

Dynamic Cities as Engines of Growth



As countries move through the development process, agriculture declines as a share of gross domestic product (GDP), and manufacturing and services begin to dominate the economy. Goods and services are often produced most efficiently in densely populated areas that provide access to a pool of skilled labor, a network of complementary firms that act as suppliers, and a critical mass of customers. For this reason sustained economic growth is always accompanied by urbanization (figure 6.1).

Globalization and localization have not diminished the importance—or the pace—of the urbanization process. Globalization promotes economic growth, which is the driving force behind urbanization. But communication and information technologies now allow firms to market their goods in distant countries and to incorporate into their production chain firms located halfway around the world. If globalization is lauded precisely because of its ability to make great distances seem much smaller, why does urbanization remain such an important trend?

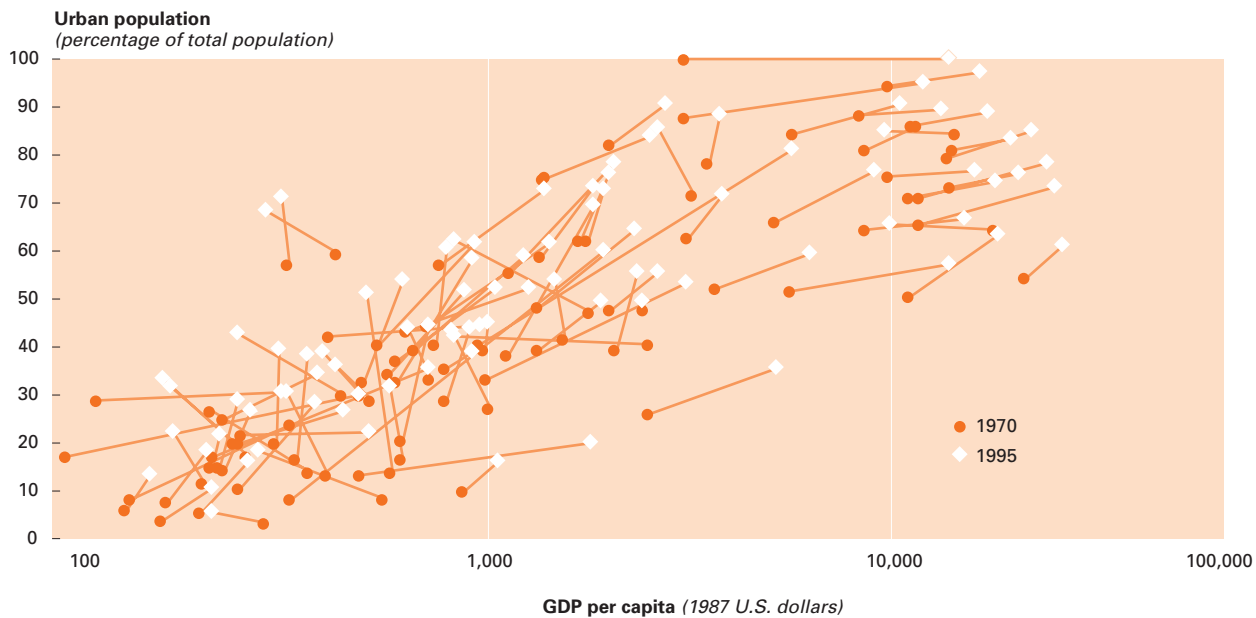
Although globalization opens up new possibilities for linkages around the

world, it also reinforces certain advantages of proximity. Firms competing in the global economy (and their suppliers) still benefit considerably from access to a sizable pool of labor, materials, services, and customers. As a result, globalization is likely to contribute to further urbanization. This is particularly true in developing countries, where access to the opportunities offered by globalization is much greater in cities.

The growth of urban populations in both large capital cities and smaller municipalities feeds demand for increased localization of political power. It puts pressure on national institutions of governance and encourages them to take the steps toward decentralization discussed in chapter 5. It makes the success of decentralization perhaps even more important. When urban governments have the power and ability to enact a development agenda, they can help the citizens of their cities hook up with the global economy. These cities then become reliable links in the global production chain and attractive destinations for foreign investment.

Urbanization is integral to development, but it also presents difficult chal-

Figure 6.1
Urbanization is closely associated with economic growth



Note: Sample includes industrial and developing countries for which data are available. The figure shows progress from 1970 to 1995 in each country. *GDP per capita* is on a log scale.

Source: World Bank, *World Development Indicators*, 1998.

lenges. This chapter reviews the economic forces underlying urbanization and discusses what national governments can do—and should not do—if they want to foster urban economic growth. Chapter 7, in turn, focuses on what makes cities livable, including essential services like housing, sanitation, and infrastructure.

What makes cities grow?

Healthy, dynamic cities are an integral part of sustained economic growth (box 6.1).¹ As countries develop, cities account for an ever-increasing share of national income. Urban areas generate 55 percent of gross national product (GNP) in low-income countries, 73 percent in middle-income countries, and 85 percent in high-income countries. The growth sectors of the economy—manufacturing and services—are usually concentrated in cities, where they benefit from agglomeration economies and ample markets for inputs, outputs, and labor, and where ideas and knowledge are rapidly diffused.²

The way cities manage development, including the arrival of industries, goes far in determining the rate of economic growth. Urban governments can foster economic development, or they can slow it down. Exam-

ining the urbanization process—the agglomerative forces and locational inducements that shape cities—is a useful way of identifying what role governments should play.

Agglomeration economies—the source of urban efficiency

Why is economic activity concentrated in urban areas, where land prices are often 50 to 100 times higher than they are 30 or 40 miles away? Why do so many individuals and firms settle in large metropolitan areas where the cost of living is typically twice as high as it is in smaller urban areas?³ The answer must be that these costs are more than offset by the economic benefits cities offer—benefits that are generally the result of agglomeration economies.

Agglomeration increases the productivity of a wide array of economic activities in urban areas. Productivity rises with city size, so much so that a typical firm will see its productivity climb 5 to 10 percent if city size and the scale of local industry double.⁴ Urban wages are also higher than rural wages—two to four times as high in middle-income countries—reflecting the higher

Box 6.1**Cities and urban areas: some definitions**

This report uses the terms *cities* and *urban areas* interchangeably. The formal definition of urban areas describes them as concentrations of nonagricultural workers and nonagricultural production sectors. Most countries call settlements with 2,500–25,000 people urban areas. The definition varies from country to country and has changed over time. If the criteria China used in its 1980 census had been applied to its 1990 census, the country's urbanization rate for the 1980s would have been more than 50 percent—far more than the 26 percent produced by the more rigorous approach used in 1990. A city has a certain legal status (granted by the national or provincial government) that is generally associated with specific administrative or local government structures. In most countries large urban areas are referred to as *metropolitan areas* because they encompass a geographic area of human settlement (that may include legally defined cities) within which residents share employment opportunities and sets of economic relations.

