

## CHAPTER 6

# Trade and Development I: Import Substitution Industrialization

**M**exico has experienced an economic revolution during the last 20 years. Until the mid-1980s, Mexico was one of the most heavily protected and highly directed nonsocialist economies in the world. Importing anything into the country required formal government approval. Even with such approval, tariffs were very high, averaging over 25 percent and rising as high as 100 percent for many goods. Moreover, Mexico did not belong to the General Agreement on Tariffs and Trade (GATT), and it was hard to imagine any conditions under which Mexico would seek a free-trade agreement with the United States. Behind these high tariff walls, the Mexican government intervened deeply in the domestic economy. Government-owned financial institutions channeled investment capital to favored private industries and projects. The government created state-owned enterprises in many sectors of the economy (about 1,200 of them by 1982) that together attracted more than one-third of all industrial investment (La Porta and López de Silanes 1997). Today, by contrast, Mexico is one of the most open developing countries in the world. Mexico entered the GATT in 1987 and the North American Free Trade Agreement (NAFTA) in the early 1990s. The Mexican government has retreated sharply from involvement in the domestic economy. It has sold state-owned enterprises, liberalized a wide variety of market-restricting regulations, and begun to integrate Mexico deeply into the global economy. In less than 10 years, the Mexican government opened Mexico to foreign competition and drastically scaled back its role in managing Mexican economic activity.

Mexico's experience is hardly unique. Governments in India, China, much of Latin America, and most of sub-Saharan Africa opted out of the

global trade system following World War II. Most governments erected very high trade barriers, and to the extent that they participated at all in the GATT, they sought to alter the rules governing international trade. Convinced that the GATT was biased against their interests, developing countries worked through the United Nations to create international trade rules that they believed would be more favorable toward industrialization in the developing world. Like Mexico, most governments intervened extensively in their economies in an attempt to promote rapid industrialization. Drawing on the logic of the infant-industry case for protection, governments used the power of the state to pull resources out of agriculture and push them into manufacturing. And, like Mexico, these policy orientations have changed fundamentally since the late 1980s. Most developing countries have dismantled the protectionist systems they maintained in the first 30 years of the postwar period, have become active participants in the World Trade Organization (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.

This chapter and the next examine how political and economic forces have shaped the adoption and evolution of these new trade and development policies. This chapter examines why governments in so many developing countries 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 30 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 with a compelling justification for transforming the protectionism sought by the import-competing producers that supported them into policies that 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. Until World War I, those developing countries that were independent, as well as those regions of the world held in colonial empires, 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 rural-based agriculture and urban-based manufacturing. Developing countries pursued liberal trade policies prior to World War I because export-oriented agricultural interests dominated politics. 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 exports, as presented in [Table 6.1](#) and [Table 6.2](#). For the time being, we will focus on 1960, 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 agriculture, whereas less than 15 percent was based in manufacturing. By contrast, agriculture accounted for only 5 percent of gross domestic product (GDP) in the advanced industrial economies. If we include the “other industry” category, which incorporates mining, then in all regions of the developing world other than Latin America, agriculture and nonmanufacturing industries 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](#)). In 1962, developing countries' exports were heavily concentrated in primary commodities: agricultural products, minerals, and other 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 listed countries, primary commodities accounted for more than 80 percent of exports. In addition, each country exported a narrow range of primary commodities. Some countries were **monoexporters**; that is, their exports were almost fully accounted for by one product. For example, more than 80 percent of Burundi's export earnings came from coffee, and cocoa accounted for 75 percent of Ghana's export earnings (Cypher and Dietz 1997, 339). 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 74 percent of Chile's exports (Thorp 1999, 346). The structure of their economies and the composition of their exports thus underline the central point: developing countries are abundantly endowed with land and have little capital.

**TABLE 6.1**

**Economic Structure in Developing Countries (Sector as a Percent of Gross Domestic Product)**

	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
East Asia and the Pacific	46	27	18	16	27	32	7	12	12	31	32	38
South Asia	49	39	30	13	15	17	6	9	10	33	35	41
Latin America	16	10	10	21	25	21	10	12	12	53	51	55

Notes: Figures may not sum to 100 because of rounding.

Other Industry Includes mining, construction, gas, and water.

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

**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
<b>Sub-Saharan Africa</b>									
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
<b>East Asia and the Pacific</b>									
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
<b>South Asia</b>									
India	9	8	7	47	33	18	44	59	75
Pakistan	0	8	1	75	44	14	25	48	85
<b>Latin America</b>									
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

Note: n.a. = not available.

