

Facets of Globalization

*International and Local
Dimensions of Development*

*Edited by
Shahid Yusef
Simon Evenett
Weiping Wu*

The World Bank

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The World Bank
Washington, D.C.

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Preface

The team responsible for the *World Development Report 1999/2000* commissioned a number of papers to map the major fields covered in the report. The purpose of this was to synthesize significant findings from recent research and to explore issues that were likely to loom large in the early 21st century. These papers by leading specialists were reviewed at workshops in Washington D.C., Tokyo, and Singapore and served as some of the building blocks for the report. However, from the outset we saw these papers as having a life of their own—independent of the report—so that all those with an interest in local and global dynamics could draw upon the ideas and information presented in them.

This companion volume to the *World Development Report* contains a selection of those papers that relate to urbanism in an increasingly integrated world environment.

All the papers in this volume were extensively revised and edited prior to publication. We greatly appreciate the effort put in by each of the authors in revising their contributions and working closely with us through the lengthy editing process.

The research in these papers, the convening of the workshops, and the publication of this volume were supported by a Population and Human Resources Development Grant from the government of Japan. This financial assistance was enormously valuable throughout the preparation of the *World Development Report*. It helped widen the knowledge base of the report by providing a rich source of feedback through the workshops, and the grant has enabled us to make these papers available to a wide readership.

Many people have contributed to the making of this volume. We want to thank our fellow team members Anjum Altaf, William Dillinger, Marianne Fay, Vernon Henderson, and Charles Kenny, who assisted in the commissioning of the papers and in reviewing earlier drafts. We are greatly indebted to Rebecca Sugui for her help in the processing of the papers and, together with Paulina Flewitt and Leila Search, assisting with the logistics of the workshops. Umou Al-Bazzaz and Marc Sanford Shotten provided invaluable assistance in the assembly of the final manuscript. We would like to thank the staff of the Office of the Publisher for their expert assistance in editing and producing this volume.

The first workshop, held in Washington during July 1998, helped to launch the *World Development Report*. We owe its success to the effort put in by Jean Ponchamni and Mani Jandu. The two workshops in Tokyo were flawlessly co-organized by the staff of the World Bank's Tokyo office together with the Overseas Economic Cooperation Fund of Japan (now a part of the Japan Bank for International Corporation) and the Foundation for Advanced Studies in International Development. We would like to thank the director of the Tokyo office, Shuzo Nakamura, and Mika Iwasaki, Tomoko Hagimoto, and staff from the Japan Bank for International Development and the Foundation for Advanced Studies in International Development for the success of these events.

The workshop in Singapore was cohosted with the Institute of Southeast Asian Studies. Thanks are due to the institute's director, Professor Chia Siow Yue, for providing us with the ideal physical and intellectual environment.

Global Integration, Regional Development, and the Dynamics of Urbanization: An Introduction

Simon J. Evenett and Shahid Yusuf, the World Bank

In the latter half of the 20th century, the integration of national economies into a global network entered a new and more intense phase. The rising volumes of trade and capital flows are two determinants traditionally associated with globalization. However, the current phase of integration is also strongly influenced by advances in information and communications technology and by the great increase in literacy worldwide. The manifold effects of globalization are only slowly being understood and measured. Clearly the opening of economies has begun influencing growth and technology diffusion, but it may also be having an effect on economic volatility, the geographical distribution of economic activity within countries, and the degree of income inequality. Population and production in developing countries are becoming concentrated in urban areas, and those cities or industrial regions with the strongest trading links and the greatest attractiveness to foreign direct investment (FDI) and human capital are the ones registering the fastest income growth.

This emerging nexus of globalization and urbanization is generating new dynamics within countries and confronting municipalities with an array of challenges. One strong tendency reinforced by global integration is the strengthening of local identities within countries, which is leading to demands for autonomy and greater participation in government decisions. Another set of demands associated with this localizing tendency emanates from within cities as they continue to accumulate political and economic clout. These demands are for better services, housing, and measures to alleviate poverty and crime as the pressure of population on resources mounts.

There is every likelihood that globalization will continue even if the pace is slowed by opposition from groups that worry about competition, loss of monopoly rents, or cultural homogenization. As a counterpoise to globalization, localization is also set to persist, with national governments forced to cede greater political, administrative, and fiscal autonomy in the interests of political stability and, possibly, better governance. In addition, both of these tendencies are likely to intensify the focus on cities and sharpen competition among cities for resources, domestic and international. Policymakers must frequently devise policies in a multidimensional framework, taking cognizance of the global, local, and urban-related angles of each particular issue. The chapters in this volume analyze a cross-section of topics straddling the three dimensions we have identified, bringing out their areas of intersection and delineating the policies appropriate for the complex circumstances of developing countries.

Globalization and Growing Regional Inequalities

The integration of certain middle-income countries into the global economy is closely related to the FDI and portfolio inflows discussed in Sit's chapter. These rose markedly in the 1990s as corporations from Organisation for Economic Co-operation and Development countries aggressively dispersed their manufacturing activities to countries that offered the prospects of lower production costs and, in some instances, eventual access to large domestic markets. Moreover, portfolio managers in industrial countries seeking diversification and higher returns invested heavily in the financial markets of East Asia and Latin America as these opened up to portfolio flows. The latest global merger wave also led to significant changes in corporate ownership in developing economies. These acquisitions, plus greenfield investments, were stimulated by deregulation, privatization of public utilities, and liberalization of trade and investment regimes. FDI helped create export platforms and enabled those firms in developing

nations that could meet the standards of buyers in industrial nations to take advantage of the global shift toward outsourcing. Meanwhile, portfolio investment has led to a broadening of financial markets.

These dynamics are now well understood (see UNCTAD 2000 and World Bank 1999), and Sit draws the links between global flows and urban development by showing how foreign and domestic investors are attracted to cities with a modern transport and communication infrastructure that benefit from productivity-enhancing agglomeration economies. These economies accrue to firms that are proximate to other firms, to those firms that are able to tap deep pools of skilled and entrepreneurial talent, and that have cheap access to a wide range of intermediate goods and service suppliers able to provide just-in-time delivery and thereby minimize inventory outlays. As cities industrialize and expand, the demand for urban real estate in downtown areas intensifies, pushing up land prices and inducing large-scale labor-intensive manufacturing industries to migrate to outer suburbs or peri-urban areas. Bangkok, Seoul, and Jakarta have all conformed to this pattern, and Sit argues that if these cities are to continue to be the foci of development in their respective countries, national and municipal governments will need to adopt a proactive policy stance. In particular, the highly competitive nature of the international milieu requires a reform of regulation and an environment conducive to private investment in services, utilities, and infrastructure, which is a theme picked up by other contributors to this volume.

