



## The role of government

This is the first of four chapters that deal with government policies for industrialization. It considers the conditions under which governments are likely to make their best contribution to industrialization in a market-oriented economy and gives particular emphasis to the services that governments provide *directly*. By way of introduction to the subsequent three chapters, this chapter also takes a preliminary look at government's *indirect* role of intervening to influence the way markets work. Chapter 5 then examines the crucial relationship between trade policies and industrialization; Chapter 6 draws lessons from different countries' experience with trade policy reform; and Chapter 7 analyzes the impact of complementary policies, including financial, labor, regulatory, and technology policies.

### Governments and industrialization

Government pervades modern society, and industrialization has to be reconciled with other public objectives—economic, political, social, and cultural. The presence of government varies greatly across countries according to ideology, political structures, administrative capacity, and the level of development. This chapter considers some of the broad principles that govern policy choices for industrialization, but does not aim to judge specific country policies.

Governments have a central role—impinging on, but separate from, their role in industrialization—of providing for a desirable distribution of income and the alleviation of poverty, ill health, and illiteracy. By providing a safety net, governments can fulfill their humanitarian duties and at the same

time reinforce a social consensus in favor of economic growth (see Box 4.1 on industrialization and poverty).

Governments have always been central to the industrialization process, whether as economic ringmaster in the laissez-faire Britain of the past century or as central planner and provider in today's Soviet Union. Most developing countries, like the industrial market economies before them, have also relied extensively on the private sector and on markets in their effort to industrialize.

In a market-based system public and private sectors have complementary roles. These roles must be seen in the context of the growing complexity of industrializing economies. While the invisible hand of the market is adept at dealing with this complexity, the visible hand of government needs to provide the rules of the game for markets to work. But even with these rules there are limitations on markets and limitations on governments, the one requiring greater intervention, the other reducing the scope for effective intervention.

In a traditional, preindustrial economy production techniques are primitive, there is relatively little division of labor, markets tend to be local, productive units are small and family-based, and transactions are simple. Industrialization brings greater division of labor and new technology. A cobbler making shoes needs leather, thread, and a few simple tools. A modern shoe factory divides production into many discrete steps. It uses sophisticated machinery, hundreds of material inputs and supplies, financial and commercial services, and many different skills.

Specialization also leads to far more complicated transactions. Separate markets emerge for compo-

### Box 4.1 Industrialization and poverty

A fundamental goal of economic development is to improve the welfare of the poor. The evidence suggests that in the long term, in most cases, the benefits of economic growth are dispersed throughout society and reach its poorest members. Yet there is also evidence that the *distribution* of income can worsen during the first decades of development, even if the absolute income of the poorest grows.

Governments seek to raise the incomes of the poorest in several ways, including fiscal redistribution (direct subsidies, for instance), institutional change (land reform, for instance), and policies to affect the structure of the economy. Policies that directly attack poverty or its causes are generally preferable to more indirect approaches which undermine the way markets work.

It is not clear that policies directed at industry can be any better oriented to the alleviation of poverty than policies directed at other sectors. The poorest sections of the population (often landless laborers or small farmers) tend to live in the rural areas, and industry's potential for alleviating poverty is probably a good deal less than agriculture's. Land reform and pricing reforms for farm output can have significant effects on the rural poor.

Nonetheless, many governments have sought to use industry as an instrument of redistribution in the short term. In practice their initiatives have done little for poverty and little for industry. For instance, price controls on such essentials as bread, sugar, and cooking oil subsidize the consumption of rich and poor alike (see Chapter 7). Price controls hardly encourage production sufficient to cover demand, and the informal rationing that ensues may well favor those with more political weight. Legislation that raises the level of wages above the marginal product of labor can have similar perverse effects. In the formal industrial sector it discourages hiring, and those who benefit do so at the expense of the urban poor who do not have factory jobs.

But other aspects of an industrialization strategy may help in the battle against poverty more than is generally realized. First, part of the government's direct—and most useful—role in industrialization is to provide basic education, physical infrastructure, and a set of secure economic rights (to allow, for example, small business to operate legitimately). When governments are effective in this role, they enable the poor to partici-

pate in the more productive activities of the modern sector.

Second, economic reforms (discussed in Chapters 6 and 7) also promise to draw the poor into the development process: they open up employment opportunities in the modern sector by reducing the degree of monopoly in the economy and encouraging the use of labor relative to capital. The demand for labor is likely to be stimulated by the relaxation of controls in the capital market, the removal of minimum wage legislation, and—for economies with abundant labor—a reduction in the protection of capital-intensive activities.

Such improvements for the poor would not be instantaneous. Meanwhile, the transition to a more market-oriented economy might aggravate the situation of some of the poor in the shorter term. In economies with large budget and balance of payments deficits and high inflation, a necessary initial stage of economic reform might involve cuts in government expenditure and employment that hurt the poor directly. At the same time, economic reforms that reduce government intervention in factor and goods markets can be expected to stimulate economic activity. But the net effect could be to make some of the poor (particularly those in towns) worse off in the short term, for example by creating regional pockets of unemployment or through the effect of a devaluation on food prices. The hitherto protected manufacturing sector might bear the brunt of this impact. There is, in fact, surprisingly little evidence that trade liberalization has adversely affected employment even in the short term (see Chapter 6). Of course, some countries—Israel and the Republic of Korea, for example—have liberalized slowly with this very worry in mind.

Economic reform undoubtedly benefits the poor in the long term. It will sometimes hurt them in the short term. Just how large a problem this poses is not yet clear, but governments will need to pay attention to the short-term effects of economic reform, both on humanitarian grounds and to gain broad acceptance for these reforms. Experience suggests that the alleviation of poverty in the short term is best tackled directly through well-targeted programs to provide social services or direct compensation in cash or kind to the poorest, rather than indirectly through interventions in factor or goods markets.

nents, supplies, machinery, differentiated labor skills, and so on. Transactions in these changing markets can be costly. When there is a delay between sale and payment, for instance, contracts have to be drawn up and honored. All this involves commercial risk. If these transactions costs

are too high, they will slow the process of specialization.

Two polar forms of economic organization have emerged to deal with the problem of high transactions costs. Centrally planned economies try to maximize information flows and minimize contrac-

tual problems with central ownership and allocation of resources (Box 3.1 in Chapter 3). At the other extreme is the decentralized economy of Hong Kong or nineteenth-century Britain, in which resources are privately owned, a multitude of separate but interconnected markets conveys information and allocates resources, and the government enforces the laws that regulate these markets. In between these poles lie the industrial and developing market economies of the world, which display a variety of forms of economic organization and public and private ownership. All of them try to influence the way markets work, and all at least partially override markets by allocating resources from the center.

The development needs of poor societies are so urgent that tremendous pressures are placed on their governments to stimulate industrialization. Yet the human and physical resources available to developing country governments are so limited that they have great difficulty in attaining their many economic objectives, including physical infrastructure, agricultural development, health, education, or the alleviation of poverty. The governments therefore have to be careful in choosing their priorities for industry. This chapter suggests that the case for government involvement in the industrialization process can be better made in some areas than others.

- There are some economic services that only governments can provide, including certain central economic functions—legal, monetary, and fiscal—and a welfare net for the poor. Particularly vital to modern industrial economies, with their multitude of complex transactions, is an efficient legal and institutional system, which clearly sets out the rules of property and commerce and the respective roles of the public and private sectors.

- Governments have played a major role in providing important parts of the economic infrastructure—transport networks, health and education services, and so forth—on which progress in the rest of the economy so heavily depends. But how this should be done and the point at which the role of government ends and that of the private sector begins will differ from country to country.

- Governments often intervene in markets to improve economic performance, to limit abuses (such as fraud, pollution, and endangerment of health), or to promote the welfare of the poor. But it is here that the government's precise role is most difficult to identify.

Experience suggests that the governments of market economies which have efficiently industri-

alized have by and large observed the hierarchy of priorities described above. They have established clear rules of the game, contributed judiciously to the construction of an industrial infrastructure, and otherwise intervened sparingly and carefully. Some developing countries, however, have undermined their industrialization efforts by approaching these choices in reverse. In the more extreme cases, public intervention in markets has been heavy, but fragmented and in pursuit of conflicting objectives. The rules of the game have been uncertain. These characteristics—together, in many cases, with an inadequate infrastructure—have resulted in poorly chosen industrial investments, high costs of doing business, and the devotion of substantial private resources to getting around the rules or obtaining special economic privileges.

The next part of this chapter discusses the *direct* role that governments have traditionally played in market-oriented economies, including the provision of economic rules and industrial infrastructure. An analysis then follows of some of the issues that arise in government's *indirect* role of seeking to improve on the working of the market. The discussion focuses, in particular, on the promotion of infant industries. The final part of the chapter examines the costs of doing business that can arise when governments intervene ineffectively in markets.