Sources: Data for 1962 from World Bank, *World Tables*, 3rd 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 precise form through which landowners dominated politics prior to World War II 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. Even though 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. India produced and exported a range of primary commodities, including cotton, jute, wheat, tea, and rice. In exchange, India imported most of the manufactured goods it consumed from Britain. In Africa, colonial powers 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. Under British rule, Ghana became the world's largest cocoa producer by 1910, and cocoa accounted for 80 percent of its exports. In Senegal, France promoted groundnut (the American peanut) production, and by 1937 close to half of all cultivated land was dedicated to this single product (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 World War II 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 World War II reduced export revenues. 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 that pressured the government to adopt 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 Perón rose to power in the late 1940s with the support of labor, industrialists, and the military. A similar pattern was evident in Brazil, where Getúlio 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.

A similar dynamic is evident in India. The global economic collapse of the 1930s forced India to become increasingly self-reliant. Markets for Indian exports constricted sharply, thereby greatly constraining Indian export revenues. Unable to earn foreign exchange, India had to reduce imports of manufactured goods as well. Under this forced self-reliance, India began to create an indigenous manufacturing sector. By the end of World War II, India had emerged as “the tenth largest producer of manufactured goods in the world” (Tomlinson 1979, 31). The indigenous

urban manufacturing sector then fused with the burgeoning nationalist movement during the late 1930s to lead the push for Indian independence and to supplant the predominantly foreign-owned export sector at the center of the Indian political system. By the time India achieved independence in 1947, it was committed to a strategy of autonomous industrialization.

In Pacific Asia, the shift in political power came about as a product of de-colonization. In Korea and Taiwan political change resulted from the defeat of Imperial Japan in World War II (see Haggard 1990). In South Korea, Japan's defeat transferred power from a foreign colonizer to indigenous groups. Although the landowners 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 landowners' power and increased the relative power of the emerging urban sector. On mainland China, Japan's 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 sector had supported the Communists. As in South Korea, land reforms reduced the power of landowners and increased the power of the urban-industrial sector.

Africa's transition came later, as decolonization began only in the 1950s, and it took a slightly different form. The push toward decolonization was led by a coalition of indigenous professionals 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. 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 sought to transfer control over existing economic practices from the colonial governments to indigenous elites.

The period demarcated by the start of World War I 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 to continue the protectionist arrangements they had built during the 1930s. As we will see, the political interest in protectionism was reinforced by an elaborate theoretical structure that argued that protectionism was the only path to the establishment of industrialized economies.

## **THE STRUCTURALIST CRITIQUE: MARKETS, TRADE, AND ECONOMIC DEVELOPMENT**

Although protectionism reflected the interests of the politically influential import-competing manufacturing sector, it did not represent a coherent economic development strategy. 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.

### **Market Imperfections in Developing Countries**

Structuralists argued that market imperfections inside developing countries posed serious obstacles to the reallocation of resources from agriculture to manufacturing industries. Structuralists argued that markets would not bring about the necessary shift of resources because developing economies were too inflexible.

Most important, according to the structuralists, was the belief that the market would not promote investment in manufacturing industries (Scitovsky 1954). 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 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, whereas the rest of the population remains in non-wage agriculture. To whom will the new factory sell its shoes? The only workers earning money are those producing shoes, and these 100 workers are unlikely to 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, that 500,000 workers are taken out of subsistence agriculture and simultaneously employed in a large number of factories producing a variety of different 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 many manufacturing industries began production simultaneously.

Structuralists doubted that uncoordinated market behavior would produce simultaneous investment in multiple manufacturing industries. No single entrepreneur has an incentive to invest in a manufacturing enterprise unless he or she is certain that others will invest simultaneously in other industries. People willing to invest will thus wait until others invest and, as a consequence, no one will invest in manufacturing unless all potential investors could somehow coordinate their behavior to ensure that all will invest in manufacturing at the same time. 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, 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. The owners of the steel plant will not increase steel production unless they are sure that the auto industry will increase car production. Yet, 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, 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 structuralists' assertion that coordination problems would prevent investment in manufacturing was a serious problem for governments intent on industrialization. Fortunately, the structuralists offered a solution to the problem. Structuralists argued that the way to overcome these coordination problems 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 focuses on the terms of trade between them. The **terms of trade** relate the price of a country's exports to the price of its imports. An improvement in a country's terms of trade means that the price of its exports is rising relative to the price of its imports, but a decline in a country's terms of

trade means that export prices are falling relative to its import prices. 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, but a decline in its terms of trade makes it poorer.