Although development centered on specific urban nodes can be the driving force for change, the force of localization pressures and the varying spatial consequences of globalization can be best understood by viewing urban growth in a regional context. Yamada's chapter provides such a perspective on Brazil, China, and Indonesia, highlighting the widening regional inequalities within these countries. In Indonesia, for example, gross domestic product per capita is approximately 10 times higher in the richest province (the Jakarta metropolitan region) than in the poorest province (Nusa Tenggara Timur). Examining these countries, Yamada identified three common explanations for the poor economic performance of laggard regions: inadequate infrastructure, illiteracy and weak primary education systems, and the limited effectiveness of mechanisms for transferring fiscal resources. The first two factors compromise the attractiveness of laggard regions as a productive base and constrain the emergence of leading urban centers. In addition, the limited capacity of the center to redistribute resources through fiscal channels for development purposes—which is not necessarily a drawback in the view of Glaeser and Rappaport—makes it necessary for the poorer subnational governments to diversify their sources of funding for human capital and infrastructure investments. Even though central governments may be constrained when it comes to transforming resources, Yamada emphasizes the role that central governments can play in coordinating the initiatives of subnational entities. For example, he notes that many inland Chinese provinces are currently seeking to attract foreign investments in the same higher-technology and capital-intensive industries as the coastal provinces, despite the fact that the former's advantages are currently in more labor-intensive light manufactures. Better coordination of provincial plans at the national level backed up by some fiscal transfers might, he suggests, lead to more regionally balanced development, taking full advantage of global opportunities and containing pressures arising from regional imbalances.

The Chinese experience with globalization and its local consequences is further elaborated in Guo's chapter. Greater openness to external market forces has stimulated domestic reforms by exposing officials to alternative policy options, and in certain cases, facilitating a convergence in opinions over the desired course of action. FDI and imported equipment have enabled Chinese industry to attain technological modernity in a number of fields. International competition and exposure to worldwide best practices have prompted improvements in productivity and inculcated in managers a willingness to promote change. Like Yamada, Guo notes how openness and FDI have contributed to growing disparities in provincial incomes, which is in part because coastal regions were opened up to foreign investment before the inland provinces. The better-performing provinces invested more heavily in infrastructure and were more aggressive in implementing market-friendly reforms than the inland provinces.

While it welcomed FDI and gradually eased current account transactions, China did not liberalize its capital account. This may have buffered China from the East Asian financial crisis and avoided a devaluation of the renminbi, although it did not prevent a substantial outflow of capital from the country. China's considerable exports to the East Asian region were, however, hit by the crisis, and this, along with weak consumer demand and uncertainty caused by extensive restructuring, prompted measures to bolster aggregate demand. Domestic investment in infrastructure accelerated, and loss-making state-owned or collective enterprises were encouraged to merge or to rationalize their operations. Guo argues that this crisis reinforced the need for certain forms of government intervention to remain in place while the dismantling of state controls over the economy continues.

The ability of some East Asian economies to weather the crisis of 1997–98 was linked to the management of capital flows and also to the nature of their financial institutions. White's chapter reminds us just how important domestic measures are in reducing the probability of financial crises and in ensuring that capital, both foreign and domestic, is allocated efficiently. The ubiquitous nature of finance in a modern monetary economy (even one that has no linkages to other nations) requires that governments develop and sustain a plethora of market-supportive finance-related institutions, including banking supervision, deposit insurance, bankruptcy laws, and laws for the enforcement of contractual terms voluntarily agreed upon by private parties. His view, which echoes other contributions to this volume, is that although globalization may expose weaknesses in domestic institutions, the solution is not to contain or reverse the former but to strengthen the latter.

Complementing Yamada and Guo, Choe and Kim draw on the experience of the Seoul metropolitan area to explore some of the urban challenges posed by integration into international markets. One such challenge arose from the working of agglomeration economies in export industries, which led to a concentration of manufacturing in a few cities, especially Seoul, Pusan, and Taegu. This tendency was reinforced by the centralization of political power in the nation's capital. In fact, the concentration of economic activities in Seoul reached a point where it became a major concern for national policymakers. Choe and Kim describe numerous regulatory and planning initiatives to direct further economic activity away from Seoul—including congestion charges, greenbelts, and permits to regulate the location of production facilities—that raised production costs and reduced competitiveness. However, while these measures dispersed activities to satellite cities around Seoul, they did not induce industries to migrate farther afield. Choe and Kim's chapter raises questions regarding the efficacy and cost of efforts to regulate agglomeration economies and reduce concentration. They also point to measures to improve the functioning of very large metropolitan areas—if they are here to stay. In an era when Korea was growing at a rate of 5 percent a year or more, Choe and Kim argue, these policies were affordable. Now that the tempo is moderating somewhat, they question whether such policies are still desirable.

Among the measures recommended are those to strengthen the organizational capacity of metropolitan governments by improving accountability through democratic reforms and by giving civil society a greater role; these steps could be taken in conjunction with further deregulation by local governments to stimulate competition between urban centers. Furthermore, as economic activity in urban areas shifts from labor-intensive manufacturing to high value-added services, urban pollution can be reduced and an environment created to attract high-value producer services. This makeover of the core urban centers will require substantial investment in the upgrading of infrastructure, and for it to be achieved private resources and skills will be essential, a theme picked up by other authors below.

Supranational Ramifications of Globalization: Regional Integration and International Environmental Concerns

The consequences of globalization are by no means confined to reconfiguring economic and political activity within nations. The cross-border mobility of people, trade, capital, and pollution have enlarged the possible international approaches to economic integration and environmental sustainability. In the

case of economic activity, many regional variations have been introduced through agreements such as the North American Free Trade Agreement and informal arrangements such as the ones yoking together the Greater China Economic Area—comprising the economies of China; Taiwan, China; and Hong Kong, China. As the last example shows, formal regional agreements are neither necessary nor sufficient conditions for an extensive web of economic linkages to develop between neighboring economies.