### **The direct role of government: public goods and public services**

All governments take responsibility for producing a range of goods and services—called public goods—that only they are in a position to supply adequately. These include national defense and internal security, money, and the provision of a legal system. Among the most important public goods is a legal and institutional system which reduces the costs and risks of transactions. Certain other goods and services—for instance, transport, power, education and training, and research—provide a foundation which enables the rest of the economy to work more smoothly. These services of the economic or industrial infrastructure often require the efficient management of large investments, which is difficult to achieve in many developing countries. As a result, costs are higher and markets fail to work as well as they should. The direct presence of government in these areas has been very important to industrialization, although the private sector has also had a significant role in most countries.

### *The legal and institutional system*

The economic rules of the game—“property rights” in the shorthand of economics—provide for the ownership and transfer of factors of production and goods. Every type of economy—market oriented or centrally planned, advanced or developing—can be defined by its economic rules. The question is whether any given set is efficient. In particular, does it provide a climate of stable expectations? Knowing clearly who owns what and how goods and services can be used, bought, and sold reduces uncertainty and provides the basis for the specialization and investment essential to industrialization. Defining a suitable set of rights gives rise to technical problems—how to cope with rights to clean air, with common property that is becoming overexploited (desertification in the Sahel, for instance), with intellectual property such as computer software, with new problems such as theft of computer data, and so on. But the most pressing issue in many developing coun-

tries is that, whether these countries embrace the market economy or not, the economic rules may be unclear and the rights that go with them insecure.

**ECONOMIC RULES IN MARKET ECONOMIES.** In the industrial market economies the economic rules of the game have evolved as a system of laws in which private ownership and freedom to dispose of property are guaranteed, there is some guarantee against arbitrary seizure or punitive taxation by the state, the limits to public ownership are well defined, and private individuals are allowed to associate freely and make contracts which can be upheld in law (see Box 4.2).

Governments need to raise revenues and regulate the economy for a variety of reasons, and they invariably have to make compromises between an ideal set of economic rules for a market economy and their other objectives. For instance, the greater the level of taxation, the more it reduces the real value of assets. The same is true of inflation, which imprudent government policies can provoke. Priv-

#### **Box 4.2 The historical evolution of economic rights in England and Spain**

Starting in the late Middle Ages, in a number of European countries, commercial interests grew more powerful and sought to force the state to cede to them greater commercial freedom in return for the increasing demands that the state was making on them. Where these commercial interests were successful, the results were momentous. Economic and political decentralization weakened governments' arbitrary powers of confiscation and prompted the evolution of the economic laws and rights that characterize most of today's industrial market economies. The history of these developments from late medieval times in England and Spain is instructive.

The development of expensive new military hardware—the longbow, the crossbow, and gunpowder—meant that medieval rulers needed additional revenue. One way to raise funds was to create representative bodies which could exchange revenue for economic rights. The segment of society capable of supplying this finance was the emerging class of landed gentry and merchants.

For a time the English Crown used its royal prerogative to satisfy the interests of this class and its own financial needs through the sale of offices and the creation of monopoly rights. But the increasing reliance of the English kings on this form of finance pitted them against the landed gentry and merchants who demanded greater commercial freedom in return. The

merchants increasingly expressed their power through the parliament. After a long struggle the parliament finally achieved victory over the king in the late seventeenth century. From then on, economic rights became more secure, and capital markets developed rapidly. The subsequent Industrial Revolution reflected these changed institutional conditions. Individuals were free to form enterprises with few political restrictions, enterprises were authorized to acquire and sell goods and switch activities freely, and—although subject to taxation—these enterprises became largely immune from arbitrary seizure.

In Spain, however, the Castilian kings were able to resist demands—expressed through the Cortes—for a better deal for commerce. This was partly because the kings continued to benefit from the riches offered by their colonies in the New World. In turn, the demands of this large overseas empire led to the development of a vast, centralized bureaucracy to administer it.

According to one authority (North 1986), these two different paths of historical development go far to explain the evolution of a set of economic rights compatible with efficient markets in British-colonized North America and Spain's legacy to Latin America of a tradition of bureaucratic centralization. This happened in spite of the similarities of many of the written constitutions in the northern and southern parts of the New World.

ileges granted to certain economic agents—monopolies or subsidies, for instance—reduce the incomes of others. Regulation to protect welfare—to ensure standards of safety and health or to protect minors, for instance—affects private rights. Sudden changes in policy reduce business confidence.

Certain institutional arrangements have helped to shape the system of economic rights that fostered industrialization in the industrial market economies. Legal forms of incorporation promoted the separation of ownership and management of firms. Limited liability and bankruptcy laws—which allow a firm's equity holders to limit their losses to the capital they have subscribed and to spread the remaining losses among the firm's creditors—have helped to spread commercial risk and transfer the assets of failed companies to those who can make better use of them. Various regulatory institutions, public and private alike, have evolved to oversee the functioning of financial markets, partly as a means of preventing abuse. The rules of the game and conventions in business behavior have developed in mutually reinforcing ways: the greater the level of trust in the business community, the more likely it is that contracts will be honored.

**ECONOMIC RULES IN DEVELOPING COUNTRIES.** Many developing countries have inherited or adapted their legal systems from the Western tradition. This has sometimes meant laws that cannot deal adequately with developing countries' problems. In some countries legal provisions for compensation have taken too little account of inflation. In most developing countries product liability law is weak (particularly in view of the import of hazardous foods, drugs, or pesticides from industrial countries that ban these products at home). In China, in recent years, the government has been seeking to decentralize microeconomic decisions to the individual enterprise. It has, for instance, been seeking ways to modify contract and bankruptcy laws.

For many developing countries the biggest problem is that the nominal rules of the game do not correspond to the real rules, which are unclear and unstable. In the Philippines, for instance, ad hoc decrees in the 1970s—sometimes unpublished—granted favors to certain firms, often at the expense of their domestic competitors. The government granted an import monopoly on black-and-white televisions and a monopoly to produce newsprint. In Brazil, for many years after World

War II, a law put a nominal 10 percent ceiling on the rate of return on historic book value for private power utilities. High inflation made this rule useless, so the government permitted the utilities to get around it with various ad hoc regulations which established, for example, surcharges or preferential exchange rates. In the meantime, the ceiling on profits created great uncertainty, which led to a deterioration in the service and encouraged businesses to install their own generating equipment.

The perceived insecurity of economic rights in developing countries has been revealed in several surveys of foreign investors. (In all probability, most of their fears are shared by domestic investors.) According to the surveys, this insecurity derives from the following: internal political pressures (to control prices, for instance); the problems of dealing with the bureaucracy (slow and arbitrary decisionmaking, especially at the base of the bureaucratic hierarchy, and lengthy regulatory procedures); corruption; the risk of expropriation; uncertainty over whether legal and contractual rights would be upheld by the courts; uncertainty about changes in legislation, especially on tax rates; and excessive legalism (a barrage of unclear laws, often flexibly interpreted by governments).

#### *Information and welfare*

All governments take steps to increase the information available to producers and to protect consumer welfare. Governments have a comparative advantage in collecting and disseminating certain kinds of information, especially in developing countries, where information is scarce and education often poor. All governments provide basic statistical and other information on their own activities and on the economy in general. Some go further and provide information about likely future developments in domestic or foreign economies. This kind of forecasting can be risky. In some cases, however—notably in Japan and the Republic of Korea—governments have played a useful role as a clearinghouse for information and forecasts on domestic and foreign markets and technologies.

Governments regulate to protect welfare by checking weights and measures, by establishing health standards for foods and drugs and clean water, by requiring product safety standards and product guarantees, and by imposing safety standards in the workplace. Similarly, governments regulate financial markets to prevent abuses such as insider trading, to require companies to disclose

more information, and to require financial institutions to insure their smaller depositors.

In all this, regulation is a two-edged sword—even in areas in which the government’s role is indisputable, such as welfare protection. Legislation can create barriers to entry, limit consumer choice, and add to production costs. For instance, the licensing procedures for new drugs in industrial economies are a tradeoff between increased safety and the expense and delay to be faced by companies bringing new drugs to the market.