The Singer-Prebisch theory argues that developing countries' terms of trade deteriorate steadily over time. When they developed this theory, developing countries exported primary commodities and imported manufactured goods. Singer and Prebisch argued that primary commodity prices steadily fell relative to manufactured goods prices, thereby steadily reducing the incomes of developing countries. The periphery's terms of trade deteriorate, according to this theory, in large part as a result of differences in the income elasticity of demand for primary commodities versus industrial goods (see Lewis 1954; United Nations 1964; Gilpin 1987, 275–276).

The income elasticity of demand is the degree to which a change in income alters demand for a particular product. For a product with a low income elasticity of demand, a large increase in income produces little change in demand for the good. For a product with a high income elasticity of demand, 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, but income elasticity of demand for manufactured goods was relatively high. 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 incomes rise 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, whereas 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.

Most research disputes the claim that developing countries face a continuous decline in their terms of trade (see, for example, Borensztein et al. 1994; see also Bloch and Sapsford 2000). Yet, the objective validity of the Singer-Prebisch hypothesis is not the central consideration. What mattered was that governments in developing countries *believed* the hypothesis. Governments of developing countries were convinced that industrialization would not occur if they 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. We examine each dimension in turn.

### Import Substitution Industrialization

Structuralism provided the intellectual justification for a state-led development strategy. Confidence that the state could achieve what markets would not was based in part on evidence of the dramatic industrialization that the Soviet Union had achieved between 1930 and 1950 with an approach based on centralized planning and state ownership of industry. In developing societies outside the Soviet bloc, this state-centered approach to development came to be 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.

Governments conceptualized ISI 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 of 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 currently satisfied by imports. Second, because these items were mature products, the technology and machines necessary to produce them could be acquired easily 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 easy ISI. Initially, the expansion of manufacturing activities 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 applied subsequently to other manufacturing businesses. Of particular importance were the management and entrepreneurial skills that would be gained by 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 stage of ISI.

**TABLE 6.3**

**Stages of Industrialization in Mexico and Brazil, 1880–1968**

	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

*Note:* ISI = import substitution industrialization.

*Source:* Gereffi 1990, 19.

Easy ISI would eventually cease to bear fruit. The domestic market's capacity to absorb simple consumer goods would be exhausted, and the range of such goods that could be produced would be limited. At some point, therefore, governments would need to shift from easy ISI to a second-stage strategy characterized by the development of 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 goods industries developed in easy ISI begin to export rather than continue to produce exclusively for the domestic market. Many East Asian governments adopted this approach, as we shall see in [Chapter 7](#).

The second alternative, and the one adopted by most governments outside of East Asia, was **secondary ISI**. In secondary ISI, emphasis shifts from the manufacture of simple consumer goods to 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 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 with three policy instruments: government planning, investment policy, and trade barriers. Most governments structured their efforts around 5-year plans (Little 1982, 35). Planning was used to determine which industries would be targeted for

development and which would not, to figure 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. India's second Five Year Plan (1957–1962), for example, sought to generate ambitious growth in manufacturing by targeting the development of capital goods production (Srinivasan and Tendulkar 2003, 8). The plan thus served as the coordination device that governments thought necessary, given their belief that the market itself could not 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 in order 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 industries by creating state-owned and mixed-ownership enterprises. 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 (Trobat 1983). Indian state-owned enterprises provided 27 percent of total employment and 62 percent of all productive capital (Krueger 1993a, 24–5). 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). Throughout developing societies, therefore, the shift to secondary ISI was accompanied by the emergence of the state as a principal, and in many instances the largest, owner of productive capacity.

Finally, governments used trade barriers to control foreign exchange and protect infant industries. Because export earnings were limited, governments controlled foreign trade to ensure that foreign exchange supported their development objectives (Bhagwati 1978, 20–33). After all, many elements critical to industrialization, including intermediate inputs



and capital goods, had to be imported. Protection also allowed infant industries to gain the 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 and quality differences.

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 listed countries, nominal protection on nondurable consumer goods was well over 100 percent, and for all but three countries, tariffs on consumer durables also were over 100 percent. Mexico and Uruguay stand out as clear exceptions to this pattern, which 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).

The costs of ISI were borne by agriculture (see Krueger 1993a; Krueger, Schiff and Valdes 1992; Binswanger and Deininger 1997). Governments taxed agricultural exports through marketing boards that controlled the purchase and export of agricultural commodities (Krueger et al. 1992, 16). 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 would 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 industrial projects (Amsden 1979; Bates 1988; Krueger 1993a). The trade barriers that protected domestic manufacturing firms from foreign competition also taxed agriculture. Tariffs and quantitative restrictions raised the domestic price of manufactured goods well above the world price. People employed in the agricultural sector, who consumed these manufactured goods, therefore paid more for them than they would have in the absence of tariffs and quantitative restrictions (Krueger 1993a, 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, 280, Table 9.1.