The chapter by Kueh describes the rise of the “Greater China Growth Triangle” over the last 20 years, pointing to the critical role that FDI has played in stimulating export-oriented manufacturing platforms in China. Goods shipped from the mainland often pass through Hong Kong, in part to benefit from the latter’s financial and marketing expertise. In addition, Taiwan continues to play a critical role in supplying finance, technology, and managerial skills to the mainland. The robustness of these economic linkages was demonstrated, Kueh argues, by the resilience of overseas direct investment flows during the East Asian financial crisis. Furthermore, these linkages might, he reasons, have been responsible for the reluctance of Taiwan and Hong Kong to devalue their local currencies in response to the large-scale speculative attacks in 1997 and 1998. Such devaluations could have substantially increased the cost of importing components and final products from the mainland of China, effectively compromising the competitiveness of leading economic sectors in the other two members of this growth triangle. So extensive are the economic linkages across the Greater China region that Kueh suggests that the next step for policymakers might involve a tacit, or even explicit, agreement on exchange rate management.

Aside from these regional trading links, globalization impinges upon countries worldwide through other channels as well. One form of interdependence of rising importance is through environmental change. In addition, to the long-standing concerns about cross-border pollution and environmental damage, the concerns now at the forefront have an intertemporal dimension. This is the message of Klepper’s chapter. They include accelerating climate change (or “global warming”), the depletion of the ozone layer, and the preservation of biodiversity. Klepper feels that three factors should guide the search for policies that can be implemented on a global scale: cultivating linkages across issues and between national and international measures so as to help form effective coalitions, taking full account of the distributional consequences of both environmental problems and proposed remedies—equitable burden sharing is critical to sustaining broad-based political support for environmental initiatives, and developing robust institutions to monitor and enforce agreements as well as to modulate responses to changing circumstances.

The Rise of Local Politics and the Implications for National Governance Structures

In this globalizing world the changes with the greatest implications for human welfare are occurring in cities. While the global, regional, and national concerns sometimes steal the limelight, how the vast majority of people in developing countries fare will depend on myriad decisions made by public and private entities in cities. The third part of the volume explores a number of interrelated themes relevant to the new urban environment. The demands on municipal governments have expanded with the surge in urban populations and economic activity. With a spreading demand for and transparency in the making and implementing of decisions, these factors have reinforced pressures for local autonomy and enhanced the accountability of local decisionmakers. A related, but distinct, phenomenon is the thickening of civil society. This is enabling the poor to better articulate or amplify their demands and helps create alternative channels to public ones for the supply of services.

Glaeser and Rappaport discuss the spatial reallocation of economic activity within nations that has led to the emergence of strong local administrations, and Stren’s chapter illuminates the political factors reinforcing this trend toward local autonomy. Viewing cities as entities, which permits an efficient pooling and dissemination of economic ideas, Glaeser and Rappaport argue that the security of property rights, the quality of social institutions, and the mobility of capital—human or physical—are critical to securing the advantages of urbanization. This perspective has a number of implications for municipal and

central government policies toward cities. The mobility of capital implies that redistributive policies should be the preserve of national governments, as intranational capital mobility is much greater than international mobility. Municipal authorities, in turn, should focus on providing high-quality public services as well as protecting local property rights, mostly notably through vigorous measures to control crime. Establishing a tight link between local budgets and local property values can reinforce incentives of municipal governments to take these steps, as the value of public amenities, such as education, will be capitalized in asset prices.

In Glaeser and Rappaport's framework, the dynamism of cities—and their long-run viability—depends upon national incentives that encourage competition. This calls for a level playing field, or spatial neutrality—which contains or eliminates transfers to favored cities or regions that are affected by the national government. To this end, they advocate decentralization to ensure that all regions are empowered to mobilize their local resources to the fullest and can utilize public policy as well as private initiative to promote development. They also recommend privatization to further reduce the number of avenues through which central governments can effect transfers.

For the kind of decentralization proposed by Glaeser and Rappaport to yield broadly positive outcomes for the majority of urban centers and regions a transformation of local governance along the lines discussed by Stren would be required. Localization has breathed new life into local politics and stimulated grassroots activism as well as the building of democratic institutions that can give greater voice to a nascent civil society. Organizations that are beyond the direct supervision and control of the state, such as charities, nongovernmental organizations (NGOs), and chambers of commerce, have become both more numerous and more active, in step with the rise of localism and disenchantment with the central government's performance. The role of civil society has grown in the wake of democratization, a process observed by many developing countries that Stren dates as starting with the restoration of democracy in Portugal in 1974. NGOs have also taken a leading role in providing public services in cities and supporting informal networks. Although this phenomenon is more important in Latin America than in Africa, Stren notes that the devolution of power to municipal governments is becoming intrinsic to the process of democratization.

This is happening at a time when municipal policies can substantially enhance a city's attractions for the global business community. Potential overseas investors are increasingly tending to target individual cities, even to the extent of identifying individual urban districts. This highlights the importance of municipalities developing a pro-business climate and taking steps to attract companies—reinforcing the message of Glaeser and Rappaport's chapter.

The considerable infrastructure needs of cities demand not just municipal action but also the appropriate national policy environment. As Mohan's chapter makes abundantly clear, when the central government directly funds urban infrastructure projects, the outcomes can be inefficient. Before pressures for local autonomy led to revisions in India's national constitution, the central and state governments dictated infrastructure investments in urban areas. Mohan characterizes the role of the central government as effectively that of a financial intermediary, which raised funds and allocated them to subnational entities using a formula that in no way ensured that resources flowed to infrastructure projects with the highest rates of return. Mohan advocates allowing municipal governments to borrow directly from the capital markets at rates that will reflect the financial community's assessment of each municipality's ability to repay. Such discipline would encourage better allocations of investment funds and public-private partnerships that might result in the private sector's running utilities and providing other services currently the preserve of public agencies. Again, none of this is possible unless national legal and, in some cases, constitutional structures are amended to allow municipalities to take on financial obligations. This may well be an instance where the nature of the efficient policy (here financing urban investment) has not changed but that urbanization and growing demands for local autonomy present policymakers with an opportunity to review what are quite often inefficient internal governance arrangements.

