production and the overwhelming majority of its export earnings. This economic structure was supported by a political system dominated by the interests of coffee producers and other agricultural exporters (Bates 1997). Political authority in Brazil was decentralized, and the states used their power in the country's federal system to influence government policy. As a result, Brazil pursued a liberal trade policy throughout the late 19th and early 20th centuries. The First World War and the Great Depression disrupted these arrangements. The world price for coffee fell sharply in the late 1920s and early 1930s, generating declining terms of trade and rising trade deficits. The government responded to this crisis by adopting protectionist measures to limit imports. The initial turn to protectionism was accompanied by political change. A military coup in 1930 handed power to Getulio Vargas, who centralized power by shifting political authority from the states to the federal government. While Vargas did not adopt an import substitution industrialization strategy, this period represented in many respects the easy stage of ISI (Haggard 1990, 165–166). Protectionism promoted the growth of light manufacturing industries, at a rate of 6 percent per year between 1929 and 1945 (Thorp 1999, 322). Concurrently, the centralization of power created a state that could intervene effectively in the Brazilian economy. While the export-oriented interests did not lose all political influence in this new political climate, the balance of power had clearly shifted toward new groups emerging in urban centers: the professionals, managers, and bureaucrats that constituted the emerging middle class and the nascent manufacturing interests. As Brazil moved into the post-World War II period, therefore, the stage was set for the transition to secondary ISI.

A full-blown import substitution industrialization strategy emerged in the 1950s. The government restricted imports tightly with the so-called law of similars, which effectively prohibited the import of goods similar to those produced in Brazil. In 1952, the Brazilian government created the National Economic Development Bank (BNDE), an important instrument for industrial policy through which the Brazilian state could finance industrial projects. In the late 1950s, the government created a new agency, the National Development Council, to coordinate and plan its industrialization strategy. In taking up its task, the Council was heavily influenced by structuralist ideas (Haggard 1990, 174). Studies conducted within these agencies—and, in some instances, in collaboration with international agencies such as the UN Economic Commission on Latin America—focused on how best to promote industrialization (Leff 1969, 46). Most of these studies came to similar conclusions: industrialization in Brazil would quickly run into constraints caused by inadequate transportation networks (road, rail, and sea), shortages of electric power, and the underdevelopment of basic heavy industries such as steel, petroleum, chemicals, and nonferrous metals. Building up those industries thus became the focus of the government's development policies. The Brazilian government had little faith that the private sector would create and expand these critically important industries. Instead, policymakers determined that the state would have to play a leading role. In the early

Continued

1950s, the state nationalized the oil and electricity industries and began investing heavily in the expansion of capacity in both. A similar approach was adopted in the transportation sector (in which the government owned the railways and other infrastructure), in the steel industry, and in telecommunications. By the end of the 1950s, the state accounted for 37 percent of all investment made in the Brazilian economy. As a result, the number of state-owned enterprises grew rapidly, from fewer than 35 in 1950 to more than 600 by 1980.

Beyond creating these basic industries, the Brazilian government also sought to create domestic capacity to produce complex consumer goods. To achieve this objective, Brazil, in contrast to many other developing countries, drew heavily upon foreign investment to promote the development of certain industries. The auto industry is an excellent example. In 1956, the Brazilian government prohibited all imports of cars. Any foreign producer that wanted to sell cars in the Brazilian market would have to set up production facilities in the country. To ensure that such foreign investments were not simple assembly operations in which the foreign company imported all parts from its suppliers at home, the Brazilian government instituted local rules that required the foreign automakers operating in the country to purchase 90 percent of their parts from Brazilian firms. In order to induce foreign automakers to invest in Brazil under these conditions, the government offered subsidies; by one account, the subsidies offset about 87 percent of the total investment between 1956 and 1969. Relying on this strategy, Brazilian auto production rose from close to zero in 1950 to almost 200,000 cars in 1962.