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 a World Bank study summarized,

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 1993a, 63)

Thus, ISI redistributed income. The incomes of export-oriented producers fell while those of import-competing producers rose.

### A Closer Look

#### Import Substitution Industrialization in Brazil

In the late nineteenth and early twentieth centuries, 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 nineteenth and early twentieth centuries. World War I 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 Getúlio Vargas, who centralized power by shifting political authority from the states to the federal government. Even though Vargas did not adopt an ISI strategy, this period represented in many respects the easy stage of ISI (Haggard 1990, 165–6). Protectionism promoted the growth of light manufacturing industries at a rate of 6 percent per year between 1929 and 1945 (Thorpe 1999, 322). Concurrently, the centralization of power created a state that could intervene effectively in the Brazilian economy. Although 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 who 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 ISI 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 United Nations

(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 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 ISI 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.

The strategy of ISI 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 percent 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. Thus, although the policies that governments adopted had important effects on the distribution of income, they also appeared to be transforming developing societies into industrialized economies.

## **Reforming the International Trade System**

Developing countries also tried to alter the rules governing international trade. For many developing-country governments, these efforts reflected their experience with colonialism. India's perspective was not unique: international trade was "a whirlpool of economic imperialism rather than a positive instrument for achieving economic growth" (Srinivasan and Tendulkar 2003, 13). Consequently, as early as 1947, India, Brazil, and Chile were arguing that the multilateral rules the United States and Great Britain were writing 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 for protection 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 the GATT failed to do so.

Developing countries continued to press for GATT reforms throughout the 1950s (see Kock 1969, 238; Finger 1991). By the early 1960s, a coalition of developing countries dedicated to far-reaching reform had emerged. Its first important success was achieved with the formation of the **United Nations Conference on Trade and Development (UNCTAD)** in March of 1964. The UNCTAD was established as a body dedicated to promoting the interests of developing countries in the world trade system. At the conclusion of this first UNCTAD conference, 77 developing-country governments signed a joint declaration calling for reform of the international trade system. Thus was born the **Group of 77**, the leading force in 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 international trade rules embodied in the GATT and UNCTAD.

During the 1960s, the Group of 77 used UNCTAD to pursue three international mechanisms that would increase their share of the gains from trade (Kock 1969; UNCTAD 1964; Williams 1991). First, the Group of 77 sought 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 fell below the floor. Stabilizing commodity prices would be an important step toward stabilizing developing countries' terms of trade (recall the Singer-Prebisch hypothesis). The Group of 77 also sought direct financial transfers from the advanced industrialized countries to compensate them for the purchasing power they were losing from 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 agreed to incorporate concerns specific to developing countries into the GATT charter. In 1964, three articles focusing on developing countries were included in the **GATT Part IV**. Part IV 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 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 provided few concrete gains. 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 tariff reductions without having to offer concessions 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 in the early 1970s. Escalated demands were sparked by the 1973 oil shock. The oil shock was a clear illustration of the potential for commodity power. 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 extract income from the core countries strengthened the belief within the Group of 77 that commodity power could be exploited to force fundamental systemic change.

Greater confidence in the possibilities that their control of commodities offered led the Group of 77 to develop a set of radical demands dubbed the **New International Economic Order (NIEO)**. The NIEO represented an attempt to create an international trade system whose operation would

promote development (see Krasner 1985). The NIEO, which the UN General Assembly adopted in December 1974, embodied a set of reforms that would have radically altered the operation of the international economy. In addition to the three mechanisms that developing countries had demanded during the 1960s, the NIEO included rules that would grant 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 (IMF).

Governments in the advanced industrialized countries refused to make significant concessions, and by the mid-1980s the NIEO had disappeared from the international agenda. 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.

Most importantly, however, by the early 1980s, many developing countries were facing serious balance-of-payments problems and turned to the IMF and the World Bank for financial support. The need to obtain IMF and World Bank assistance altered the balance of power in favor of the advanced industrialized countries. This power shift sparked a reform process that changed fundamentally development strategies throughout 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, generated governments 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 political incentive to protect these domestic 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 the market imperfections that reduced private incentives to invest in manufacturing activities.

## Policy Analysis and Debate

### The Sustainable Development Goals

#### Question

Can the Sustainable Development Goals eradicate extreme poverty?