### Education

Education spurs the process of industrialization by imparting skills, improving health, and allowing more women to enter the labor force. Education, investment in technological knowledge, and physical investment go hand in hand. Countries that neglect any one of these forms of investment may not be efficient in industrializing. China, Hong Kong, Israel, Japan, Korea, and Singapore have all achieved fast economic growth. All adopted a balanced investment strategy that included education along with increased physical capital and technology transfer. All had achieved universal or almost universal enrollment at the primary school level by

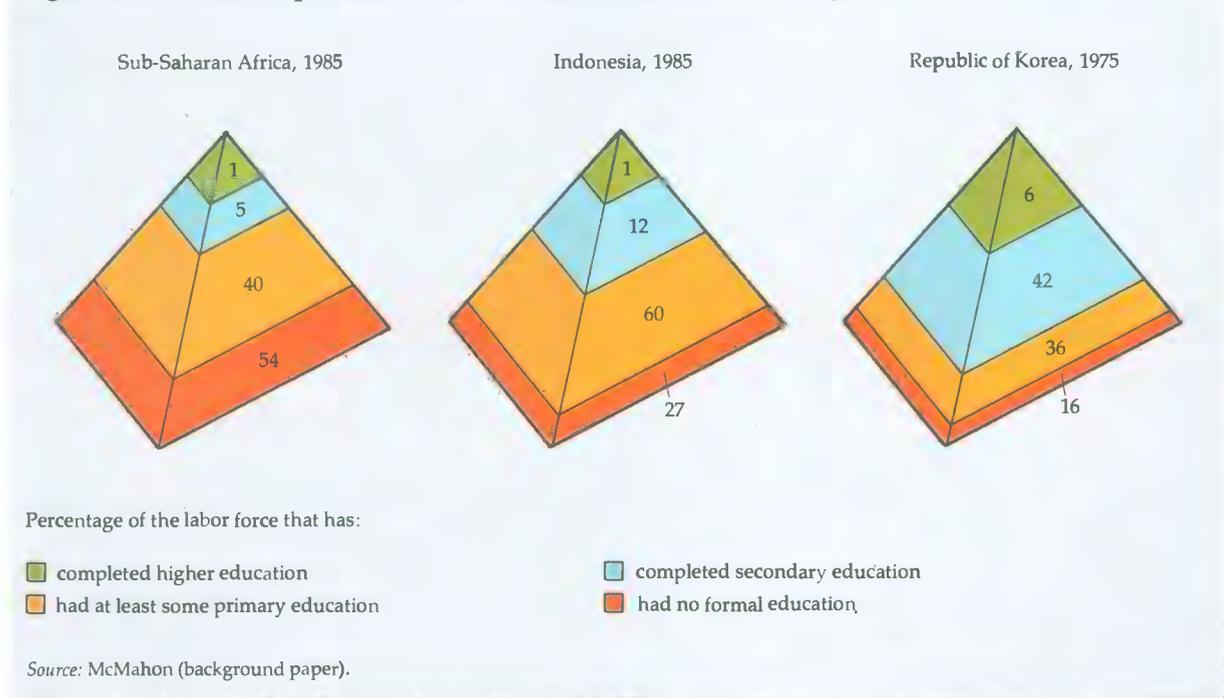
1965. The most successful also achieved high percentages enrolled in secondary schools and near-universal literacy of their labor force—usually just before the economy embarked on rapid and sustained industrial growth. (Figure 4.1 shows a considerably higher level of educational attainment in Korea’s labor force than in Sub-Saharan Africa’s, with Indonesia’s in between.)

Returns to investment have generally been higher in education than in physical assets. Economic rates of return to primary education in developing countries have averaged 26 percent, compared with estimated returns on physical capital of 13 percent. This suggests that lack of education is a greater obstacle to industrialization and development than lack of physical assets.

Economic returns are higher at the lower and more general levels of education (see Table 4.1). General education is profitable because it teaches the skills of basic literacy and numeracy, the ability to think adaptively, and the importance of time-based discipline. Modern industry has little use for illiterates. Some developing country governments have tended to expand higher-level vocational training too fast.

Education can be produced in small units, can be easily charged for, and can be provided privately.

Figure 4.1 Educational profile of the labor force in selected developing countries



**Table 4.1 Economic rates of return in education**  
(percent)

Country group	Level of education		
	Primary	Secondary	Higher
Industrial market economies (ten countries)	15 <sup>a</sup>	11	11
Developing country exporters of manufactures <sup>b</sup>	15	13	9
Other developing countries (twenty-six countries)	28	17	14

*Note:* The economic rates of return (referred to as social rates of return in the literature on the economics of education) on which these averages are based are from studies which for the most part refer to the 1970s and early 1980s. For comparison, economic rates of return to investment in physical capital averaged 13 percent for developing countries and 11 percent for industrial market economies.

a. The lack of a control group of illiterates in the industrial market economies prevents a direct computation; the estimate is based on the return for developing country exporters of manufactures.

b. India, Israel, Singapore, and Yugoslavia.

*Source:* McMahan (background paper).

Yet the case for a large public effort is strong. The need for national educational standards and for civic responsibility implies elements of a public good. A basic primary and secondary education for those unable to pay for it is both an economic investment and a means of income redistribution.

For vocational and higher education the arguments are different. The more specialized the education or training, the more its beneficiaries will be able to appropriate the return—and the more willing they will be to invest in their own education. Firms will provide training if they can reap the rewards. Individuals will invest in their own education if they can profit from the skills they acquire. (Apprenticeship is one such form of private investment.) Governments could therefore achieve greater cost recovery from students in higher education—or, in poorer developing countries, from students in the higher levels of secondary education. There may be scope, too, for greater decentralization of higher education in order to make it more responsive to market signals.

### *Technology*

Much of the unprecedentedly rapid development of large parts of the world economy in recent decades is due to advances in technology (Chapter 3). These advances can be reproduced for a fraction of the cost borne by the industrial countries that devise them. This explains the emphasis placed on technology in the industrialization process. Often technological knowledge is a commodity that can be traded like many others, but it has some pecu-

liarities which sometimes make trade difficult. These are frequently used to justify public intervention.

Producers of technology often face high risks, since the outcome of innovation is uncertain and technologies can sometimes be easily copied. Purchasers of technology also face risks, because they often cannot know just what they have bought until they have acquired and used it. Technologies often require substantial adaptation to local circumstances; those that come in the form of machines or blueprints require a substantial complementary input of human capital. Although the process of international technology acquisition is complex, the problems are no different from those faced by firms in the normal competitive process in advanced countries. And for the same reasons it is difficult to define the best role for government in developing countries.

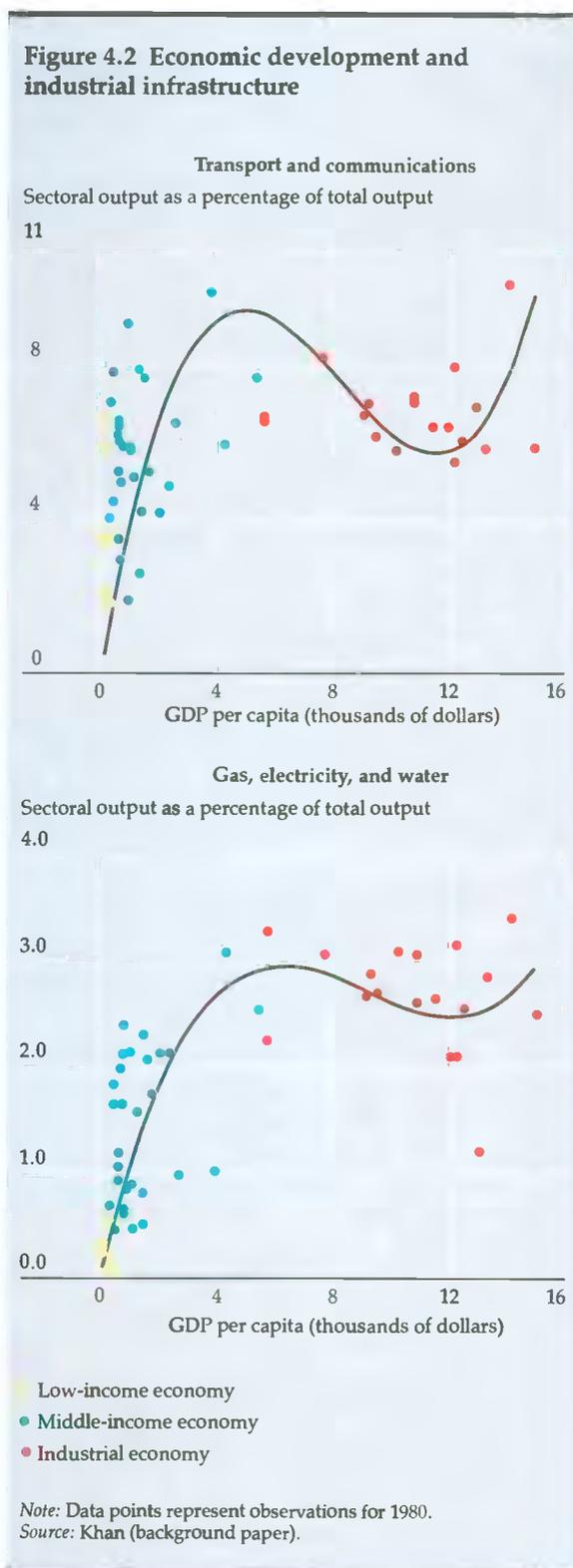
In some respects technological knowledge is akin to a public good. Technological knowledge is already produced as a freely available good by universities, publicly subsidized laboratories, or private foundations. This tends to be in areas of purer (less applied, less product- and firm-specific) research, which the more advanced countries are likely to dominate and from which less advanced countries can (eventually) benefit without having to pay the full costs of the research.