For most municipalities that are attempting to engage with the global economy, the demand for transport services is rising steeply. As Kitano demonstrates in his study of Sendai, Japan, associated with the expansion of a city and the appearance of new suburbs is the sharp rise in travel between the periphery and the city center. Without additional infrastructure investment in the periphery's transportation network, congestion and pollution will increase. Unfortunately, the outer suburbs and edge cities of core metropolitan areas can lie in neighboring jurisdictions—which are often reluctant to invest in additional transportation infrastructure when they are not sure of capturing the full benefits. Thus in the absence of any cross-jurisdictional planning, there may be insufficient investment in municipal transportation. The broader point being made here is that special arrangements are frequently necessary for those public investments and services where the benefits or costs of the city's actions, including its growth, spill over into other jurisdictions. Kitano notes that “integrated” planning, or other forms of interjurisdictional coordination, are appropriate to this problem. In the case of transport, regional or panmetropolitan investment funds, and mechanisms to share revenues across jurisdictions, can be used to mitigate the effects of spillovers—an approach that Choe and Kim also stress in their analysis of the future of urban policy and planning for the Seoul Metropolitan Area.

Poverty Alleviation in an Era of Urbanization

The quality of urban life is an important facet of a city's competitiveness. Two major determinants of quality are poverty and crime levels. Urban poverty is a multifaceted phenomenon, and Mitlin and Satterthwaite argue that in an urban context absolute poverty tends to be associated with four distinct, and related, deprivations. These are inadequate personal incomes; inadequate or highly volatile asset bases; few or no political rights or little access to judicial procedures; and poor-quality basic services, including housing and health. Tackling these deprivations calls for a multilevel approach, with the national government taking the lead in redistributing resources. However, with localization and the decentralizing measures being implemented, municipal authorities and civil society have a bigger part to play in alleviating poverty. In particular, NGOs are becoming the suppliers of a multitude of services and devising schemes through which the urban poor can gain access to, for instance, credit, housing, and clean water. Furthermore, NGOs and other elements of civil society are helping enhance the accountability and responsiveness of municipal leaders, often by articulating the grievances of the poor and disseminating information about municipal performance. Mitlin and Satterthwaite point to the benefits that accrue to the urban poor when municipalities improve the quality and availability of public services, as well as taking the steps, noted earlier, of investing in infrastructure and nurturing a climate conducive to business startups.

In spite of its salience as a social problem, reducing urban poverty still does not receive the priority it deserves, even in a rapidly growing region such as East Asia. As Yeung describes in his chapter, at a time when high rates of economic growth were raising wages little attention was given to supplemental measures that would reduce pockets of urban poverty. The downturn associated with the East Asian financial crisis and the difficulty some nations face in restoring precrisis rates of economic growth has led to a greater appreciation of the need for social safety nets to provide income security for urban dwellers and others. Yeung also argues that municipal governments should expand their provision of social services and points out that, for example, Hong Kong has tended to spend a much smaller share of its civic income on social services than other East Asian economies. Yeung is especially concerned about the effect of urban poverty and growing income inequality on social cohesion—a question that has considerable force given the role that political stability is thought to have played in underpinning the East Asian miracle. The tendency toward decentralization and greater autonomy can in fact reduce income disparities, but the chances it will do so will be higher if political reforms improve governance structures, strengthen the rights of the poor, and bring to the fore responsive municipal leaders.

One of the important blights in urban living—especially injurious to the poor—is crime. Bourguignon carefully reviews the cross-country evidence on crime and its increasing concentration in urban areas. He also marshals evidence to support the claim that lower incomes and higher income inequality are important economic determinants of crime. Moreover, economic downturns can exacerbate the problem, with losses from crime climbing to 2 to 3 percent of gross domestic product in severe recessions. In a globalizing world in which countries might be more exposed to shocks, ensuring that crime can be held in check will be a matter of greater urgency. These findings place an additional premium on macroeconomic stabilization and reinforce the case for national redistributive measures. At the municipal level, steps can be taken to enhance property rights, perhaps through better policing, citizen awareness, and more effective judicial systems.

Concluding Remarks

Taken together, the chapters in this volume underscore the transformative role of globalization and urbanization and show the interplay between these forces. Trade reform and liberalized foreign investment regimes have contributed to the spatial reallocation of economic activity toward cities, especially those cities that can attract and nurture human capital (which can sustain high value-added service industries) and strong connections to other markets. Global factors have, therefore, reinforced agglomeration economies in shifting economic clout toward cities, and in so doing they may be exacerbating regional disparities in incomes.

The rise of cities is changing political dynamics in developing nations. It is forcing a reappraisal of existing constitutional structures and center-local relations, as well as the important—and perhaps more mundane—arrangements for funding and organizing investment by subnational entities. At the same time, democratization is reinforcing the pressures for local autonomy.

This perspective shifts the debate away from whether or not globalization is undermining the role of the central state and toward one about the appropriate allocation of responsibilities and resources to different layers of government. Strong arguments support the position that municipalities can, with the appropriate resources and political structures to ensure their responsiveness to local needs, make substantial improvements in the well-being of urban residents. However, experience suggests that some state functions (in particular, macroeconomic stabilization and redistribution) ought to remain the preserve of national government. In this view, central states may find some of their powers constrained, but they continue to play a critical role in promoting national development. In this they are joined—as a consequence of democratization—by a civil society that has become especially active in, and enables some cities to rise to, the challenge of a global era.

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Part I
Global Systems and the New Dynamics

1

Finance, Financial Regulation, and Economic Development: An International Perspective

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Until recently, the financial sector was a relatively neglected area of the theory and practice of modern economic development. Finance did not have a glamorous image. It was neither heavy industry nor high technology. It was largely invisible and seemed unimportant.

Experience gained since the mid-1980s, along with developments in theory and empirical evidence, have placed finance in a more central position with respect to economic development—and properly so. While finance is ubiquitous and plays a central role in the allocation of scarce resources in any economy, it also has special attributes and special problems. For all these reasons, finance deserves detailed attention.