Brazil's import substitution industrialization strategy helped transform the country's economy in a remarkably short time. Imported consumer nondurable goods (the products targeted during easy ISI) had been almost completely replaced with domestic production by the early 1950s (Bergsman and Candal 1969, 37). Imported consumer durables, the final goods targeted in secondary ISI, fell from 60 percent of total consumption to less than 10 percent of total consumption by 1959. Imports of capital goods also fell, from 60 percent of total domestic consumption in 1949, to about 35 percent of consumption in 1959, and then to only 10 percent by 1964. Finally, imports of intermediate goods, the inputs used in producing final goods, also fell continually throughout the decade, to less than 10 percent of total consumption by 1964. Thus, as imports were barred and domestic industries created, Brazilian consumers and producers purchased a much larger percentage of the goods they used from domestic producers and a much smaller percentage from foreign producers. As a consequence, the importance of manufacturing in the Brazilian economy increased sharply: whereas manufacturing accounted for only 26 percent of total Brazilian production in 1949, by 1964 it accounted for 34 percent.

Such government policies transferred income from rural agriculture to the urban manufacturing and nontraded-goods sectors. The size of the income transfers was substantial. As summarized in a recent World Bank study,

the total impact of interventions . . . on relative prices [between agriculture and manufacturing] was in some countries very large. In Ghana . . . farmers received only about 40 percent of what they would have received under free trade. Stated in another way, the real incomes of farmers would have increased by 2.5 times had farmers been able to buy and sell under free trade prices given the commodities they in fact produced. While Ghanaian total discrimination against agriculture was huge, Argentina, Cote

d'Ivoire, the Dominican Republic, Egypt, Pakistan, Sri Lanka, Thailand, and Zambia also had total discrimination against agriculture in excess of 33 percent, implying that in all those cases, farm incomes in real terms could have been increased by more than 50 percent by removal of these interventions (Krueger 1992, 63).

Thus, ISI redistributed income. Groups in the export-oriented sector that enjoyed little political influence saw their incomes fall. Groups in the import-competing sector that enjoyed considerable influence with ruling elites saw their incomes rise.

The strategy of import substitution industrialization promoted rapid economic growth in the 1960s and 1970s: developing countries' economies grew at annual average rates of between 6 percent and 7.6 percent during this period. In many countries, it was the manufacturing sector that drove economic growth. Argentina, Brazil, Chile, Mexico, Mozambique, Nigeria, Pakistan, and India, to select only a few examples, all enjoyed average annual rates of manufacturing growth between 5 and 10 percent during the 1960s. A glimpse back at Table 6.1 indicates that, in Latin America, manufacturing's share of the total economy increased substantially between 1960 and 1980, and a quite similar pattern is evident in Africa as well. Thus, while the policies that governments adopted had important effects on the distribution of income, they also appeared to be transforming developing societies from producers of primary commodities into modern industrialized economies.

Reforming the International Trade System

Developing countries also tried to alter the rules governing international trade. One of their principal objectives in pursuing such reforms was to create mechanisms that would transfer income from core countries to the periphery as compensation for the losses resulting from their deteriorating terms of trade.

As early as 1947, India, Brazil, Chile, and Australia expressed concerns that the rules the United States and Great Britain were writing for the GATT and the ITO failed to address the economic problems that developing countries faced (Kock 1969, 38–42). Advancing the infant-industry justification for protection, many developing countries argued that their firms could not compete with established producers in the United States and Europe. Yet, GATT rules not only made no provision for the infant-industry justification, but, indeed, explicitly prohibited the use of quantitative restrictions and tightly restricted the use of tariffs. Developing countries insisted that they be given a relatively free hand in the use of trade restrictions to promote economic development, because GATT failed to do so.

Developing countries continued to press for GATT reforms throughout the 1950s (Kock 1969, 238; Finger 1991). While few concrete reforms resulted from these early efforts, they did produce a study, called the **Haberler Report**, that was conducted under the guidance of the GATT and published in 1958. The study was conducted in an attempt to understand why developing countries' trade performance was so poor. It focused particularly on the impact of primary-commodity price fluctuations and agricultural protection in the advanced industrialized countries on developing countries. (See Campos et al. 1958.) The report represented a "turning point in the GATT's relations with less-developed countries" (Dam 1970, 228), providing intellectual support for the structuralists' main arguments by suggesting that the GATT was "relatively

unfavorable to primary producing countries" and concluding "that developing countries were losing ground under the GATT" (Finger 1991, 212). By supporting the developing countries' principal claims, the Haberler Report altered political dynamics in the international trade system. Henceforth, not only would the demands for reform made by the developing countries be more far reaching, but the ability of the advanced industrialized countries to dismiss those demands out of hand would be greatly weakened.