#### Overview

Members of the UN agreed in 2015 that for the next 15 years they would focus their development policies on 17 **Sustainable Development Goals** (SDGs). The SDGs constitute an ambitious attempt to build on the gains realized through the Millennium Development Goals, and include (among other things) end extreme poverty everywhere (measured as living on less than \$1.25 per day) and cut the numbers living in poverty in half by 2030. In addition, the SDGs place greater emphasis on sustainable development—and thus have a variety of environmental goals—and they attach greater importance to protection of human rights. Governments are to achieve these goals through extensive planning at the domestic and international levels. Policies based on these plans will in turn be supported by foreign aid offered by the international community. For that purpose, the UN has called upon rich countries to provide aid equal to 0.7 percent of GDP to developing countries and provide technical assistance and technology transfers where it is useful to do so.

The logic upon which SDGs rest is similar to the thinking that at the broad level shaped the government's role in ISI. The SDGs rest on a diagnosis of poverty that emphasizes structural factors. Rather than emphasize market failure, however, contemporary thinking emphasizes a "poverty trap":

When poverty is extreme, the poor do not have the ability—by themselves—to get out of the mess ... When [people] are utterly destitute, they need their entire income, or more, to survive ... There is no

margin of income above survival that can be invested for the future.  
(Sachs 2005, 56)

People can escape the poverty trap with help from the contemporary analogue of the “big push.” The international community must provide “a leg up” through well-funded and well-conceived government policy initiatives. Given the logic upon which they are based, do you think the SDGs will be successful?

### **Policy Options**

- An SDG-like strategy is necessary if the world is to eradicate extreme poverty. Governments must embrace these goals.
- The SDGs rest on faulty logic and thus cannot reduce extreme poverty. Governments should re-evaluate their approach to the problem of global poverty.

### **Policy Analysis**

- Do developing-country governments have incentives to implement the policies called for by the SDG strategy? Why or why not?
- Do advanced industrialized countries have incentives to provide the foreign aid that is required to support SDG policies? 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?

### **Resources**

*Online:* To learn more about the SDGs and current progress toward achieving them, conduct an online search for the keywords *UN* and *MDGs*. Look especially for the UN’s annual progress reports.

*In Print:* Read the alternative perspectives embodied in Jeffrey Sachs’ *Ending Poverty: Economic Possibilities of Our Time* (New York: Penguin Press, 2005), and William Easterly’s *The White Man’s*

*Burden: Why the West's Efforts to Aid the Rest Have Done So Much Ill and So Little Good* (New York: Penguin Publishers, 2006).

To the extent that developing countries participated in the global trade system, they sought to achieve far-reaching reform of the rules governing the system. Again, the structuralist critique served an important role in this effort, as it suggested that developing countries could not expect to gain from trade with the advanced industrialized countries until they themselves had industrialized. Moreover, structuralism claimed that trade based on GATT rules would only make 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 available gains. Thus, an international struggle over the distribution of the gains from trade arose as an important counterpart of the domestic strategy of redistributing resources from agriculture to industry embodied in ISI.

## KEY TERMS

Backward Linkages  
Big Push  
Complementary Demand  
Easy ISI  
Enclave Agriculture  
Export Substitution Strategy  
GATT Part IV  
Generalized System of Preferences  
Group of 77  
Import Substitution Industrialization  
Monoexporters  
New International Economic Order  
Pecuniary External Economies  
Secondary ISI  
Singer-Prebisch Theory  
Structuralism  
Sustainable Development Goals  
Terms of Trade  
United Nations Conference on Trade and Development

## SUGGESTIONS FOR FURTHER READING

For a readable introduction to structuralism and development strategies more

generally, see Ian Little, *Economic Development* (New York: Basic Books, 1982). For an in-depth look at Latin America, see Victor Bulmer-Thomas, *The Economic History of Latin American since Independence*, 3rd edition (Cambridge: Cambridge University Press, 2014).

For a comparative study of the role of the state in development, see Atul Kohli, *State-Directed Development: Political Power and Industrialization in the Global Periphery* (Cambridge: Cambridge University Press, 2004).

For a detailed examination of the New International Economic Order, see the recent special issue of *Humanity* (2015 6 (1), <http://humanityjournal.org/issue-6-1/>), Paul Adler, 2017. “‘The Basis of a New Internationalism?’ The Institute for Policy Studies and North-South Politics from the NIEO to Neoliberalism.” *Diplomatic History* 41(4): 665–93, and the now classic, Stephen Krasner, *Structural Conflict: The Third World against Global Liberalism* (Berkeley: University of California Press, 1985).