The public goods argument can apply to developing countries, particularly the more advanced among them, and thus justify university research, higher education, research and development institutes (such as the Korean Institute of Science and Technology), technological information services (as in Brazil), or even collective research projects (as in Japan). But it may be more advantageous to focus the public sector resources of developing countries on health or agriculture rather than on industry, where the developing countries are clearly technology followers. Thus government regulation of private technology transactions is likely to prove more effective (see Chapter 7).

### *Transport, communications, and energy*

Early in the industrialization process there is rapid growth in the transport and power-generation sectors. In 1980, Rwanda had a per capita income of \$223; its transport and communications sectors accounted for 2.2 percent of GDP; gas, electricity, and water had a share of 0.1 percent of GDP. In Malaysia, with a per capita income of \$1,787, those sectors had considerably larger shares—5.3 and 1.8

percent, respectively (see Figure 4.2). Once countries are more fully industrialized—at income levels of around \$4,000–6,000—these GDP shares start



to decline. Note that there is also some support for the notion that the share of physical infrastructure in GDP may begin to rise again once per capita GDP is around \$12,000. This is reflected in the relationship shown in Figure 4.2. In transport and communications, for instance, this may be explained by rapid growth in telecommunications services in high-income societies.

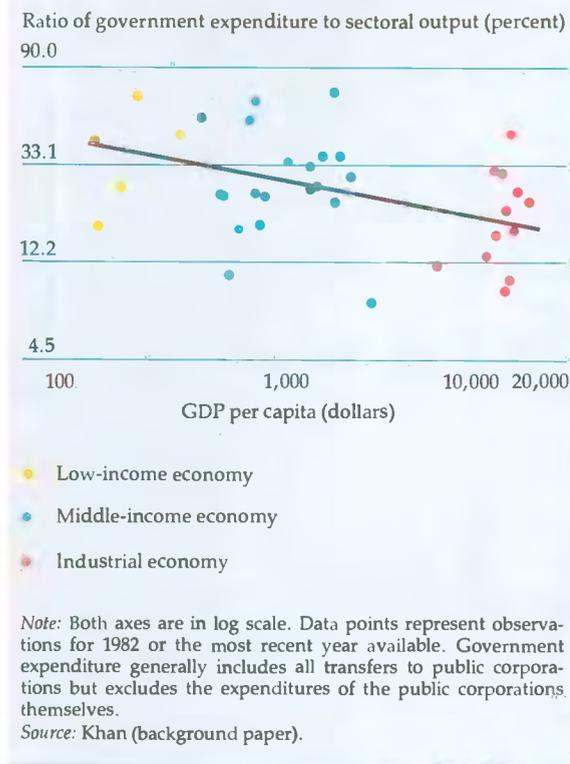
These sectors provide important services to other parts of the economy as well as to consumers. The phase of rapid growth in transport and communications partly reflects the growth of transactions as more and more firms sell to one another and to households and as interregional trade grows. The increasing demand for power is largely explained by the introduction of mechanized techniques throughout the economy, especially in industry. Both sectors require large investments which, once made, can dramatically reduce costs or open up economic opportunities. In Korea and Yugoslavia, for instance, public decisions to extend the road network led to an increase in traffic, which in turn laid the basis for government decisions to encourage the domestic production of automobiles.

It is difficult to judge whether today's developing countries have invested enough in these infrastructure systems. There is plenty of evidence of unsatisfied demand (at prevailing prices) for power and telecommunications services, as well as of congestion in much of the transport system. In Kenya, for instance, some 55 percent of local phone calls and 87 percent of long-distance calls cannot be completed because of the heavy traffic. Overloaded and undermaintained electricity systems lead to frequent power cuts and encourage many firms to invest in their own power plants. One study estimated the costs of power shortages in India in the mid-1970s to have averaged 2 percent of GDP—most of this representing lost output in the industrial sector.

If such services—now often subsidized—were priced nearer to their costs, their quantity and reliability would be more in line with demand. But the apparently high economic rates of return for infrastructure projects suggest that for many countries the present supply of infrastructural services is still a bottleneck to development. Certainly, infrastructure investment was a priority for the more successful developing economies, whether the burden was on the public sector (as in Korea and Singapore, for instance) or on the private sector (as in Hong Kong).

Government involvement in the provision of

**Figure 4.3 Economic development and government expenditure on transport and communications**



transport, communications, and power occurs for several reasons. There is a public goods argument in cases where user fees are difficult to collect, although governments can sometimes levy indirect user charges—they might finance roads, for example, with gasoline taxes and license fees. Larger projects—telecommunications, railways, and electricity and gas production, for instance—may involve economies of scale. In other words, a single investment—private or public—might be more efficient than a number of competing investments. The preference in most countries for public enterprise may reflect a belief that control is better exercised through ownership than through regulation. For large projects, underdeveloped financial markets or political risks might also deter private investments.

Unlike power, transport services tend to be left more and more to the private sector as development proceeds (see Figure 4.3). This suggests that the scope for competition in some public services may be underestimated. For instance, thanks to

technical progress the market for telecommunications equipment has been liberalized in many industrial countries. In the United Kingdom and the United States a limited amount of competition has even been introduced in the telecommunications network. In some countries cooperatives supply telecommunications services (as in Bolivia, for instance) or electricity. In other countries some public services are subcontracted to the private sector (the telephone system in Botswana, for instance, and road maintenance in Brazil and Costa Rica).

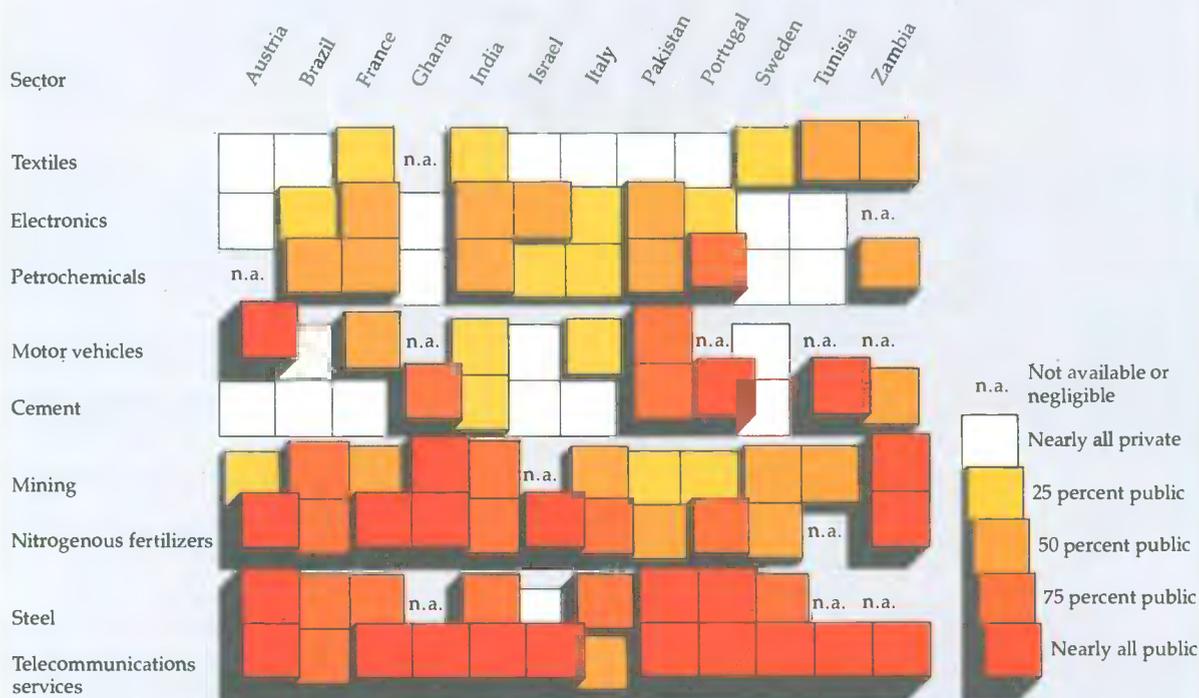
In cases of monopoly, a public authority usually fixes prices, whether the utility is publicly or privately owned. These prices are often set too low, usually for social reasons. The result is that demand at the prevailing price outstrips supply, and the utilities are unable to cover their costs. Experience firmly suggests that the pricing of outputs at their long-run marginal cost (that is, the investment, maintenance, and operational costs of producing an additional unit of output) is the best way to match supply and demand, recover costs, and ensure adequate investment. Often this is easier said than done. Prices may need to be adjusted to account for specific social, fiscal, or financial objectives. Where the level of investment is still inadequate, prices may need to be adjusted to clear the market. Moreover, it is sometimes difficult to measure long-run marginal costs or to meter the use of the services. But analytical techniques to overcome these problems have improved greatly.

#### *State-owned enterprises*

State-owned enterprises (SOEs) were extensively discussed in *World Development Report 1983*. Virtually all governments provide at least some commercial goods and services, notably power and telecommunications, through SOEs. SOEs are important producers of a broad range of industrial products such as steel, fertilizers, automobiles, and petrochemicals (see Figure 4.4). Governments have created them for a variety of reasons: to spearhead industrialization in countries with virtually no large-scale industry; to promote industries deemed to be of strategic importance; to save threatened jobs; to reduce the presence, or prevent the entry, of foreign-owned firms; and so on.