Source: Mills 1998; UNCHS 1996.

productivity levels obtained from urban agglomeration economies.⁵

Urban areas have historically been more efficient than rural areas because cities had markets for inputs and outputs big enough to support good-sized plants and thus could take advantage of economies of scale. In smaller towns the economies of scale such plants provided were offset by high transportation costs to consumers or from input sources. The relationship between plant size and city size has all but disappeared, however. Transportation costs have also declined (and become much less important) as services and light industries increasingly dominate the world economy.

In a modern economy the benefit of the kind of proximity urban areas offer is that firms, regardless of size, are able to experience economies of scale and scope. The presence of a common pool of labor, materials, and services allows large and small firms alike to profit from scale economies. Economies of scope emerge when the presence of one activity makes carrying out a complementary activity cheaper by fostering diversity in supply and specialization among firms.⁶ Proximity also facilitates the diffusion of knowledge. Firms operating in proximity to each other benefit from information spillovers, in some cases by observing what neighboring firms are doing. Evidence from patent citations shows that information flows actually deteriorate

rate with distance.⁷ When firms are concentrated in cities, transaction costs also fall, most notably the search costs involved in matching workers with employment opportunities.

Agglomeration economies come in various forms. Benefits that derive from firms locating close to firms in the same industry are known as *localization economies*. Benefits that derive from proximity to many different economic actors are known as *urbanization economies*. Evidence from Brazil and the Republic of Korea shows the benefits of localization economies. If a plant moves from a location shared by 1,000 workers employed by firms in the same industry to one with 10,000 such workers, output will increase an average of 15 percent, largely because the pool of specialized workers and inputs deepens.⁸ Whether an industry benefits most from urbanization or localization economies depends on how innovative it is. New, dynamic industries are likely to locate in large urban centers where they can benefit from the cross-fertilization provided by diverse actors. Older, mature industries concentrate in smaller, more specialized cities, where congestion costs are low and localization economies can be high.

A final benefit of agglomeration in large urban areas is that these locales are less vulnerable to economic fluctuations because of their diversified economic base. Employment can flow from one sector to another, keeping average unemployment low.⁹ The number and variety of consumers offer firms some protection, allowing them to apply the law of large numbers to inventory management (a practice that results in substantial savings). For consumers, large cities provide a variety of services and shopping and entertainment opportunities. Rural areas can tap into these benefits by building links to the urban sector (box 6.2).

Systems of cities

Although productivity is higher in large metropolitan areas, almost 65 percent of the world's urban residents continue to live in small and medium-size cities (figure 6.2). This pattern reflects the degree of agglomeration that works best for firms and industries and the kinds of benefits agglomeration provides. Large metropolitan areas provide some firms with enough benefits to justify the high labor and land costs. But other industries find smaller cities more lucrative bases. Economies can support a range of cities of different sizes and the accompanying variations in production patterns. And the effects of city size on workers are often minimal. A typ-

Box 6.2 Rural-urban linkages

Thinking on the links between urban and rural development has changed in the past 50 years. In the 1950s urbanization was considered a desirable alternative to rural overcrowding, particularly in densely populated areas where the prospects of raising agricultural productivity seemed limited. Manufacturing was seen as a key to growth. But manufacturing often failed to produce enough jobs for rural migrants to cities. As a result, governments worried about the rising number of underemployed in large cities and sometimes tried to restrain rural-urban migration—a policy that had the effect of lowering the migrants' welfare.

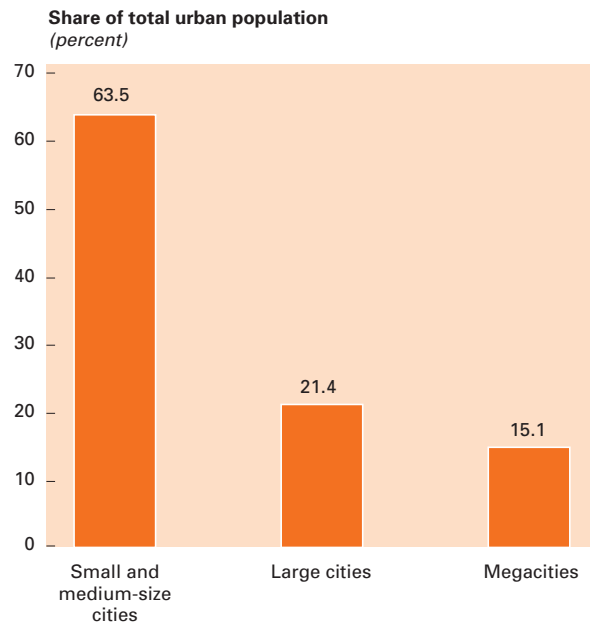
In principle, urban and rural economies can enjoy a symbiotic relationship. Cities benefit when agricultural productivity increases. Growing rural areas provide new, important markets for urban services and manufactured goods. Mechanization and the use of fertilizers, pesticides, and herbicides spur demand for these products. A boom in commercial agriculture boosts demand for marketing, transportation, construction, and finance, which urban centers often provide. In Africa every \$1 of additional output in the agricultural sector generates an extra \$1.50 of output in the nonfarm sector. In Asia that figure is \$1.80.¹⁰

Rural areas also benefit from the growth of cities. Nearby cities provide ready markets for agricultural products such as vegetables and dairy products and for rural nonfarm output. Rural industries often supply parts and components to nearby urban manufacturers. Urbanization can also help raise rural productivity through technology transfers, educational services, and training.

ical worker is generally as well off in a small city with low wages and low living costs as a worker in a large urban area where wages and living costs are as much as 100 percent higher.¹¹

The biggest metropolitan areas provide a large, diverse economic base for modern service and other innovative industries that derive important benefits from such an environment. In contrast, small and medium-size metropolitan areas tend to specialize in the production of goods that are exported outside the city, focusing on a single standardized manufacturing or service area such as primary metals, food processing, textiles, pulp and paper, machinery, or transportation. By specializing in one set of activities, smaller metropolitan areas exploit localization economies while conserving on the congestion costs that affect larger cities. Specialized cities grow with the economies of scale and local intermediate input linkages their activities generate, and with the size of regional markets and city-specific amenities.

Figure 6.2
Most of the world's urban population lived in small and medium-size cities in 1995



Note: Megacities are cities with populations over 5 million. Large cities are cities with populations between 1 million and 5 million. Medium-size cities are cities with populations between 0.5 million and 1 million. Small cities are cities with populations less than 0.5 million.