Finance Is Special

Finance is important for economic development in a number of ways. It also suffers from the problem of asymmetric information.

Finance Is Ubiquitous

In any economy, virtually all individuals, enterprises, and governments need finance, even if it is only self-finance. Individuals need finance to save resources for future uses or to borrow resources for current uses. Enterprises need finance to bridge the gap between production and sales and to acquire resources for investment and future growth. Governments need finance to bridge the gap between expenditures and taxation revenues. And all the participants in an economy need a payments system to lubricate their mutual transactions.

Finance Is Central

The need for and ubiquity of finance places it in a central role in the allocation of scarce resources, that is, the allocation of savings and investment. Efficient channeling of a society's savings into investments with high social returns will augment economic growth;¹ inefficient allocations will represent a waste of scarce resources and forgone opportunities for growth.

This chapter is an expanded version of a presentation at the World Bank's Summer Workshop on "Challenges for the 21st Century," on July 6, 1998. Please note that rather than provide a running series of citations, I have provided a brief bibliography at the end of the chapter.

¹ These investments would include resources devoted to private sector plant and equipment, public sector infrastructure, and individuals' human capital, as well as to the research and development that will underlie technological change.

financial facilitators will be involved in these securities markets—securities brokers, securities dealers and market makers, securities underwriters and issuers, rating and evaluation agencies, accountants, financial advisers, publishers of financial publications—who will facilitate the issuance, trading, and evaluation of these securities.

In between are borrowers who are at an intermediate level of transparency and who can obtain finance from financial intermediaries and, in the case of enterprises, through trade credit, that is, from input suppliers who are willing to wait a limited amount of time, such as 30 days, before demanding payment. Financial intermediaries are institutions that hold primarily financial assets (for example, loans or securities), whose primary activity is investing in those assets, and who obtain the funds for these investments by issuing liabilities (such as deposits or other debt) on themselves. Included in this category would be banks and other depository institutions (for instance, savings institutions and credit unions), insurance companies, pension funds, mutual funds (unit trusts), commercial finance companies, consumer finance companies, and local money lenders. These institutions are information specialists that have the skills and resources to obtain substantial amounts of information about prospective borrowers, and that can therefore say “yes” knowledgeably to potential borrowers with good prospects for repayment and “no” to those with poor prospects for repayment. They can also monitor borrowers after lending to them so as to ensure repayment.⁴ The loans from these institutions are likely to be relatively short term in nature (though renewable), secured (where possible), and callable.⁵ As for trade credit, suppliers may be able to develop expertise with respect to their customers by monitoring their customers’ business practices and thereby determining which of them are good risks for limited extensions of credit.

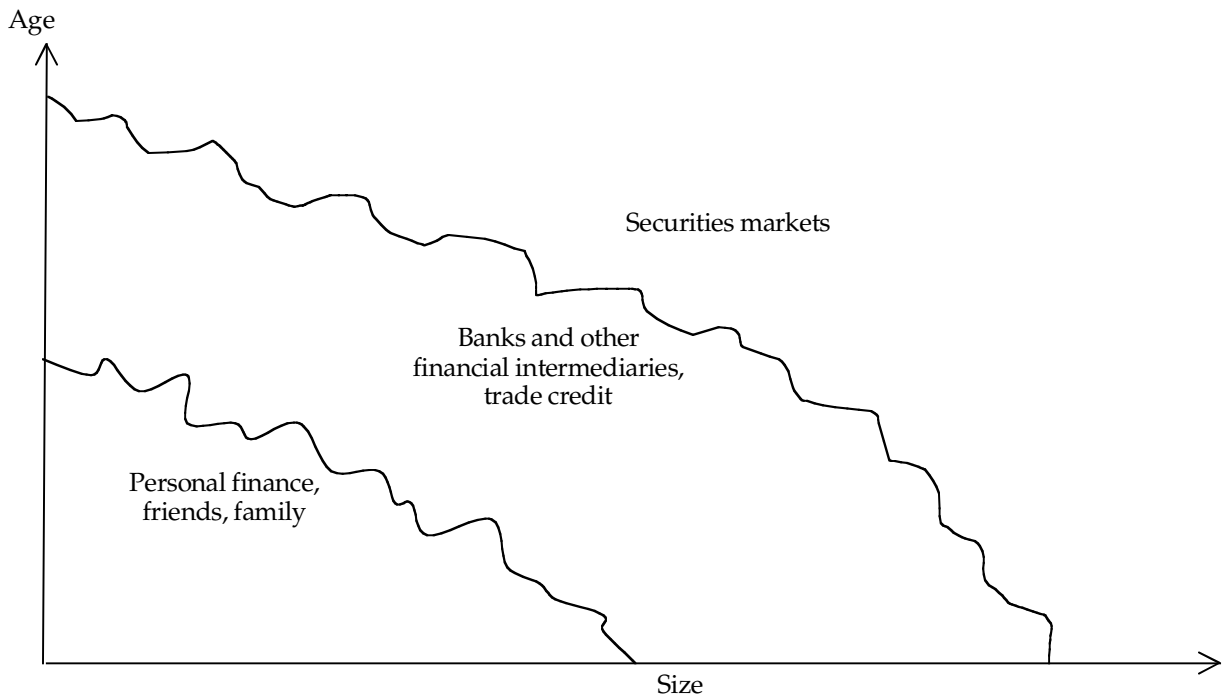
The boundaries in figure 1.1 that demarcate the realms of securities markets, financial intermediaries, and less formal sources of finance are fuzzy and porous, and will be significantly influenced by the state of technology, which has tended to move the boundaries to the left. For example, the dramatic improvements in data processing and telecommunications technologies of the past three to four decades have greatly improved the ability of financial sector participants to gather and process information rapidly and inexpensively. In the United States these improvements have permitted the securitization of assets that three decades ago would have been considered the exclusive domain of financial intermediaries. It has also allowed banks and other financial intermediaries to issue credit cards, and thus provide finance to individuals who three decades ago would have relied on less formal sources of finance.