The performance of SOEs varies widely within and between countries, but their record has frequently been poor, particularly in developing countries. They have clearly failed to play the strategic role in industrialization that governments had hoped for. Financial rates of return have gen-

Figure 4.4 Public ownership of selected industrial sectors, 1984



Note: For the purpose of this chart, public companies with substantial (but less than 50 percent) private ownership have been treated as fully public.  
 Source: Ayub and Hegstad 1987.

erally been lower for SOEs than for the private sector, as recent comparative studies for Brazil, India, and Israel have indicated. Financial profitability has often been compromised by price controls, but the indications are that SOEs have also had a generally poor record of social profitability. They have often put large burdens on public budgets and the external debt. For example, the net deficit of a sample of SOEs accounted for about 4 percent of Niger's GDP in 1982. For the seven largest Latin American economies, the combined deficit of SOEs rose from about 1 percent of GNP in the mid-1970s to about 4 percent in 1980-82. One study has found that countries in which SOEs accounted for higher shares of gross domestic investment generally had lower rates of economic growth.

SOEs perform poorly partly because of the incentives faced by their managements and partly because of the control exercised by governments.

SOEs frequently operate without competition, as a result of protection or barriers to entry. Governments often place little emphasis on efficiency and profitability and are rarely prepared to use the sanction of liquidation. Other objectives set for SOEs—in particular, employment maintenance or price controls on essential goods—weakens any emphasis on profitability. At the same time, SOEs may develop their own momentum and objectives, which often diverge from the public interest. Paradoxically, their public status often gives them greater independence from government control than equivalent private firms.

SOEs have generally improved their performance when competition has been greater, when managers have had more financial autonomy, when poor performers have been removed and good ones have been rewarded, and when government interference with the day-to-day operations has been reduced. Some governments have pur-

sued more radical solutions to the problem of SOEs: liquidation or privatization (see Box 4.3).

### **The indirect role of government: intervening in markets**

Among some 130 developing economies, a broad variety of approaches to industrialization can be

observed. These approaches are examined in detail later: trade policies in Chapter 5 and complementary policies in Chapter 7. If a generalization can be made, it is that most developing economies rely extensively on private ownership and markets, but temper this with substantial interventions to influence the way markets work and with at least some

#### **Box 4.3 State-owned enterprises and divestiture**

Governments in industrial and developing countries alike are divesting their ownership of state-owned enterprises (SOEs) in an effort to improve efficiency and competition. They are doing this in three ways:

- *Liquidation*, which can be either formal or informal. Formal liquidation involves the closure of an enterprise and the sale of its assets. Under informal liquidation, a firm retains its legal status even though some or all of its operations may be suspended.
- *Privatization of ownership* through the sale of assets to the private sector.
- *Privatization of management*, using leases and management contracts. The disposal of inefficient SOEs permits the government to shed an economic and financial burden. Governments hope that it will lead to innovative management. But divestiture also serves other objectives. For example, privatization can increase popular ownership of productive assets. This was an important consideration in the sale of British Telecom and in recent efforts at privatization by Brazil and Chile. In addition, divestiture raises revenues for governments.

Among industrial countries, the United Kingdom has been particularly active in divesting publicly owned manufacturing and service enterprises. Majority control of British Telecom and British Gas was turned over to private shareholders in two of the largest share offerings in history. Among developing countries, Bangladesh, Chile, Kenya, Malaysia, Mexico, the Philippines, Thailand, Togo, and Turkey have shown particular interest in divestiture. But substantial privatization has occurred in only a few countries (Bangladesh and Chile among them) and has mostly involved small manufacturing and service firms that had once been privately owned. Privatization of management has been used less frequently as a form of divestiture. Formal liquidations are rare except in Africa, but informal liquidations are common.

Governments confront several obstacles when they decide to divest SOEs. For example:

- Governments usually want to sell the least profitable enterprises, those that the private sector is least willing to buy at a price acceptable to the government.
- Divestiture tends to arouse political opposition: from employees who may lose their jobs; from politi-

cians who fear the short-term unemployment consequences of liquidation or of cost reductions by private owners; from bureaucrats who stand to lose patronage; and from those sections of the public that fear that national assets are being cornered by foreigners, the rich, or a particular ethnic group.

- Relatively undeveloped capital markets sometimes make it difficult for governments to float shares and for individual buyers to finance large purchases.

The experience of developing countries also highlights some important policy issues. Privatization is meant to introduce a greater emphasis on profitability. Whether or not this leads to greater efficiency depends on the policy framework and, in particular, on the extent to which product markets are subject to competitive forces. Often competition is more important than ownership in inducing efficiency. Thus governments should place priority on lowering entry and exit barriers and removing import barriers that restrict trade. Even where markets are competitive and there is no significant market failure, the efficiency gains from transferring ownership to the private sector can be substantial. For natural monopolies, however, there is a need for a regulatory watchdog irrespective of whether the firm is in private or public hands, and strong measures are needed to deter anticompetitive behavior.

In addition, managing divestiture is a complex task, and a well-prepared strategy is important. The government needs to consider removing price controls and implicit subsidies and amending its pay and employment policies. Some firms can then be divested immediately, so that the search for investors can begin. Inefficient enterprises that are potentially profitable may require physical and financial restructuring before their divestiture. Nonviable enterprises will have to be liquidated; for this to happen, assets must be valued and arrangements made for sale.

Although divestiture of state-owned enterprises is a relatively new and untested instrument, it is a promising avenue for improving the efficiency and dynamism of the industrial sector. It is important to stress, however, that the gains from privatization will be greater if the trade and domestic policy environment encourages competitive markets.

measures for the central allocation of resources.

Such interventions can address a number of shortcomings in markets. The smaller the degree of competition, the more limited the information available to buyers and sellers, and the greater the uncertainty in general business conditions, the less effective markets will be. Markets fail to allocate resources efficiently—that is, in a way that equates social marginal costs with social marginal benefits—in two main ways:

- *Monopolized markets.* A single seller (monopoly), or a small number of them (oligopoly), can restrict output and raise prices in the absence of competition. Monopoly, however, is sometimes the most efficient way to allocate resources. Electric power and telecommunications networks, which benefit from economies of scale up to very high levels of output, are often taken to be natural monopolies of this kind. Governments may need to regulate prices in monopolized markets or devise policies to encourage new entrants (see Chapter 7).

- *Externalities.* Externalities occur when economic activities have spillover effects. For example, a polluting factory inflicts a negative externality on those who live downwind. In contrast, a firm which invests in acquiring technical knowledge produces a positive externality when this knowledge passes outside the firm. In both cases, private costs and benefits are different from social costs and benefits. The problem of externalities lies at the core of arguments over policies regarding infant industries, foreign investment, and transfer of technology.

Even if markets allocate resources efficiently, they may still fail to produce a desirable distribution of income.

Designed to compensate for some of these market failures, industrial intervention in developing countries has often been heavy. Many different instruments have been employed, often simultaneously, including tariff and nontariff protection, fiscal incentives, and direct controls on credit allocation, interest rates, and foreign and domestic investment. The nonprice instruments among these policies—nontariff barriers, for instance—have been popular, despite their recognized economic disadvantages, because of the prospects they offer of more immediate public control over the allocation of resources. The typical pattern of intervention has had two other characteristics. First, the level of incentives provided has been high for many activities (see Chapter 5). Second, the objectives pursued have often conflicted (for

instance, price controls imposed on welfare grounds can affect profitability and hence discourage investment).

Intervention along these lines can create distortions elsewhere in the economy, and governments seek to correct these, in turn, through further interventions (see Chapter 7). For instance, import protection can create domestic monopolies; domestic monopolies may be regulated through price controls; price controls may reduce levels of investment; and so on.

### *The infant industry argument*

The most durable argument for intervention is based on the infant industry. This is the main rationale for the discriminatory structure of protection found in most developing countries (see Chapter 5), for policies to acquire foreign technology, and for policies toward foreign investment (see Chapter 7). Although it is plausible to give new industries a "breathing space" through protection, such an argument would apply to most new activities in developing countries. Whatever the merits of this approach in specific cases, many developing countries have offered widespread import protection in the name of support for infant industries in ways likely to frustrate the objectives of the policy.

The governments of many developing countries argue that private investors will not undertake socially desirable investments which take time to come on stream or require a long learning process. The problem of how to finance a project in its initial, loss-making stage—often where a learning process is involved—is a common one. This may indeed be a problem if capital markets do not exist or do not work properly, as is frequently the case in developing countries (although the failure of the capital market to finance a risky project might equally well reflect investors' good judgment).