Source: UNDIESA, *World Urbanization Prospects*, 1998.

The dynamics of city formation

The relationship between a country's industrial organization and its system of cities helps explain emerging patterns of urbanization. During the early stages of industrialization in most developing countries, modern industries—particularly in sectors that are influenced primarily by the location of consumers—often cluster in one or two large metropolitan areas. The first site for agglomeration is usually the national capital (Bangkok, Bogotá, Jakarta, Mexico City, Seoul, and Suva, Fiji) or a large city near the coast (Calcutta, São Paulo, and Shanghai). This clustering saves on scarce resources and helps industries cope with initial shortages of skilled labor, technical knowledge, business and financial services, and modern telecommunications and transportation infrastructure. For foreign investors and industrial exporters, the national capital may be a prime location for entering the country and the best place to find modern services. Capitals have the added advantage of proximity to government decisionmakers and regulators.¹²

As industrialization proceeds, manufacturing activities begin to move to smaller cities outside the capital. This shift occurs because congestion costs increase and because, to some extent, the benefits of agglomeration decrease as production standardizes in mature plants. The spread of effective telecommunications and transportation, the devolution of bureaucratic processes to local governments, and the opening of capital markets also encourage the movement of industries out of major cities (box 6.3).

In the future, the forces of globalization, including trade liberalization and financial integration, will continue to reinforce the importance of urban agglomeration economies. Because international firms and investors seek low-cost, accessible locations for their plants, localized production networks will be essential to a country's global competitiveness.¹³ Manufacturing is placing increasing emphasis on high effective capital-labor ratios and light, high-tech materials, often in connection with intermediate service inputs such as software, programming, and engineering services that can be supplied at a distance. Sydney's transformation into a global city between 1971 and 1991 translated into a 25 percent increase in employment creation as well as a radical shift toward financial and business services.¹⁴

Openness to the world economy will increase the volatility of urban economies and heighten competition among cities within the same country. Cities that are able to exploit a comparative advantage in global tradables will thrive, but those that have depended on protected industries will struggle.

Technological change has enhanced agglomeration economies in the past and should continue to do so in the future. Commuter rail transportation, automobiles, and metropolitan highway systems have all contributed to urban growth in industrial economies during the 20th century. In the future, local human capital and the accumulation of knowledge will also affect city size. Estimates for 1940–90 suggest that an increase of one standard deviation in the percentage of college-educated residents in a U.S. city is associated with a 20 percent increase in size, even after accounting for growth trends and specific city characteristics.¹⁵ Recent evidence suggests that telecommunications is a complement to, rather than a substitute for, face-to-face interaction.¹⁶ In a world of extraordinary technological gains, one of the most effective mechanisms for transmitting knowledge and conducting business may still be geographic proximity.

Box 6.3
The dispersal of industry in Korea

Urbanization in Korea has meant that the proportion of the population living in Seoul has grown steadily. But this statement does not take into account the decline in Seoul's primacy in the country's system of cities and its manufacturing structure (see table). Seoul is growing, but other Korean cities are growing faster. Even more dramatic is the exodus of manufacturing employment from metropolitan Seoul to surrounding suburban areas. In 1970 three-quarters of provincial manufacturing employment was in metropolitan Seoul, but by 1993 the percentage had fallen to one-third. Industry began moving out of Korea's major metropolitan areas—Seoul, Pusan, and Taegu—and their satellite cities in the mid-1980s. The share of other cities and rural areas in national manufacturing employment rose from 26 to 42 percent between 1983 and 1993.

Policy changes were responsible for this trend. In the 1970s the government initiated policies designed to encourage the decentralization of industry from metropolitan Seoul. Key elements of these policies included financial incentives to relocate, direct relocation orders, and the construction of industrial parks. Despite the natural market forces that were encouraging firms to leave Seoul (including high wages and rents), these initial policies had little immediate effect. Strong government regulation and the associated red tape made plants unwilling to locate more than a 45-minute drive from the capital. Within that zone, only a few successful industrial parks existed.¹⁷

Ultimately, three developments sparked the move out of Seoul, Pusan, and Taegu. First, Korea liberalized its economy in the early 1980s, reducing the red tape tying industries to Seoul. Second, the government reinstated local government autonomy in 1988, enabling local authorities to hold elections and assess and collect taxes. Third, the government invested heavily in communications infrastructure and roads outside Seoul and Pusan—and has continued to do so.

The primacy of metropolitan Seoul
(Seoul as a percentage of national total)

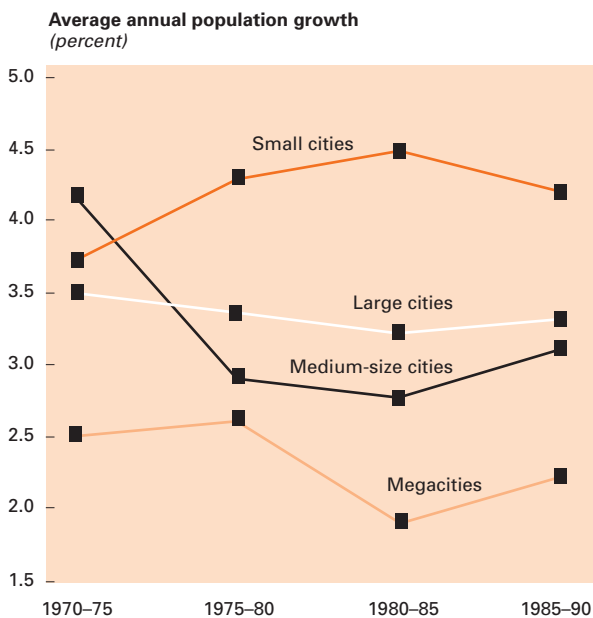
	1960	1970	1980	1990
National urban population	34	41	38	33
National population	9	17	22	25
Manufacturing	21	14

.. Not available.

Source: Henderson, Lee, and Lee 1998; Henderson 1998.

Most of the world's urban population will remain in small and medium-size cities, since they are growing faster than large urban areas (figure 6.3). But sizes are relative. In 1970 a medium-size city was defined as one with a population of anywhere from 250,000 to

Figure 6.3
Small cities had the fastest growing populations, and megacities the slowest, from 1970 to 1990



Note: Megacities are cities with populations over 5 million. Large cities are cities with populations between 1 million and 5 million. Medium-size cities are cities with populations between 0.5 million and 1 million. Small cities are cities with populations less than 0.5 million.

Source: UNDIESA, *World Urbanization Prospects*, 1998.