By the early 1960s, a coalition of developing countries dedicated to the pursuit of far-reaching reform of the international trade system had emerged. This coalition would engage in a 20-year campaign to fundamentally alter the rules governing international trade. Its first important success was achieved with the formation of the **United Nations Conference on Trade and Development (UNCTAD)** in March of 1964. UNCTAD was established as a body dedicated to promoting the developing countries' interests in the world trade system. At the conclusion of this first UNCTAD conference, 77 developing-country governments signed a joint declaration that called for reform of the international trade system. Thus was born the **Group of 77 (G77)**, which led the campaign for systemic reform. During the next 20 years, trade relations between the developing world and the advanced industrialized countries revolved almost wholly around competing conceptions of how to organize international trade embodied in GATT and UNCTAD. While the advanced industrialized nations defended the market-based GATT, the Group of 77 used UNCTAD, and the United Nations more broadly, to try to reduce GATT's role in international trade and redistribute global income from the core to the periphery.

During the 1960s, developing countries used UNCTAD to pursue three international mechanisms that would provide them a larger share of the gains from trade (Kock 1969; UNCTAD 1964; Williams 1991). Developing countries pressed for the creation of **commodity price stabilization** schemes. Commodity price stabilization was to be achieved by setting a floor below which commodity prices would not be allowed to fall and by creating a finance mechanism, funded largely by the advanced industrialized countries, to purchase commodities when prices threatened to fall below the established floor. If commodity prices could be effectively stabilized at relatively high levels, the deterioration of developing countries' terms of trade could be slowed, if not ended altogether. Recognizing that commodity price stabilization schemes could not "offer a complete solution for all commodities or for all situations," developing countries also sought direct financial transfers from the advanced industrialized countries. Such transfers would compensate developing countries for the purchasing power they were losing from their declining terms of trade (UNCTAD 1964, 80). Developing countries also sought greater access to core-country markets, pressuring the advanced industrialized countries to eliminate trade barriers on primary commodities and to provide manufactured exports from developing countries with preferential access to the core countries' markets.

These reform efforts yielded few concrete results. Core countries did modify the GATT charter, however: In 1964, three articles focusing on developing countries' trade problems were included in **GATT Part IV**. These three articles called upon core countries to improve market access for commodity exporters, to refrain from raising barriers to the import of products of special interest to the developing world, and to

POLICY ANALYSIS AND DEBATE

Intellectual Property and the WTO

Question

How should the world balance the equity and efficiency aspects of intellectual property?

Overview

NIEO demands for low-cost technology transfers find their contemporary manifestation in the debate over the developing world's access to patented drugs used to treat HIV/AIDS. The world's highest HIV infection rates are in the world's poorest societies, and while Western drug companies have developed antiretroviral therapies to treat the disease, a month of treatment with these drugs costs substantially more than average annual incomes in those countries. Many have argued that HIV/AIDS therapies should be made available at low cost to the developing world.

This debate is a very stark form of a broader debate surrounding the equity and efficiency issues generated by intellectual property. Equity issues arise because, once knowledge exists, it can be transmitted from one society to another at practically no cost. A drug, after all, is knowledge about how specific chemical compounds affect the human body—and it is easy for an Indian drug company to use knowledge created by Western firms to produce HIV drug therapies that are substantially less expensive than the Western versions. Yet, the TRIPS agreement prevents the Indian firm from selling its lower cost therapies to African countries. Access to intellectual property is thus restricted to those who can afford to pay.