A different argument is made for cases where entrepreneurs fail to invest in projects that generate benefits for the rest of the economy because the investor would not be able to capture the benefits. One example of this would be investment in technical skills, embodied in individual workers who could then take their skills to a new employer. There would be no market failure if the firm were able to charge the workers for their training, but if this is prevented by laws, trade unions, or social convention, the private value to firms of investment in training will be less than the social value, and there will be underinvestment.

Cases of successful infant industry protection are difficult to prove or disprove. One study (Krueger and Tuncer 1982a) found little support for the notion that infant industry protection had been effective in Turkey: total factor productivity growth was lower in the most protected industries. Japan and some of the newly industrializing countries are often cited in support of infant industry protection. According to a popular view, the Japanese government successfully promoted steel, cars, and cooperative efforts in basic research—especially in electronics (see Box 4.4). Steel, automobiles, and cement have been cited as examples of successful infant industries in Korea, likewise automobiles in Brazil. The debate has gone on for the past century, but there have been surprisingly few attempts to study individual cases or to compare the net costs of infant industry failures with the net benefits of the successes.

It is a sound general principle that interventions should attack the problem of market failure nearest to its source. This may mean policies to make financial markets work better, to provide education, or to establish a patent law, rather than measures directed at particular firms or sectors. Protection may prove counterproductive in several respects. In many developing countries it has become more or less permanent, so that the stimulus for infant industries to mature is removed. Indeed, it has often created a gap between local costs and world prices so wide that it is unlikely ever to be bridged. Protection raises prices and therefore reduces domestic demand for the protected good. By the same token, protection provides no stimulus to exports. This in turn inhibits the achievement of lower costs through greater economies of scale.

Infant industry protection probably works best with a preannounced and credible timetable for withdrawal. In addition, selectivity is vital, for two reasons. First, one activity can be favored, ultimately, only at the expense of others. The more widespread the support, the more the exchange rate becomes overvalued (with a consequent discrimination against exports), and scarce resources are spread thinly through the economy. Second, if support is offered too frequently, firms will divert resources to the task of soliciting favors from government. There is an unresolved debate about whether countries like Korea—which has trade policies that are broadly neutral between import-replacing and export activities, combined with infant industry interventions in specific activities—have succeeded because of, or in spite of, such interventions (Box 4.4). But in addition to main-

taining relative neutrality in its trade policies, Korea has kept its interventions limited and its exchange rate competitive. This is not the case in most other developing countries (see Chapter 5).

### *Externalities and industrialization*

With urban and industrial development, pollution has grown alarmingly in many countries. This is an externality problem. For example, the manufacture of bleached paper produces more pollutants than the manufacture of unbleached paper. But if paper mills are not held liable in law for damaging the environment, the price of bleached paper will not reflect the true cost of resources used in its production, and therefore consumers will have no incentive to switch from using bleached to unbleached paper.

Pollution control policies are rare in developing countries. Where pollution control has become an issue, governments have relied heavily on a regulatory approach. But regulations often lead to unintended results, which then require a fresh set of regulations to correct. Alternatively, governments can provide subsidies for purchasing pollution control equipment. But it is very difficult for government officials to determine the most appropriate equipment for a particular process, keep pace with technological change, and make judgments on the tradeoffs between relative costs and effectiveness.

Urban congestion is another example of an externality associated with industrial development. When firms locate in a particular area, they may impose costs on society by adding to congestion, but they may also confer benefits by acting as a magnet for other investments, particularly in underdeveloped regions. Developing country governments, therefore, have adopted a variety of instruments to reduce urban congestion costs or to stimulate economic development in less developed regions. Again, such policies have proved problematic.

The Indian government, for example, has used investment licensing, public investment, and regional incentives to induce new firms to locate away from metropolitan areas. Yet according to a recent study there was no overall improvement in industrial dispersion between 1961 and 1971. And in Northeast Brazil, tax credits alone, among a number of regional incentives, exceeded \$15,000 per job created in 1980.

Reducing protection itself may correct a bias in favor of urbanization. For instance, in Brazil dur-

#### Box 4.4 Industrial targeting: the great debate

A group of economies in East Asia, including Hong Kong, Japan, the Republic of Korea, and Singapore, has had phenomenal success in industrial growth in recent decades. With the exception of free-trading Hong Kong, there is considerable disagreement as to how much of this success is due to governments that have intervened in markets. In fact, the disagreements on the causes of success go a good deal further, covering areas such as foreign aid, regional and cultural factors, and the role of different forms of economic organization.

One school of thought points out that these economies have by and large "got their prices right"—in other words, they have maintained a competitive exchange rate and implemented policies that do not in aggregate discriminate between broad groups of industrial activity. For instance, the net effect of incentives is more neutral between import substitution and exporting activities in Korea than in the great majority of developing countries. And public expenditure on research and development is a considerably smaller fraction of equivalent private expenditures in Japan than in the other large industrial economies.

Other schools point to the evidence that these economies have intervened in the market to promote specific activities or firms, often with considerable success. They may not deny that getting the prices broadly right is a necessary condition of successful industrial growth; indeed, the more that intervention aims at a limited number of targets, the smaller its effect will be on the aggregate level of price distortion. They do, however, stress the importance of strong, capable, and honest government in these countries, close government-industry relations (with a strong national consensus on economic goals), and domestic markets large enough to allow substantial competition. They also cite the selective use of import protection, concessional credit, policies to restructure firms, and in some cases direct public investment to promote specific industrial activities. In some countries interventions appear to have been the outcome of a collective decision-making process in which government acted as an agent for the exchange of information between firms. Of course, the pattern of public intervention has differed from country to country and over time; for instance, in Japan and Korea import protection was more important up to the 1960s than it is now.

The empirical evidence about the success of intervention in these countries is much disputed. The Japanese government is said to have played a role in the development of such industries as steel, automobiles, fertilizers, synthetic fibers, and microelectronics. In automobiles, for instance, nontariff protection was heavy up to the mid-1960s, while the Ministry of International Trade and Industry (MITI) vetted technology transfers

(in the 1950s) and inward foreign direct investment (in the 1970s). Yet MITI's role in the industry's phenomenal success has clearly declined since the 1960s. (For instance, it has not always had its way on industrial restructuring.) MITI was also instrumental in establishing the conditions under which foreign firms would be allowed to produce integrated circuits in Japan: only one firm was permitted entry in the late 1960s, and it had to share its knowledge with Japanese firms.

Korea's success in promoting infant industries such as automobiles and steel is also cited. (POSCO, a state-owned enterprise, has emerged as one of the world's lowest-cost steel producers.) But after the mid-1970s the Korean government made a number of expensive mistakes in its promotion of various heavy and chemical industries. The success stories beg a number of questions: Did the benefits of the successes outweigh their initial costs (as well as the costs of infant industry failures)? Did government intervention change decisions, or did it simply put a seal of approval on what the firms would have done anyway?

The flagging fortunes of many other industrial countries in comparison with Japan have revived debates on the role of industrial policy. Western Europe's largest economies have in fact pursued active industrial policies since the 1960s, although with indifferent success. Often these policies have differed from Japan's and put greater emphasis, for instance, on first aid for ailing sectors. In France, indicative planning was accorded some success in modernizing leading industrial sectors for a decade or two after World War II, and the development of civil nuclear energy and the modernization of telecommunications are reckoned to be public sector successes. But intervention has also been conspicuously less successful in such sectors as machine tools and steel.

Whatever the allocative effects of industrial intervention in East Asia, it has been carried out by strong and capable governments. It has also been selective and time-bound, and competition has been maintained in domestic markets. The level of intervention has been reduced over time. Central guidance becomes progressively more demanding as economies become more complex and as the opportunity for imitating more developed economies diminishes. Further research needs to ask many more questions about the East Asian experience, but there is a strong case for suggesting that the government's role as a coordinator and information clearinghouse was important. Finally, if some East Asian governments have intervened successfully, it is not clear whether most developing countries could emulate their administrative capacity, the ability of their firms and governments to cooperate closely in pursuit of agreed economic goals, or the degree of competition in their domestic markets.

ing the 1970s the protection enjoyed by industries in the two largest metropolitan areas was higher than the national average, whereas in the lagging Northeast region it was lower. This suggests that trade policy reforms might have exerted a greater influence on the regional distribution of industry than explicit location policies. Governments can also reduce some of the pressures for urbanization by ensuring that private costs reflect more accurately the broader economic costs of congestion. In particular, governments could enforce the recovery of investment and operating costs in urban services, such as education, transport, waste removal, and disease control, by charging user fees.

### **Government policies and the high costs of doing business**

Analyses of government intervention in developing countries usually concentrate on resource allocation and efficiency in the production of individual products. But extensive intervention also adds to the costs of doing business. This argument starts with the observation that the costs of doing business in many developing countries are generally high—because of regulation and bureaucratic inefficiency. But the evidence is not conclusive, because transactions costs are difficult to measure, and intervention often leads to illegal activities or lobbying efforts which are not publicized, in either industrial or developing countries.