500,000. Today a medium-size city is defined as one with a population closer to a million. The same is true for large cities. In 1950 the average population of the world's 100 largest cities was 2.1 million, but by 1990 it had reached more than 5 million. In 1800 it was only about 200,000.¹⁸

The number of cities will also continue to grow. In 1900 the United States had 75 metropolitan areas, which were defined as areas with a population of over 50,000. Today the number of metropolitan areas has reached almost 350. As these urban centers grow, the number of very large agglomerations will also increase. In 1970 some 163 metropolitan areas worldwide had more than 1 million people. Today there are about 350 such areas. Having more metropolitan areas in a country means having more centers of political power that feed the forces of localization and raise the stakes for good urban governance.

The national government's role in urbanization

National governments have often tried to influence the pace or location of urbanization. Often these efforts

consisted of shifting resources from agriculture to finance the expansion of "modern" economic sectors—usually manufacturing—which were concentrated in cities. Urban workers in the formal sector benefited from food and housing subsidies and government-sponsored unemployment and pension schemes, while rural populations received low prices for their crops and had little access to government support. Such misplaced efforts are part of the reason Africa has seen urbanization with very little economic growth (box 6.4).

In other cases governments, alarmed at the growing population of ill-housed and underemployed citizens living on the periphery of cities, have attempted to halt urbanization. In Indonesia squatters were rounded up and trucked back to the countryside. In China, the Soviet Union, and Vietnam a system of permits restricted rural-urban migration. And in India industrial

Box 6.4 Africa: urbanization without growth

Urbanization is typically associated with rising per capita income. This pattern has held true in Europe, Latin America, and—more recently—much of Asia. Africa has been the exception.

Between 1970 and 1995 the average African country's urban population grew by 4.7 percent annually, while its per capita GDP dropped by 0.7 percent a year. This negative correlation between urbanization and per capita income is unique, even among poor countries and economies with low growth rates. Industrialization did not accompany the boom in urban growth. Only 9 percent of Africa's labor force is employed in industry, compared with 18 percent in Asia, which has seen comparable rates of urbanization. Cities in Africa are not serving as engines of growth and structural transformation. Instead, they are part of the cause and a major symptom of the economic and social crises that have enveloped the continent.¹⁹

Africa's pattern of "urbanization without growth" is in part the result of distorted incentives that encouraged migrants to move to cities to exploit subsidies rather than in response to opportunities for more productive employment. African cities were the beneficiaries of food pricing and trade policies that favored urban consumers over rural producers. While the structural adjustment programs initiated in the mid-1980s removed many of these distortions, they have already contributed to excessive levels of rural-urban migration over prior decades. Worsening physical or economic security in rural areas may also be pushing the migration to the relative safety of cities. Over the years, wars and civil unrest have led millions in Angola, Liberia, and Mozambique to flee to cities. In Mauritania, Nouakchott's population doubled during one drought year in the mid-1980s.

firms were essentially prohibited from locating new plants in or near large cities.

Policies to stem urban population growth have largely failed. Indonesia's effort to evict migrants did not succeed and was later abandoned. Substantial internal migration occurred in China, the Soviet Union, and Vietnam despite controls on population movements. These efforts did, however, impose significant costs on both migrants and the economy. An overwhelming body of evidence shows that when the poor migrate, they are responding efficiently to economic incentives—notably higher wages—and generally are better off after they move. Attempts to stop migration prevent the poor from improving their economic situation and can impose other costs on migrants. Limits on migration to Dar es Salaam, for example, made the poor more susceptible to extortion by corrupt officials.²⁰

Governments have also distorted urban growth through their choice of locations for state-owned industries and by creating special economic zones—decisions that are often influenced by political rather than economic considerations. The state-owned portion of the Brazilian iron and steel industry was placed near politically influential São Paulo and Rio de Janeiro rather than near the source of raw materials in the state of Minas Gerais (where private iron and steel producers have chosen to locate). Brazil's choice to put the heavily polluting iron and steel industries in the middle of the country's largest concentration of people (Grande São Paulo) not only raised transportation costs but had high human costs as well.²¹

Countries that set up special development zones offering relaxed tariffs encourage economic activity to settle in one privileged area at the expense of others. For example, if trade liberalization is introduced in the coastal area of a country first, inland regions may find themselves permanently disadvantaged. Such policies foster dual societies, with cosmopolitan cities on the coast and disadvantaged areas in the hinterland. The coastal cities that were the early beneficiaries of China's "open door" policy have maintained their advantage, even though their special status was abolished long ago.²² Similarly, if the spread of technology or the liberalization of capital markets is confined to certain areas, these areas will have a permanent advantage over others in the country.

Bureaucratic centralization is another, more subtle form of the government-induced distortions that can influence the choice of new sites for production. Government regulations, especially rules governing import and

export licenses and capital markets, affect the economic life of firms. Central government bureaucrats like to keep tight control over the process of allocating licenses or loans. But an overly centralized allocation process causes distortions when firms are deciding where to locate production. Producers tend to locate in capital cities and other bureaucratic centers in order to be able to deal effectively with red tape.²³ In the early 1980s Indonesia liberalized capital and export-import markets, creating new opportunities for small and medium-size firms. But the dispensing functions remained highly centralized, and the concentration of small and medium-size firms in larger metropolitan areas increased.²⁴

The unhappy record of past government efforts to prevent rural-urban migration or to steer urban growth to particular locations leads to a straightforward conclusion: governments are not skilled at deciding where households and firms should locate. National governments can perform a more useful function by working to provide an environment conducive to economic growth regardless of location. Macroeconomic policies that promote price stability and national institutions that enable firms and households to make binding contracts may be the most important factors in creating a growth-oriented environment, and national governments can provide them.²⁵ In matters of location the ideal government policy is to provide a level playing field so that large and small cities and rural areas can compete fairly with each other.

Pursuing such a policy involves more than just eliminating subsidies and tax breaks, however. Many government decisions have unavoidable spatial implications, especially decisions on siting large-scale public infrastructure investments, military bases, and public enterprises. As urbanization spreads within a country, investments in public infrastructure must follow. Industrial producers in remote cities and areas outside of cities require interregional telecommunications, roads, and electricity if they are to produce competitively, move products to major markets, and communicate with buyers and sellers. The national government plays a key role in determining whether and when such investments take place. One difficulty is that centralized state-owned industries or established businesses may resist hinterland infrastructure investment for fear of competition. Another complication may be that the central government fails to understand the needs of hinterland areas. Industries in Korea began decentralizing in the late 1980s after the government made massive investments in communications and transportation

in regions outside urban centers and restored local government autonomy.