Efficiency issues arise because society would have less innovation if intellectual property rights were not protected. Intellectual property is costly to develop. Estimates suggest that it costs about \$850 million to develop a single new drug. If firms cannot recoup these costs, few will invest in creating knowledge, and we would not have anti-retroviral therapies. Consequently, society would be worse off, for it could not treat serious diseases. To promote innovation, therefore, governments have to protect intellectual property. What is the appropriate balance between equity and efficiency?

Policy Options

- Place all intellectual property in the public domain. This allows all to benefit from intellectual property, regardless of their income.
- Protect intellectual property for a limited time in order to allow innovators to recoup their investment.

Policy Analysis

- To what extent does the specific issue (HIV/AIDS) shape your approach to the question? That is, would you have the same view if the preceding discussion focused on computer software? Why or why not?
- Can governments make decisions on a case-by-case basis after knowledge exists? Why or why not?

Take a Position

- Which option do you prefer? Justify your choice.
- What criticisms of your position should you anticipate? How would you defend your recommendation against these criticisms?

Continued

Resources

Online: Visit the WTO webpage on the TRIPs agreement. The World Intellectual Property Organization (WIPO) also maintains a useful website (www.wipo.int), and Oxfam (www.oxfam.org.uk) has useful information.

In Print: Susan Sell, *Private Power, Public Law: The Globalization of Intellectual Property Rights* (Cambridge: Cambridge University Press, 2003). Peter Drahos and Ruth Mayne, eds., *Global Intellectual Property Rights: Knowledge, Access and Development* (London: MacMillan Press, 2002).

engage in “joint action to promote trade and development” (Kock 1969, 242). In the absence of meaningful changes in the trade policies pursued by the advanced industrialized countries, however, Part IV offered few concrete gains to developing countries. The advanced industrialized countries also allowed the developing countries to opt out of strict reciprocity during GATT tariff negotiations. The developing countries that belonged to the GATT were therefore able to benefit from the tariff reductions made by the advanced industrialized countries without having to make tariff reductions in return. Benefits from this concession were more apparent than real, however: GATT negotiations focused primarily on manufactured goods produced by the advanced industrialized countries and excluded agriculture, textiles, and many other labor-intensive goods. Developing countries were therefore exporting few of the goods on which the advanced industrialized countries were actually reducing tariffs. In the late 1960s, the advanced industrialized countries agreed to the **Generalized System of Preferences (GSP)**, under which manufactured exports from developing countries gained preferential access to advanced industrialized countries’ markets. This concession, too, was of limited importance, because advanced industrialized countries often limited the quantity of goods that could enter under preferential tariff rates and excluded some manufacturing sectors from the arrangement entirely.

Even though their efforts during the 1960s had achieved few concrete gains, the Group of 77 escalated its demands for systemic reform in the early 1970s. The limited success realized during the 1960s heightened the Group of 77’s dissatisfaction with the structure of the international trade system. Then, in 1973, the world’s major oil-producing countries, working together in the Organization of Petroleum Exporting Countries (OPEC), used their control of oil to improve their terms of trade. OPEC’s ability to use commodity power to improve its terms of trade with the advanced industrialized countries and, in so doing, extract income from the core strengthened the belief within the Group of 77 that commodity power could be exploited to force fundamental systemic change.

Growing dissatisfaction and greater confidence combined to produce a set of more radical demands known collectively as the **New International Economic Order (NIEO)**; (see Krasner 1985), an attempt by the Group of 77 to create an international trade system whose operation was to be made “subordinate to the perceived development needs” of developing countries (Gilpin 1987, 299). The NIEO, which the UN General Assembly adopted in December 1974, embodied a set of reforms that, if implemented, would have radically altered the operation of the international economy. In addition to encompassing the three mechanisms that developing countries had

demanded during the 1960s, the NIEO included rules that would give governments in developing countries greater control over multinational corporations operating in their countries, easier and cheaper access to northern technology, a reduction in foreign debt, increased foreign aid flows, and a larger role in the decision-making processes of the World Bank and International Monetary Fund.