Two important determinants of a borrower’s informational opaqueness or transparency, especially when the borrower is an enterprise or government, are the entity’s age and size. These characteristics provide the axes in figure 1.2. With age comes an observable track record with respect to reliability generally and also specifically with respect to any past credit experiences. With size comes the scale that makes worthwhile a lender’s investment in the sunk costs of an informational investigation and the subsequent extension of credit. Thus, as portrayed in figure 1.2, young and small enterprises will largely be confined to the realm of less formal finance. As an enterprise grows older and/or becomes larger, its track record and scale may make it eligible to qualify for trade credit or for finance from banks or other financial intermediaries. Finally, still greater age or size may allow it to qualify for the securities markets. The boundaries that demarcate these realms in figure 1.2 are again fuzzy and porous, and improved data processing and telecommunications technologies have tended to push the boundaries toward the origin, thereby allowing younger and smaller entities to access financial intermediaries and then the securities markets at earlier stages than was previously possible.

⁴ Also, by making multiple loans to multiple borrowers, a financial intermediary will be able to diversify its portfolio, and thereby reduce its overall risk from nonrepayment by any individual borrower.

⁵ A major exception is mutual funds, many of which are designed to invest in long-term debt and equity securities.

Figure 1.2. *Two Determinants of Opaqueness or Transparency*



Source: Author.

Implications of the Opaqueness-Transparency Paradigm

The implications of the informational opaqueness-transparency framework are profoundly important for the structure of an efficient financial sector and for the appropriate role of governments and international agencies such as the World Bank.

The Structure of an Efficient Financial Sector

In an economy where most enterprises are small and young, financial intermediaries, such as banks and bank-like institutions, ought to be important for efficient finance. They are the sophisticated, efficient gatherers and assessors of borrower information. Even though securities markets for developing countries have attracted a great deal of attention in the past decade, they are suitable only for the largest and oldest enterprises in an economy, because only these enterprises will be transparent enough for nonspecialist investors/lenders.⁶ Consistent with this view, as most household savers are likely to be unsophisticated and relatively poorly informed, financial intermediaries such as banks and other depositories, insurance companies, and pension funds will be the best vehicles for their savings. Governmental assurances and prudential regulation will still be necessary even for these institutions to reassure and protect their uninformed and unsophisticated liability holders (that is, depositors).

The provision and encouragement of standardized accounting information, enforced by trained accountants and auditors, will make potential borrowers more transparent and comparable, and will

⁶ Note that even in a highly developed economy such as that of the United States, only approximately 10,000 enterprises have publicly traded securities. The remaining smaller enterprises—numbering more than 20 million—must obtain their finance from financial intermediaries or from less formal sources.

thereby make the tasks of financial intermediaries and securities markets easier and more efficient. Furthermore, greater clarity and appropriate balance with regard to the rights of borrowers and lenders, especially concerning conditions of bankruptcy and insolvency, will encourage greater efficiency of finance. The more easily lenders can recover their funds in the event of a financial failure by a borrower, the more willing the former will be to lend in the first place.

In the same spirit, greater clarity and appropriate balance with regard to the rules of corporate governance (including the rights of stockholders in relation to managers, the rights of debt holders in relation to stockholders, and the rights of minority stockholders in relation to majority stockholders) will encourage greater efficiency of finance. Finally, greater clarity in regard to the rules of securities issuance and trading will reassure potential investors, and thereby encourage greater efficiency in finance.

The Appropriate Roles for Government

Where financial intermediaries are subject to runs (for instance, by depositors), or where their liability holders are at a clear informational disadvantage (for example, banks and other depositories, insurance companies, defined benefit pension plans), governments should maintain a strong system of prudential (safety and soundness) regulation. Effective prudential regulation must have the following components with respect to the regulated institutions: a transparent accounting system based on market value; adequate, risk-based capital requirements that are based on the market value accounting framework and that are forward-looking; sensible rules on risk limitations; insistence on the financial and managerial competency of owners and managers; a clear understanding that owners (stockholders) of insolvent institutions lose their investments; clear authority for intervention and enforcement of the rules; and adequate numbers of well-trained and well-paid prudential regulators (examiners and supervisors).

Formal government insurance arrangements to protect the liability holders (depositors and others) of these regulated financial institutions are worthwhile.⁷ Risk-based premiums should accompany such insurance.

Underlying all these arrangements should be a central bank that is seen as a reliable lender of last resort to solvent depository institutions.

Furthermore, governments should encourage banks and other financial intermediaries to be efficient lenders. This would include promoting education in such areas as credit evaluation, portfolio management, hedging, and the properties and uses of derivatives. In addition, governments should more generally foster a climate and infrastructure that promotes transparency and efficiency in finance, including a transparent accounting system based on market value; a clear commercial code, with contract enforcement mechanisms; clear bankruptcy arrangements and procedures; clear corporate governance arrangements; clear securities issuance and trading arrangements; and an open system (subject to prudential considerations) of entry to and exit from the financial sector.

Governments should eschew credit allocation and intervention efforts, protection of incumbent financial institutions, and the creation of barriers to entry into the provision of financial services.

These suggested roles contrast with the past policies of many governments. Although most governments of developing countries have stressed the roles of banks in their financial sectors, until relatively recently, they tended to view banks as tools of government policies—with regard to credit allocation and nationalization—rather than as efficient allocators of credit.⁸ They generally permitted only a few, protected banks to operate in their economies, and those banks were under tight governmental control and influence. Credit evaluation skills were not encouraged. Prudential regulation skills, tools,

⁷ Such insurance has been regularly provided on a de facto basis by virtually all governments, even when no formal insurance arrangements are in place.

⁸ Note that the governments of industrial countries have not been immune to the temptations of credit allocation. The United States, for example, has a plethora of regulatory provisions, tax breaks, and specialized financial institutions that are the embodiments of legislative efforts at credit allocation.

and institutions were not developed. Transparent accounting standards were not encouraged for financial intermediaries or for enterprises more generally.

Simultaneously, because securities markets were less susceptible to direct government influence in the allocation of credit, they were discouraged and often portrayed as “gambling dens.” Arrangements and institutions that would have encouraged the use of securities markets through transparent accounting, clear corporate governance rules, clear commercial codes, clear bankruptcy procedures, and clear securities issuance and trading arrangements were not encouraged and did not develop.