In principle, a centralized government can create a level playing field for locational decisions. In practice, however, resisting pressure to concentrate investment in the primary city requires institutional mechanisms that give other regions a voice in the allocation process. Central governments are now under pressure to decentralize decisionmaking power and resources to subnational governments, as chapter 5 discusses. In a decentralized system the central government's role with respect to urban development no longer involves eliminating spatial biases in a centrally managed system of investment allocation. Instead, the role of central governments is to provide the institutional structure for decentralization and coordination across all levels of government.

Local policies for urban economic growth

If cities are to exploit the benefits of agglomeration, they must provide an efficient and attractive place to do business. This section focuses on three cross-sectoral elements of this strategy: financing for infrastructure investment, land use policy, and municipal entrepreneurship. Chapter 7 analyzes sector-specific policies for water, sanitation, and housing.

Financing capital investment

Cities need to invest in infrastructure if they are to provide the basic services necessary for economic growth. Pressure for investment will be particularly heavy during a country's urban transition—the years of rapid urban population growth fueled by rural-urban migration. In recent decades a boom in infrastructure spending has paralleled urban growth. Absorbing the 2.4 billion new urban residents expected over the next 30 years will require further investment in housing, water and sanitation, transportation, power, and telecommunications. The need for these new infrastructure investments comes on top of the backlog that already plagues the world's cities. Providing universal coverage for water and sanitation alone in the cities of developing countries will cost nearly 5 percent of those countries' GDP.²⁶

Public or private? Not all the necessary investment financing need come from government, as several alternative sources are available. Housing, which accounts for about 30 percent of gross capital formation in many poor countries (including the on-site costs of water, sanitation, power, and access), is often funded by pri-

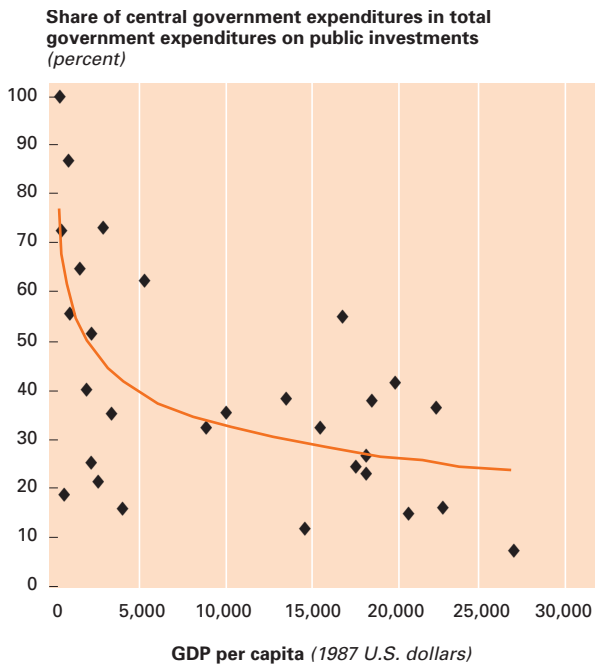
ivate sources.²⁷ In industrial countries developers are frequently required to provide on-site infrastructure. These costs are incorporated into the price of finished housing and are ultimately financed through the mortgage market. In developing countries poor and low-income households have to finance housing from current income, adding space and infrastructure as their means allow. In both cases capital is mobilized and allocated independent of the government. The private sector can also finance off-site costs of power, water, and telecommunications. In fact, private firms are increasingly signing contracts to build such infrastructure and in many instances agree as part of the deal to finance the future expansion or upgrading of networks.

Publicly financed infrastructure will still be needed, however. In the case of streets, cost recovery is difficult. In the case of social infrastructure, it is undesirable. Recent estimates for India suggest that urban investments will require public funding equal to nearly 2 percent of GDP—even though the private sector's share of infrastructure funding is expected to increase from its present level of 25 percent to 45 percent by 2006.

Central or local? In most developing countries, central governments have traditionally mobilized the resources for public infrastructure through domestic taxation and borrowing, forced savings schemes, external debt, and donor assistance. These funds have been spent directly by central government ministries or government-owned enterprises. But pressure for decentralization is changing this pattern to allow subnational politicians to make investment decisions. Sound economic arguments exist for pushing these infrastructure investment decisions to the subnational level. Centrally determined spending can produce arbitrary allocations across cities and tends to sever the links among investment, operation, and maintenance.²⁸ In contrast, municipalities that have control over investment decisions can respond to local priorities. High-income countries have apparently found this argument persuasive. The central government's share of public investment spending is generally below 50 percent in countries with a per capita GDP of more than \$5,000. Growth in GDP per capita is generally associated with a declining share of central government spending in public investment (figure 6.4).

Local governments can finance their new responsibilities in several ways. Development fees, connection charges, and local tax revenue can all generate funds that can be used for investment.²⁹ While such resources can make a significant contribution to investment fi-

Figure 6.4
As countries develop, central governments' share of public investment falls



Note: Sample includes all developing and industrial countries for which calculations could be made of the share of central government investment in total government investment in the mid-1980s and mid-1990s.

Source: IMF, *Government Finance Statistics Yearbook*, 1998; World Bank, *World Development Indicators*, 1998.

nancing, particularly in slow-growing cities, they may not be enough to finance all infrastructure investments at the peak of the urban transition. In this case debt financing may be required and can make financial sense. Roads, schools, and pipelines have long useful lives, and debt spreads out the costs over their lifetimes. But what options do local governments have for borrowing? The experience of industrial countries suggests two: municipal bonds and municipal funds.

Municipal bonds. In the United States and Canada, subnational governments rely on the bond market. Bond debt issued by subnational governments in the two countries now totals more than \$7.4 trillion.³⁰ Bond financing is possible because both countries have well-developed capital markets, and their history of macroeconomic stability has made private investors willing to make the long-term financial commitments infrastructure investment requires. Investors are familiar with and have confidence in the laws and proce-

dures governing defaults and bankruptcies. Public disclosure guidelines and market intermediaries (such as credit-rating agencies and bond insurers) help investors process information on the risk of their investments. And local governments have both well-established financial track records and the autonomy to respond to changing financial circumstances rather than simply defaulting.

In many developing countries, few of these conditions exist. Long histories of macroeconomic instability make long-term financial commitments extremely risky. Information on potential borrowers is unreliable. The legal framework needed to provide investors with recourse in cases of default is underdeveloped and often untested. Municipal governments in these countries are viewed—often correctly—as particularly unattractive borrowers because they lack the autonomy to raise revenues or reduce spending, particularly on personnel. Moreover, local governments often have no credible political commitment to long-term financial obligations. Under these conditions, even if long-term private capital is available, local governments generally can borrow only at a very high rate of interest, if at all.