The pattern of intervention which creates these high costs of doing business has its origins in a policymaking capacity that is often weak and fragmented. Intervention sometimes allows two prices to coexist for the same product (because, for instance, one firm enjoys an import duty concession on an input that another does not). Alternatively, intervention creates a barrier to entry (for instance, when an investment license allows one firm to invest where its competitors cannot). These interventions in turn have two consequences. First, they encourage economic dualism—a formal and an informal sector. Second, they create incentives for arbitrage—the practice of buying low in one market and selling high in another.

#### *The policymaking process*

Governments have not always made the welfare of the governed their principal aim. Historically, European states sought economic control in order to extract revenues. Then, in some countries, countervailing powers emerged and forced the state to

cede greater commercial freedom in return for the right to tax (Box 4.2). Even today, according to a widely held view, politics remains the battleground in which different groups fight over the distribution of incomes.

For all that, few governments have disclaimed responsibility for achieving growth and equity. Yet, when governments choose an active role in economic development, they may find that their capacity to make and enforce economic policy is weak. In the debate on the role of government it has perhaps been too easy to assume that an ideal policymaking system prevails: namely, that laws are clear, enforcement is effective, and disputes are smoothly resolved. This ideal is never fully attained, any more than markets are ever perfectly competitive.

Economies in transition from traditional to modern forms of organization face special difficulties, because of problems of poor information and because of the way individuals cope with risk. Levels of education are lower than in industrial countries, investment in the machinery of communications is lower, the investigative capacity of the state and of the watchdog professions (lawyers, accountants, journalists, and so on) is lower, and reporting mechanisms are difficult to set up and enforce. Risks arise from the increasing number and complexity of transactions in a modernizing economy, often between people who do not know or may not trust each other and where legal and economic rights are uncertain. So individuals steer clear of impersonal transactions in favor of the more familiar relationships of kinship, friendship, or client and patron. Because of lack of information and risk avoidance, an informal policymaking system often stands behind the formal structure.

In some countries the legislative and judicial branches of government—which would serve as counterweights to the executive in an ideal system—are weak and leave wide discretion for administrative decisionmaking. Tax rates, for instance, often do not correspond to those set by law. Unauthorized and ad hoc concessions are common; noncompliance is rife. In other countries the legal system is well developed. But an abundance of confusing and inflexible regulations has produced a cumbersome bureaucratic process (see Box 4.5). Laws are passed, then not effectively implemented. Litigation is costly, and so few people seek legal redress.

To some extent these features are present in all sorts of countries, industrial and developing, but they are often more pronounced in developing

countries. They can have an important effect on economic policymaking. The result is uncertainty for the private sector: the rules of the game are unclear, decisionmaking is fragmented, and many economic decisions are made on a case-by-case ba-

sis. Policymaking is subjected to pressure from private interests. This may help to explain why import quotas, which are usually subject to administrative discretion, are more popular than high tariffs, which usually require legislation. In-

#### Box 4.5 Battling the bureaucracy in Brazil

Wherever modern government structures are built on an already highly developed legal and administrative system, bureaucracies are bound to multiply. Brazil is no exception. What is exceptional is the degree to which Brazilians have managed to circumvent the more rigid and obstructive bureaucratic rules. In addition, the government has recently had some success in attacking the rules themselves.

Brazilians have described their federal administrative system as excessively centralized, formal, and distrustful of the public. This view dates back at least to the temporary transfer to Brazil of the Portuguese kingdom and its centralized administration in 1808, and perhaps even further, to 1549, when the first governor-general arrived with a framework of laws and regulations even before there were people to conform to them. The formalism embodied the prejudice that documents are more important than facts. The distrust showed in the controls that required endless lists of certificates, attestations, licenses, and other documents. Not many years ago the case was reported of an export license that required 1,470 separate legal actions and involved thirteen government ministries and fifty agencies.

The *jeito* was employed to overcome such difficulties (Rosenn 1984). This Portuguese term, corresponding roughly to "knack," "way," or "fix" in English, refers to the varied ways that Brazilians, like people in other countries, get around the maze of regulations and legal requirements. The *jeito* principle has been remarkably effective. It relies significantly on the *despachante* (roughly, an expeditor), who has counterparts in many countries but has been especially active in Brazil, where the lubrication of sticky administrative processes has been essential for social mobility and rapid economic development.

The *despachante* is an intermediary who, in return for a commission or fee, purchases and fills out the multiplicity of legal forms, delivers them to the proper persons, and extracts the needed permission or document. The system developed when the simplest transactions, such as obtaining a marriage license or identity card, could take ages or days or hours, depending on whether one used *despachantes* and how much they were paid. The *despachantes* are thriving, specialized professionals and have their own union and competitive examinations. Some specialize in police work, naturalizations, auto licenses, marriages, or "legalization of real estate." The *despachantes* who arrange imports

and exports have long enjoyed a legal monopoly. Each typically has several employees, and almost all sizable businesses maintain their own *despachantes*.

Brazil's rapid economic growth and social evolution demonstrate that a complex bureaucracy need not be a barrier to development. The costs are nevertheless substantial. Moreover, such resourceful adaptations of the *jeito* may have been too effective and undermined attempts to reform public administration.

The most recent efforts to reform the system, rather than live with it, began in 1979. A National Debureaucratization Program was designed to simplify administrative procedures and, more broadly, to reverse what was seen as the relentless trend toward growth in government, excessive centralization, and abundant regulation.

The results in 1979-84 were impressive. On the basis of a citizens' project (which surveyed all the points of contact of individuals, throughout their lives, with bureaucratic requirements) it was possible to eliminate, or simplify, a long list of documents and procedures ranging from notarization requirements and driver's licenses to passport extensions, university enrollment processes, and income tax returns. Evidence of residence, economic dependence, and so on, could be established with simply a written statement by the interested party rather than legal certificates and third-party attestation. Thus a "presumption of truth" displaced the "rule of distrust." Other legal procedures were simplified. In all, more than 600 million documents a year were removed from circulation. The savings have been estimated at close to \$3 billion a year, equivalent to about 1.5 percent of Brazil's GDP.

In the economic field the main achievements were to simplify rural credit procedures, to change commercial registration procedures so that forming a company could take three days rather than three to six months, and to bring relief from bureaucracy to 1.5 million small enterprises. For the time being, however, the program has left many areas of regulation untouched, including some that are important to industrialization and trade.

It is significant that, although a minister of debureaucratization was appointed, no new government department was formed. The program was implemented by an executive secretary and just twelve assistants. At the very least—and on a limited front—some progress has been made in simplifying the rules and changing the relationship between citizens and civil servants.

terest groups infiltrate the policymaking process because risk avoidance by government servants and lack of information undermine the capacity of governments to centralize and scrutinize decisions. Finally, policies are often designed with feasibility of implementation an uppermost consideration. Thus, because of the problem of raising public revenues, governments sometimes prefer import protection to direct subsidies in the promotion of selected industries. They may prefer to collect taxes through import duties rather than through direct and indirect taxes (where opportunities for avoidance are much greater). And, rather than regulate private firms, governments may choose to produce through public enterprises, in the hope of gaining easier access to the information on which regulation must be based.

#### *Intervention and the creation of a formal and an informal sector*

Privileged firms enjoy access to import quotas, subsidies, investment licenses, subsidized loans, and so on, whereas unprivileged firms have to operate in informal markets. This distinction between privileged and unprivileged sectors, more pronounced in developing countries than in industrial countries, is a simplification. Firms may receive some privileges and not others. Moreover, it is generally the unprivileged firms which more easily evade taxes and ignore minimum wage and social security legislation.

The informal sector has a tacitly tolerated, legally precarious existence in most developing countries. It operates outside the letter of the law and outside the de facto protection that privileged firms receive from governments. In other words, economic rights are insecure in the unprivileged sector. This adds a risk premium to the cost of doing business and can prevent certain transactions altogether. Insecure economic rights are the reason unprivileged firms are likely to remain small and labor-intensive: the larger the firm's tangible assets (building and machinery), the greater the ease with which these assets can be confiscated. Peru, which has a large informal sector, provides an example of the effects of dualism (see Box 4.6).

#### *Intervention and directly unproductive profit seeking*

The dual markets created by government intervention, which express themselves in price differentials and scarcities, create opportunities for arbitrage in the form of queuing, illegal operations,

#### **Box 4.6 Informality in Peru**

Peru has a large informal economy. It comprises small businesses, most of them in Lima, that do not have access to the incentives enjoyed by most larger firms and that operate outside the framework of laws and regulations (although they are not necessarily intrinsically illegal). The informal economy is the outcome of numerous historical factors that have influenced the structure of economic activity—including a chronically overvalued exchange rate, high levels of industrial protection, high taxes (combined with tax reliefs that encourage the use of capital), labor protection laws, powerful labor unions, credit rationing, and the recent recession (see Box 7.6). But the informal economy is also a response to the pervasive regulations that have come to affect economic activity.