In sum, many governments generally had little interest in and did not pursue the goal of developing an efficient financial sector. Those attitudes have been slowly changing during the past two decades, with some governments showing greater interest in efficient financial sectors and the steps that they can take to foster that efficiency.

The Appropriate Roles for International Agencies

International agencies can help national governments develop the private and public institutions needed for efficient financial sectors. Providing education and training will be important. The agencies can also help national governments share information and informally coordinate their efforts.

Furthermore, international agencies can serve as international lenders of last resort. However, lending to institutions that are fundamentally solvent and that primarily need modest amounts of liquidity and time is quite different from lending to institutions (or governments) that need major changes in policies, as well as massive amounts of liquidity and time, for an effective recovery. Lending under the latter set of circumstances will involve the international agencies in political imbroglios that they may be poorly equipped to handle.

Formal international harmonization efforts are generally not necessary. Effective national prudential regulation should be able to prevent virtually all instances of international financial contagion. Formal harmonization, for example, through a formal organization, creates the risk that the organization will become a vehicle or screen for international protectionism. However, under some circumstances harmonization may serve as the basis for reducing protectionism or competitive subsidization, as through the General Agreement on Tariffs and Trade and the World Trade Organization, or encouraging beneficial standardization.

Conclusion

Finance is important, but an efficient financial sector does not arise easily or automatically. It requires a substantial amount of unglamorous infrastructure. Sensible government policies have a major role to play in developing a strong and effective prudential regulation system and in fostering a climate and framework for general informational transparency. International agencies can assist in these efforts.

In sum, efficient finance requires considerable effort on the part of private and public entities, but the benefits surely exceed the costs.

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2

Globalization, Foreign Direct Investment, and Urbanization in Developing Countries

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Since the early 1980s, urbanization has taken on new dimensions as a result of increasing globalization. The latter embraces an emerging global production system in what has been referred to as the new international division of labor (NIDL), and increasing participation by foreign capital and transnational corporations (TNCs) in constructing, running, and financing major urban infrastructure and services (Blackbourn 1982; Cohen 1981; Dicken 1986; Friedmann and Wolff 1982; Gilbert 1993; King 1990; McGee 1997; Sassen 1998; Timberlake 1985; UNCTAD 1991). These globalizing trends are the outcome of many new developments, including

- A strong recovery of the world economy from the recession of the early 1980s
- The emergence of Japan as the world's largest international investor because of the rapid appreciation of the yen
- An increase in cross-border mergers and acquisitions driven by technological and competitive forces, such as new means of communication and production and the formation of regional markets like the European Union (EU)
- The rise of the service sector in the world economy, particularly in producer services, whose value added is increasing in proportion with the contribution of labor, raw materials, and energy in the final goods
- The increasing liberalization and deregulation of countries for foreign direct investment (FDI) and cross-border economic activities (UNCTAD 1991).

The economic activities involved in this new round of globalization can be measured largely by the inflows and outflows of FDI and the mushrooming of TNC affiliates in cross-border mergers and acquisitions, joint ventures, and greenfield foreign investments. The World Investment Report 1991 (UNCTAD 1991) reported a number of FDI features that reflected the magnitude and nature of this globalization and its increasing impact on home and host countries. In 1983–90 FDI inflows had grown at an average annual rate of 29 percent, about triple the growth of exports and four times the growth of world production output. The report concluded that “As a means of international economic integration, FDI is in its take-off phase”(UNCTAD 1991, p. 3) It also noted that FDI plays a much greater role in the economies of developing countries than industrial countries: the ratio of FDI to total domestic investment in the developing countries was 6 percent in 1985–87, compared with 3.4 percent for the industrial countries. Indeed inflows of FDI into the developing countries had picked up substantially since the mid-1980s, rising from 3 percent per year in 1980–84 to an annual increase rate of 22 percent in 1985–89. A record increase for the developing world of 37 percent was recorded in East, South, and Southeast Asia. The 1986–90 boom of FDI for the developing countries meant more in terms of inflow into manufacturing than into the primary and service sectors. Within manufacturing, the most important sectors for FDI were electronics and electrical equipment and motor vehicles and other transport equipment, underlining the significance of both import substitution and export-oriented industries as target sectors for FDI.

To a large extent, the increasing trend of inflows and outflows of FDI was maintained in 1991–97 (table 2.1). The year 1995 in particular was a boom year (UNCTAD 1998).

Table 2.1. Selected Indicators of FDI and International Production, Selected Years

<i>Item</i>	<i>Value at current prices (US\$ billions)</i>		<i>Percentage change 1986–90</i>	<i>Annual growth rate (percent)</i>		
	<i>1995</i>	<i>1997</i>		<i>1995</i>	<i>1997</i>	<i>1991–96</i>
FDI inflows	317	400	24.4	32.6	18.6	17.1
FDI outflows	339	424	27.0	34.9	27.1	11.8
FDI inward stock	2,866	3,456	18.7	18.2	12.7	11.7
FDI outward stock	2,811	3,541	19.8	11.1	15.1	13.7
Cross-border mergers and acquisitions ^a	141	236	21.0 ^b	28.8	45.2	27.1
Sales of foreign affiliates	5,933	9,500	17.3	12.5 ^c	7.3	13.4 ^d
Cross-product of foreign affiliates	1,363	2,100	19.1	-2.9 ^c	7.7	6.2 ^d
Total assets of foreign affiliates	7,091	12,606	19.9	13.1 ^c	13.0	24.4 ^d
<i>Memorandum</i>						
GDP at factor cost	264	30,551	10.7	9.5	6.0	6.4
Gross fixed capital formation	6,088	5,393	10.7	12.4	5.0	4.5 ^e
Royalties and fee receipts	48	61	21.9	16.4	15.0	12.0 ^e
Exports of goods and nonfactor services	5,848	6,432	14.3	16.2	3.0	7.4

GDP Gross domestic product.

a. Majority-held investments only.

b. 1987–90.

c. 1993.

d. 1991–95

e. 1991–95.

Source: UNCTAD data.