Despite these shortcomings, municipal bond markets are emerging in many developing countries. In Latin America 52 municipalities and provinces accessed capital markets between 1991 and 1998.³¹ Asia's local bond market is estimated at \$477 billion. All Czech cities with more than 100,000 people have issued municipal bonds, enabling the investment share of Czech municipalities to remain at more than 38 percent of their budgets, despite deep cuts in central government capital transfers. Standard and Poor's has given Prague and Ostrava "A" ratings for foreign currency bonds. Poland, Russia, South Africa, and Turkey also have municipal bond markets.

Emerging municipal bond markets have an indifferent track record. Much like the U.S. bond market in the 19th century, the initial years have been marked by defaults. Ankara and Istanbul have both defaulted on their bond debt, and many Brazilian states have either defaulted or had their debts taken over by the national government (see the case study on Brazil in chapter 8). However, governments are taking measures to increase investor confidence. Poland, for example, is considering both legislation on a municipal bankruptcy law and controls on the volume of subnational debt.

Municipal funds and banks. The other source of long-term financing in industrial countries is the municipi-

pal bank or the municipal development fund (MDF). These have a long and successful history in Western Europe. European MDFs (Crédit Local de France, the Spanish Banco de Crédito Local, and the British Public Works Loans Board) were founded to address the unwillingness of private capital markets to provide long-term credit to small municipalities. In their initial years, many such funds were financed by the central government. In effect, central governments used their excellent credit ratings to raise money cheaply in capital markets and then lent the proceeds to municipalities through MDFs. More recently, MDFs have sprung up throughout the developing world.

Under an MDF the central government bears the ultimate risk of municipal default. Some governments have responded to this risk by behaving as diligent investors, insisting on prudent lending standards and strict repayment schedules. When central governments do not impose such standards, levels of default are high. One mechanism for encouraging governments to act as prudent investors is to dilute their exposure with some private participation. Under Colombia's FINDETER program, private banks originate all municipal loans and bear the full risk of default. The government functions as a second-tier bank, providing liquidity without assuming risk. As a result the government is exposed only to the risk that the originating bank itself will fail. The Czech Republic operates a program along similar lines.³² And many of the European MDFs have shifted to market sources to finance their operations and are now in the process of privatizing.

Conditions in individual countries determine whether the bond or the bank approach makes more sense. Both can operate simultaneously, as they do in the United Kingdom. The challenge is not to choose between them, but rather to establish an environment that gives local governments the opportunity and incentive to become worthy borrowers. Such an environment emphasizes a stable macroeconomy, a legal framework that defines the rights and remedies of lenders and borrowers, and the creation of a supply of creditworthy borrowers. Central governments especially need to concentrate on the legal framework affecting municipal borrowing, including bankruptcy procedures for municipalities. They need to take measures to forestall pressure for government bailouts (see chapter 5). Finally, they need to do their part to enhance municipal creditworthiness by stabilizing intergovernmental transfers and scaling back unfunded mandates and regulations that limit local governments' flexibility in making spending decisions.

Local governments, for their part, can improve their attractiveness to borrowers by instituting accounting, auditing, and disclosure practices that are compatible with international standards. They can also improve the quality of their collateral by allowing central governments to deduct debt service directly from intergovernmental transfers or by using a specific tax or other revenue source to pay debt service. Loan contracts can specify that debt service will receive priority, prohibit new borrowing backed by the same revenue source until the debt is retired, or both. Actions, however, are more persuasive than words. The most convincing evidence a local government can offer potential lenders is a long, unblemished credit history.³³

Land use

Firms and households must be able to make efficient decisions about where to locate within cities. Freedom of mobility, or the lack of it, profoundly affects urban economic growth. Agglomeration economies, by definition, require proximity—firms to firms, households to places of employment. The ability of firms and households to sort themselves into efficient location patterns requires an active real estate market in which land prices reflect the different economic values of various sites (box 6.5).

Governments regulate the operation of land markets in several ways. The most extreme approach is to ban the real estate market entirely and make location decisions by fiat. Cities in the former Soviet Union and in Eastern Europe were laid out in this manner. In market economies, zoning is the most common mechanism for controlling land use. Zoning typically assigns various uses—residential, retail, commercial, industrial, and mixed—to land in different parts of the city. It may also dictate the intensity of use by imposing maximum or minimum limits on lot sizes, floor space, or floor-area ratios. Zoning is intended to coordinate private configurations of land use with the public portion of the market, where the roads and ports are. It is also intended to minimize externalities across uses by, for example, isolating landfills from residential areas.

Even zoning can be taken too far, however. If manufacturing is isolated from residential areas, commuting becomes difficult and expensive for industrial workers. Excessively high standards for residential development drive up housing costs and force low-income households to locate far from job centers. Zoning can also be too static. Cities change, but redrafting land use plans can be a slow process. In the mid-1970s Malaysia

Box 6.5
City development and land markets

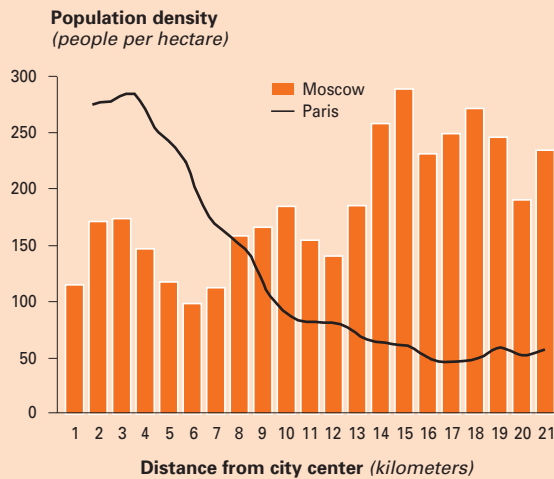
Most cities of the world have a common spatial pattern of economic activity. Most of the activity is densely packed near the city center and declines with distance. Commercial activity agglomerates at the city center in skyscrapers because of scale economies (from information exchanges and spillovers) and low transaction and transportation costs. Public transportation systems and utilities also operate more efficiently in high-density areas. Some households, especially those without children, cluster near the city center in high-rise apartments to minimize commuting time to work and downtown entertainment. Land prices reflect these density patterns, decreasing as the distance from the city center increases. High land prices near the city center mirror the many advantages of living there and the corresponding demand for office, housing, and retail space. Low land prices further out reflect the comparative disadvantages of reduced benefits from economies of scale and the long commuting times. Market forces thus tend to push cities toward an efficient pattern of land use, one that is (in the ab-

sence of geographic obstacles) less intense as the distance from the city center grows.

In Paris residential population density declines steadily with distance from the city center. Land prices follow the same pattern. However, Moscow appears to violate the common pattern: its density gradient is upward, not downward. But Moscow's densities were determined not by market forces but by planned allocations that did not recognize either the benefits of central locations or the demand for them.