The informal economy is perhaps most visible in the explosion of unauthorized housing structures built in and around Lima by the flood of new arrivals from the countryside. Without existing homes to move into, and faced with a multitude of administrative steps to obtain formal land title, these immigrants invade barren state-owned land, typically in large organized groups, and erect *pueblos juvenes* (new minitowns), complete with wooden houses, streets, sewers, and connections to the electric utility grid. The groups organize their own governing councils, which informally settle disputes over property boundaries and other matters. As many as 2 million of greater Lima's total population (more than 5 million) live in these *pueblos juvenes*.

Informality appears, if anything, to be even more widespread in Lima's transportation system. Only some 10 percent of the city's residents use formal, mu-

and lobbying activities to seek or create rents. All of these add further to the costs of doing business in industrial and developing countries alike. Such activities have been christened directly unproductive profit-seeking activities (see Box 4.7). Tax evasion and smuggling are examples of outright law-breaking to avoid payment of various kinds of taxes; other laws are broken to avoid the cost of meeting standards (on pollution or safety at work, for example). Rent seeking is the devotion of resources to the pursuit of the excess profits that become available when goods, services, and privileges are in short supply. Rent seeking may occur through bribery or lobbying. An example of queuing is the practice of some firms in developing countries of holding a phone line open all day between two offices in order to avoid the interminable wait for a connection.

nicipally owned buses. The rest ride buses operated either by semiformal drivers—those with bus routes granted under a municipal franchise and who charge regulated fares, but who generally do not report their income to the tax authorities—or by informal drivers, who lack a franchise and charge what the traffic will bear.

Informality is also prevalent in the small commercial sector, particularly among an estimated 84,000 street vendors—*ambulantes*—who offer a full menu of goods in direct competition with large formal retail establishments. The *ambulantes* are well organized. Street vendor organizations assign and enforce informal property rights to slices of sidewalks that have estimated property values averaging \$500 to \$750. The organizations also collect dues that have enabled Lima's *ambulantes* to construct more than 270 local markets.

Because informality in Peru's industrial sector is least visible, it has yet to be well documented. Nevertheless, fragmentary evidence suggests that informal industrial enterprises—for instance, textile factories and repair shops—are prevalent in Peru's urban areas.

Since by their nature informal activities tend to be carried out on a cash basis rather than through banks, the size of the informal sector should be positively related to the ratio of cash to broader measures of the money supply. On this basis, informal activity in Peru is estimated to account for roughly one-third of gross domestic product and for about 60 percent of the part- and full-time active population.

In the face of burdensome regulations and incentives that favor a limited number of firms and workers in the

formal sector, informality may be an efficient mode of operation. But if regulation could be reformed and the incentive system were to become less discriminatory, the evident dynamism of the population currently engaged in informal activities could, once formalized, lead to greater growth in the economy as a whole.

First, and perhaps most important, excessive regulation and the absence of effective economic rights combine to prevent informal entrepreneurs from realizing scale economies. Informal firms must operate with few workers, often in remote locations, to avoid detection; hence the need to incur other costs simply to remain in business. Moreover, since credit is rationed and informals often operate illegally, they have little access to formal credit and are forced to pay the much higher rates of interest charged by informal lenders. This makes it difficult for informal entrepreneurs to expand, even though their investments may be far more profitable than those of large private and state-owned enterprises which have easier access to credit.

Second, the imperfect protection of property and contract rights for informal citizens diminishes their incentives to save and invest. For example, residents with formal title to their homes in Peru have invested significantly more in housing than have the informal residents of the *pueblos juvenes* with similar incomes.

Finally, informality undermines the government's own efforts to establish an evenhanded and effective legal system. Such a system could help develop the economic rights and rules often taken for granted in industrial countries.

Since profits are to be made by the firm that succeeds in acquiring a privilege, it is clear that firms will compete with each other and devote real resources to rent seeking. Thus at least part of the rent will be "competed away" with real resources that could otherwise have been put to productive uses. If this were not the case, rent seeking would simply mean transfers of income from one pocket to another. But rent seeking has additional costs: firms come to specialize in rent seeking, to the detriment of production. In consequence, markets operate inefficiently and resources are wasted.

The evidence on directly unproductive activities is patchy. First, there is the evidence of large price differentials in parallel markets—black market premiums on exchange rates, interest rate differentials between formal and informal capital markets, and wage differentials in the labor market. The higher

the price differential and the less effective the policing of illegal activities, the stronger the presumption that individuals will engage in directly unproductive activities. Some of the evidence on price distortions was reviewed in *World Development Report 1983*, and other evidence is reviewed in Chapter 7.

The extent of smuggling has been estimated for several countries—cocoa from Ghana, coffee from Uganda, and various commodities from Colombia, for example. There is also evidence—unsystematic and anecdotal for obvious reasons—on the way corruption imposes high costs on doing business. In some countries corruption has been so rife that better evidence has been collected through official inquiries. Rent-seeking activities were estimated to account for 24 percent of Kenyan GDP in 1982 (see also Box 4.7 on estimates of rent seeking in India

#### Box 4.7 Rent seeking and directly unproductive profit seeking

Economic analysis has traditionally focused on productive activity. But economists are now taking a closer look at unproductive activity. The terms “rent seeking” and “directly unproductive profit seeking” (DUP) have become common parlance in economics. While unproductive activities can certainly arise in the private sector, economists have been particularly interested in those arising from policy interventions of various kinds.

Rent seeking embraces lobbying activities designed to capture the rents—that is, scarcity premiums—that are attached to licenses and quotas. Typical examples include the lobbies that aim to secure import licenses in trade and payments regimes that rely, in many developing countries, on exchange and import controls. Another example is lobbies seeking the lucrative premiums generally associated with industrial licenses. Such rent seeking is common in industrial countries, too—for example, in the allocation of import quotas and in public purchasing.

The concept of directly unproductive profit seeking is more comprehensive. It includes all ways of making a profit by undertaking activities which are directly unproductive. That is, DUP activities yield income or profit but do not produce goods or services directly or indirectly. They are economic activities that produce zero output while using up real resources.

Thus DUP activities include rent seeking. But they also cover activities where resources are devoted to encouraging policy interventions that *create* rents: for ex-

ample, lobbying efforts can be directed at creating or sustaining quota or tariff protection against imports. DUP also embraces activities designed to make money by *evading* policies. For instance, tariff evasion yields pecuniary income by exploiting the difference between legal (tariff-paying) imports and illegal (tariff-evading) imports.

In an analysis of the costs and benefits of policy intervention, these activities cannot be ignored. Economists have therefore begun to explore ways of estimating the costs of DUP. The conventional costs of protection are estimated by calculating the loss that arises from distorting the prices faced by consumers and producers (see Box 5.4). These so-called deadweight losses, however, are now supplemented by estimates of significantly larger losses from associated rent seeking and DUP.

For instance, rent-seeking costs have been estimated by assuming that license premiums would lead to equivalent resource costs by lobbyists. For India, the resulting cost estimates for 1964 were roughly 7.3 percent of GNP; for Turkey, they were 15 percent of GNP in 1968. These estimates may be on the high side, because administered allocations may be routine and thus reduce the real resources profitably diverted to seeking the licenses. But the full effects on economies with extensive interventions and associated DUP activities are likely to elude quantification. What is remarkable is that even the quantifiable part of the costs is so large.

and Turkey). Finally, in economies where scarcities and red tape rule, professionals adept at cutting through the knot of bureaucracy are in great demand. These range from the *tolkach* (pusher) of the Soviet Union to the *despachante* (expeditor) of Brazil (Box 4.5).

#### The priorities for government

At the core of the industrialization process is an ever increasing division of labor which reaps the rewards of specialization, but at the cost of an increasing number of transactions between economic agents. Governments cannot predict the direction or form of this changing division of labor, but they nonetheless have a vital role in facilitating these transactions.

This is not easy for governments. Their capacity for playing this role is limited, particularly in developing countries where the level of information

is often deficient and the policymaking process often fragmented and ad hoc. What is more, although economic principles play a useful role in indicating the general conditions under which government action will be most productive, identifying the specific cases in which these principles apply and devising effective measures are often difficult.

Nonetheless, a clear hierarchy of priorities emerges for market-oriented governments seeking to industrialize efficiently. First, developing the web of complex activities and relationships that characterizes a sophisticated industrial sector becomes difficult, if not impossible, in the absence of clear, evenhanded, and predictable rules of the game. These rules must be the primary concern of governments since only governments can provide them. Second, an efficient and adequate supply of infrastructural services such as transport, communications, power, and education is also vital to

modern industry. Governments must make sure these needs are effectively met, but this does not always mean the government should be the provider. In some cases it may be more appropriate to regulate private monopolies, in others to allow competition among providers. Finally, governments also intervene to change the way markets work—for instance, to prevent abuses, to improve welfare, and to improve the pattern of investment or output. It is here that the government's task is

most difficult: the dividing line between measures that improve and those that worsen the conditions under which the private sector operates is often fine.

In sum, governments must use their scarce resources carefully. The problem is not so much the right or wrong *level* of resources deployed by the government, but rather the particular way these resources are deployed.