Governments in the advanced industrialized countries again proved unwilling to make significant concessions, and by the mid-1980s the NIEO had fallen from the agenda of the world trade system. The failure of the NIEO has been attributed to a number of factors. First, developing countries were unable to establish and maintain a cohesive coalition. The heterogeneity of developing countries' interests made it relatively easy for the advanced industrialized countries to divide the Group of 77 by offering limited concessions to a small number of governments in exchange for defection from the broader group. In addition, the Group of 77 had hoped that OPEC would assist it by linking access to oil to acceptance of the NIEO. But OPEC governments were unwilling to use their oil power to help other developing countries achieve broader trade and development objectives. Finally, by the late 1970s, many developing countries were facing serious balance-of-payments problems and were forced to turn to the International Monetary Fund (IMF) and the World Bank for financial support. The need to obtain IMF and World Bank assistance gave the advanced industrialized countries considerable influence over economic and trade policies in the developing world.

Conclusion

Throughout much of the postwar period, developing countries insulated themselves from the world trade system. The interaction between domestic politics, on the one hand, and economic shocks and decolonization, on the other, gave rise to governments throughout the developing world that were highly responsive to the interests of import-competing manufacturing industries and a growing class of urban workers. Influenced greatly by structuralism, most governments transformed the then-existing political incentive to protect these domestic manufacturing industries into ambitious state-led development strategies. Structuralism's critique of the ability of domestic and international markets to promote industrialization led governments to intervene in domestic markets to overcome imperfections that reduced private incentives to invest.

To the extent that developing countries participated in the global trade system at all, their participation was aimed at bringing about far-reaching reform of the rules governing the system. Again, the structuralist critique served an important role in this effort, arguing that developing countries could not expect to gain from trade with the advanced industrialized countries until they themselves had industrialized and that trade based on the rules embodied in GATT would only make such industrialization harder to achieve. Rather than accept participation in the global economy on what they viewed as vastly unequal terms, developing countries battled to change the rules governing international trade in order to capture a larger share of the gains from North-South trade. Thus, an international struggle over the distribution of the gains

from trade was an almost necessary counterpart of the domestic strategy of redistributing resources from agriculture to industry embodied in import substitution industrialization.

Was the strategy of state-led industrialization successful? As we will see in the next chapter, the answer to this question remains in dispute. What there seems to be less disagreement about, however, is that the specific import substitution industrialization strategies adopted by many governments in Latin America, South Asia, the Middle East, and parts of Sub-Saharan Africa failed to deliver on their promises. (See Todaro 2000, 507–509.) While we will look at the key weaknesses in detail in the next chapter, here we will note only the following: In many countries, ISI did promote the fairly rapid development of a “modern” industrial sector. However, the costs of doing so were frequently very high, and more often than not, the industries that were established failed to operate efficiently. High costs arose in large part from the loss of export earnings in the internationally competitive primary sectors. This in itself would not have been bad if the resources being shifted to the newly created industries had been used efficiently. Too often, however, they were not. By reducing competition, high tariffs reduced the incentive for these infant firms to become more efficient. The preference for large capital-intensive industries failed to make the best use of the factors that were readily available in the local economy. Many governments were unwilling to close down inefficient firms and opted instead to subsidize their operation.

As a consequence, much of the resources that were extracted from agriculture were wasted in the pursuit of rapid industrialization. Eventually, the accumulation of these inefficiencies forced developing countries to embark on radical reforms. How they did so, the details of the specific reforms that governments adopted, and the impact of these reforms are issues we take up in the next chapter.

Key Terms

Backward Linkages	Import Substitution Industrialization
Big Push	Income Elasticity of Demand
Capital Goods	Monoexporters
Commodity Composition of Exports	New International Economic Order
Commodity Price Stabilization	Nontraded-Goods Sector
Complementary Demand	Pecuniary External Economies
Core	Periphery
Easy ISI	Secondary ISI
Enclave Agriculture	Singer-Prebisch Theory
Engel's Law	State-owned Enterprises
Export Substitution Strategy	Structuralism
GATT Part IV	Terms of Trade
General Human Capital	Terms-of-Trade Shock
Generalized System of Preferences	United Nations Conference on Trade and Development
Group of 77	
Haberler Report	