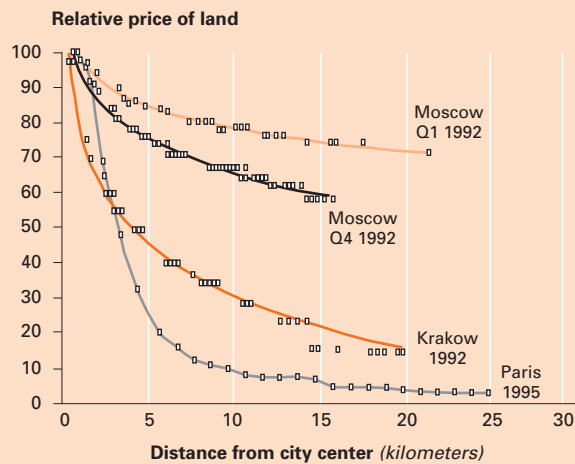
Market pricing is likely to change the pattern of land use in socialist cities. The price gradient for land in Moscow, which was relatively flat in the first quarter of 1992, had already begun to steepen two quarters later. Krakow, having opened land to market pricing somewhat earlier, has a considerably steeper land price gradient. As market forces take hold, both cities are likely to take on the steeply sloped density gradients of efficient Western cities, where economic activity clusters at the core areas.

In Paris population densities fall as the distance from the city center increases; in Moscow, densities increase



Source: Bertaud and Renaud 1997.

Land prices in Moscow and Krakow are beginning to look like those in the West



Source: Bertaud and Renaud 1997.

adopted the Town and Country Planning Act of Britain and Wales, imposing a rigid planning system developed for a slow-growing country on a fast-growing economy. The impact was immediate. The supply of housing in Kuala Lumpur became inelastic, and housing prices climbed at two to three times the rate of economic growth, reaching five to six times the average annual income. In Bangkok, where zoning regulations are more liberal, housing prices are only two to three times the average annual income.³⁴

Governments also influence the location of economic activity through their control over public land and transportation systems. Up to half of urban land is in the public domain, including roads, highways, sidewalks, parks, and public buildings and facilities. The way the government chooses to use the public portion of urban land determines the spatial configuration of a city: where industry locates, how congested the city is, how dense neighborhoods are, and how the city will develop. Cities expand through progressive additions of

transportation corridors and ring roads that allow economic activity to spread out in more or less concentric circles. Failure to expand transportation facilities delays the movement of people and industry from city centers to suburbs, resulting in exceedingly dense core cities with poor living conditions and noncompetitive land and wage costs. When Jakarta finally built toll roads into the immediate surrounding countryside in the late 1980s, population density in the city center fell from 42,000 people per square kilometer in 1980 to 30,000 in 1990. Meanwhile, the suburbs around Jakarta, where wage costs were 25 percent lower than in the city center, increased their share of the metropolitan area's formal manufacturing employment from 44 percent in 1985 to 65 percent in 1993.

Governments influence the efficiency of land use in a third way: through their role as a repository of claims to land ownership. Well-functioning land markets require clear title arrangements and a well-kept land registry, so that ownership rights are clearly established and all transactions are recorded. The lack of such arrangements hinders private (re)development by jeopardizing the gains developers and individuals expect when they improve land. When a city has an informal sector where land use rights are insecure, redevelopment becomes even more difficult. Finally, urban planners need up-to-date information on land use and transactions in order to design and implement effective land use plans.

Municipal entrepreneurship

In 1996 senior officials of the Indian state of Gujarat went to the World Economic Forum and wooed the chief executive officer of General Motors, convincing him that Gujarat was a suitable location for a plant. At the beginning of the 1980s two U.S. states had trade offices abroad; by the end of the 1980s, 40 did. Today more U.S. states have trade offices in Tokyo than in Washington.³⁵ In a world characterized by increased globalization and urbanization, subnational governments are marketing their jurisdictions abroad, aiming to catalyze opportunities for innovation and cooperation. Can city governments become strategic brokers that influence their city's—and even their country's—position in the global urban hierarchy? With appropriate planning and support, the answer seems to be yes (box 6.6).

Some argue that cities need this kind of municipal entrepreneurship in order to seize the new opportunities offered by globalization and localization and to cope with the attendant challenges. But others fear that in-

creased competition within regions is causing cities to enter a race they cannot win, in which urban governments offering lavish and costly incentives to “footloose” investors force other local governments to follow suit. Such corporate welfare is estimated to cost several billion dollars annually in the United States, where examples abound of states and cities providing massive subsidies that seldom lead to new jobs. In Philadelphia, Pennsylvania, the city and state have provided \$426 million in subsidies to Europe's largest shipbuilder just to retain existing jobs. In Ohio one city government spent \$156,000 for each of the 180 jobs a General Motors plant created.

One intellectual justification for such subsidies is the infant industry or scale economy argument, which supports subsidizing a line of industrial activity until it achieves sufficient local scale to be viable. But if all cities in a region adopt this strategy and begin offering excessive subsidies, they may well wind up with the same industrial base they would have had without the subsidies. An obvious policy solution is a national agreement to harmonize or cap subsidies. Although such agreements are rare, they may become more common, given the recent bad press on local subsidies in the United States and related debates in the European Union.

Even without regional agreements to limit industrial incentives, international trade agreements are limiting the scope for such incentives.³⁶ The agreement on subsidies and countervailing measures adopted as part of the General Agreement on Tariffs and Trade (GATT) in 1993 prohibits any domestic subsidy that could displace imports in domestic markets or other countries' exports in international markets. Subsidies are defined according to the benefits they confer and the geographic area or industry they target. This agreement may keep local governments from offering subsidies to specific industries within their jurisdiction or using tax breaks to attract particular firms. By connecting local economies more fully to the global economy, globalization may expand the ability of trade agreements to limit such local industrial subsidies. Recent cases such as the one brought against Nova Scotia, Canada, for incentives it offered to a tire plant show how the GATT agreement has made state and local governments vulnerable to retaliatory actions initiated by foreign countries.

In the debates over subsidizing industry, both politicians and the public too often forget that the inputs most relevant to economic development are often beyond the control of local governments—labor costs and skills, natural resources, climate, and energy prices.³⁷ Business sur-

Box 6.6**Regionalism and local economic development: lessons from Europe**

The 1980s saw the demise—at least in Europe—of top-down industrial policies and their spatial correlate, regional economic development policies. By the early 1990s not a single national industrial policy initiative could be identified in Europe, and nationally determined regional policies were scarce.

Two factors explain the demise of centrally issued regional policies. First, they had a record of picking industrial lame ducks. Second, regional governments resented national policies aimed at their economies, complaining that local authorities were rarely consulted. The result has been a drop in spending on local development initiatives but greater regional input on how such funding is used.

The increased involvement of regions in development initiatives did result in some bidding wars to attract firms, but it also led to strategic improvements. Ireland is a good example of these changes. The Irish program emerged from the national economic crisis of the mid-1980s, which was characterized by severe long-term unemployment and attendant social ills. The central government's efforts to deal with the crisis were clearly not working, and budgetary pressure was forcing a reconsideration of social policies.

Out of this dilemma came the new Irish "social partnership," which created decentralized centers for the unemployed managed by boards composed of representatives of local governments, training agencies, and the office of the prime minister. The centers serve as vehicles for retargeting social assis-

tance to focus on the most vulnerable groups, increasing the resources available for economic development. To complement the centers, the government fostered partnerships in the same areas (and in rural areas) with a mandate to enhance the competitiveness of local firms by making residents more employable. Finally, with the support of the European Union, the government created county enterprise boards that allocated project grants locally using criteria set at the national level.

Despite some weaknesses, the Irish partnerships are generally considered successful. The keys to their success are:

- Their ability to draw directly on local resources, so that the experience of local businesspeople provides the foundation for enterprise creation and the unemployed themselves set up programs targeting the jobless
- Their ability to adapt the objectives and resources of state agencies to local needs
- Their capacity for improving the targeting of social welfare—and thus the cost-effectiveness of providing it.

Part of the reason for the success of Ireland's local partnerships is that they developed in a period of economic expansion. But their successes are proof that practical, positive area-based programming and public-private partnerships can work.

Source: Cooke and Morgan 1998; Sabel 1998.

veys suggest that entrepreneurs care about operating costs and conditions most, followed by quality of life. Transportation costs and wages are generally cited as the most important, followed by utility and occupancy costs. Among the public services that matter are transportation and safety. Taxes matter only at the margin in choosing among similar locations.³⁸ A municipality's economic development efforts should focus on efficiently providing the services it is responsible for and easing red tape and excessive regulation.

A possible role for municipal activism does remain, however. The efforts of local governments to promote industrial development can be successful and cost-effective if they focus on broad policies designed to form a critical mass for specific industries and not on firm-specific benefits. Sectorwide strategies are more likely to create a competitive advantage because they "cluster" activities that can lead to agglomeration economies. For example, local governments can develop training initiatives adapted to local economic conditions and comparative advantages. France and Italy are decentralizing vocational training on the theory that local governments are best suited to working with local

firms and workers' unions to identify needs and create potential partnerships. Arrangements among local governments, employers, and unions aimed at providing vocational training facilitate these efforts. In Penang, Malaysia, the Penang Skills Development Center brings together representatives of industry, state and local government, and academia to bridge the gap between formal education and the job skills the area's top investors require. Similarly, the Skill Development Councils of Karachi and Lahore (Pakistan), composed of provincial and federal government representatives, employers, and workers' representatives, are successful forums that serve as links between industry and training providers.³⁹

What institutional arrangements are most likely to produce successful local development policies? Leadership is important, but it can emerge from many sources, either private or public.⁴⁰ A forum is needed within which the private and public sectors can communicate with each other and define a common goal or vision for a city. Such a forum requires the support of a common base of information (box 6.7). Different cities have different forums and institutional arrangements that range from formal chambers of commerce

Box 6.7**Know thy economy: the importance of local economic information**

A city can judge the appropriateness of regulations only if it has reliable information on its economy and spatial organization. This lesson holds true whether the issue is deciding which growth-hampering regulations to eliminate or which growth-friendly regulations to implement during the urban transition. For example, the spatial organization implicit in a zoning plan is often hidden because zoning is usually the result of parcel-by-parcel negotiations. Few cities have an overall schematic zoning map. When Krakow conducted an overall review of its city zoning plan, it found that while the stated objective was to promote a compact city with few suburbs, the plan's constraints on land use and its tendency to reinforce existing land use patterns were actually blocking this goal.⁴¹

Regional analysis can help identify infrastructure investments that will improve integration between cities and nonurban areas, increase access to national and global markets, and contribute to regional prosperity. A regional economic analysis pointed out that for more than 30 years investment in Senegal's river delta had focused on rice farming—apparently because many believed that rice farming was the source of the region's growth. Yet rice farming has never generated more than 4 percent of the region's gross local product despite absorbing three times that amount in foreign aid in the 1990s. Meanwhile, the regional capital stagnated (along with the region) because its port and local transportation infrastructure were never properly developed.

A common base of facts promotes a constructive debate on municipal development and facilitates consensus around a local development strategy. Without a common factual base, the debate can be frustrating and inconclusive. At a conference organized by Durban, South Africa, to design an economic development strategy, all the speakers had been hampered by the

paucity of data, and each had spent precious time gathering information that was often outdated and not always consistent or comparable. Unsurprisingly they found it difficult to place their work in context and to establish cross-sectoral priorities.⁴²

In most countries the needed information is available through completed censuses and surveys, and the amount of work required to compile the information is manageable and affordable. A modest investment of time and money supported the collection of information for estimating and analyzing regional accounts in several West African regional capitals. Data came from the national census office, trade bureaus, and elementary surveys.⁴³ New technology has made it easier and cheaper to process data and understand its spatial implications.

If the information exists, why is it so difficult to access? Most cities have local planning offices or economic bureaus whose role is to collect and process statistical information about the city. But the census and survey data routinely collected at the national level are typically not available to local offices, at least not in a readily usable form. In other cases local offices collect basic demographic and production statistics. But these data are transmitted directly to the national capital and are not analyzed locally, either because local economic officers do not have the skills or resources or because the city's decisionmakers do not demand the information.

The key is to establish a structure to ensure that local development strategies and investment plans are based on good information. Regions can contract out the tasks of analyzing and compiling data or develop partnerships with groups that can help collect the necessary information, such as local universities, national statistical institutes, chambers of commerce, and trade institutes.

and municipal commissions to informal ad hoc commissions organized around a single vision or project. Whatever its structure, the forum needs to have the powers and means necessary to collect and process reliable information on the local economy.

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In economic terms, what is good for a country is good for its cities. If the political, legal, and macroeconomic conditions for nationwide economic development are

in place, urban economies are likely to grow. National governments will find it best not to attempt to stop or direct internal migration, since such efforts inevitably fail. Local governments can facilitate urban economic growth in their areas by investing in trunk infrastructure and fostering an open land market. But the key role of local government in economic development is to provide the basic infrastructure and public services needed to create an attractive environment for both businesses and households.