In 1997 the stock of FDI was 64 percent of the world's gross fixed capital formation, while the sales of foreign affiliates were 31 percent of the world's gross domestic product (GDP). During 1991–97 the developing countries improved their share of the world's total inflow of FDI. In 1989 their share was 19 percent (US\$30 billion), but by 1997 it had grown to 37 percent (US\$149 billion). In absolute terms, the FDI inflow to the developing countries had roughly quadrupled in eight years. In 1989, the 10 largest recipient economies were Singapore (12 percent); Brazil (12 percent); Mexico (11 percent); China (10 percent), Hong Kong, China, henceforth referred to as Hong Kong (7 percent); Malaysia (6 percent); Egypt (6 percent); Argentina (4 percent); Thailand (3 percent); and Colombia (3 percent). In 1997 the largest 10 recipient economies were China (27.8 percent), Brazil (7.6 percent), Singapore (6.4 percent), Mexico (5.6 percent), Indonesia (4.2 percent), Argentina (3.5 percent), Malaysia (3.2 percent), Chile (2.8 percent), Peru (2.4 percent), and Hong Kong (1.7 percent). While in 1989 the five economies in East and Southeast Asia accounted for 38 percent of the developing countries' total, by 1997 their share had increased to 43.3 percent. China stood out as the largest FDI host country among the developing countries, and was the second largest FDI inflow recipient in the world, following the United States.

Various studies on FDI in 1991–97 further confirmed a number of significant features (for example, U.N. 1991, 1993, 1997, 1998). On average, US\$1 in FDI stock generates US\$0.64 in value added, with more value added contributed in developing than in industrial countries. In the industrial countries sales of foreign affiliates in the host country outweigh exports, whereas in the developing countries their sales are dominated by exports. In Latin America; Oceania; and South, East, and Southeast Asia, sales of foreign affiliates in the host market are higher than imports. There is also a high degree of networking between foreign affiliates and parent TNCs, for instance, more than half the exports of Japanese and U.S. foreign affiliates go to their parent TNCs and 40 percent of the latter's shipment are sent to their foreign affiliates. In short, one-third of world trade is done within the TNC corporate network. Thus, participation in global production through FDI has become an important way to integrate with the global market.

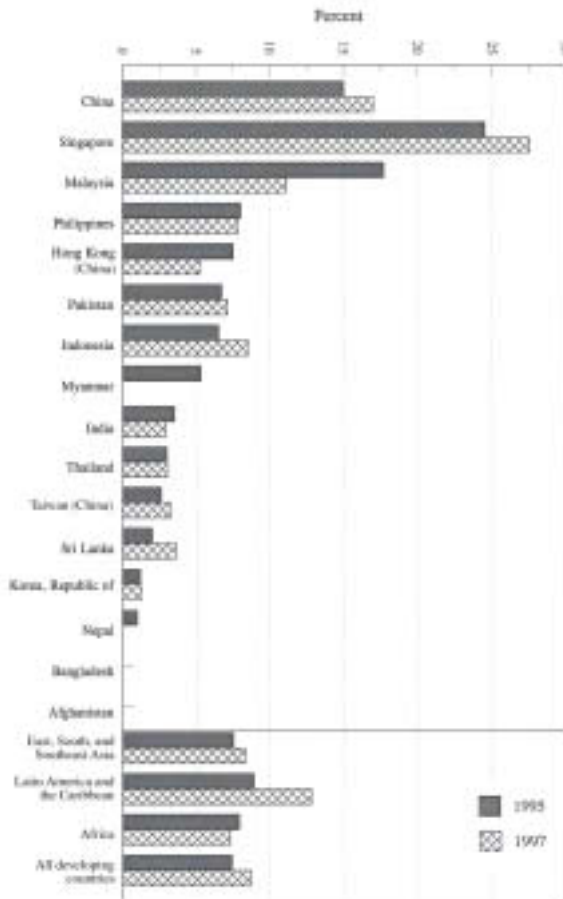
The increasing significance of FDI to host economies in the late 1990s compared with 1986–90 can also be seen in the increased proportion of FDI in gross fixed capital formation. In 1995–97 the world average was 5.3 percent, while it was 3 percent in 1985. The highest proportion registered was 30 percent (for example, Bangladesh and Rwanda), whereas the averages were 10 percent for Latin America; 8 percent for Africa; and 7.5 percent for South, East, and Southeast Asia. For China, Singapore, and Malaysia, their proportions were between 15 and 24 percent for 1995, and between 10 and 27 percent for 1997 (figure 2.1). However, FDI inflow alone is an underestimation of the economic significance of foreign affiliates or TNC influence on the host economy, as foreign affiliates usually have access to additional forms of financing besides FDI. The United Nations Conference on Trade and Development, based on its survey of U.S. foreign affiliates, concluded that foreign affiliates obtain loans from local commercial banks in amounts about equal to their FDI equity, and additional loans and other financing from third party countries of about twice of their FDI amount. Thus the adjusted FDI is about four times the FDI inflow as normally measured in official statistics. Therefore, even if we take a cautious approach by halving that multiplier to 200 percent, the actual impact of FDI to a host economy whose ratio of FDI to gross fixed capital formation is already over 10, is significant.

FDI and TNC studies on the situation in the 1980s and 1990s have identified three major host country determinants that will affect the volume of FDI inflow: (a) the policy framework for FDI, (b) economic determinants, and (c) business facilitation (UNCTAD 1997). Since the early 1990s, FDI regulatory regimes for almost all countries have looked quite similar, and are simply taken for granted. TNCs and host countries are now paying more attention to economic determinants and business facilitation measures. Business facilitation includes investment promotion, investment incentives, "hassle" costs, social amenities, and after investment services. From a spatial or locational perspective, that is, where the FDI will take place, economic determinants have the most weight. Dependent on the motives of the TNC or on the nature of FDI project, different economic determinants determine the choice of the host country and the actual location of the investment within the host country.

Accordingly FDI is classified into three types: (a) market seeking, (b) resource and asset seeking, and (c) efficiency seeking. Market-seeking FDI normally seeks large urban centers that offer market potential in terms of market size, per capita income, growth potential, and access to global markets. In resource- and asset-seeking FDI in developing countries, low-cost and unskilled labor is a major factor in export-oriented manufacturing, while skilled labor; technological and other created assets; and physical infrastructure such as airport and ports, power, and telecommunications are important for import substituting industrial projects and producer services. Thus this type of FDI tends to locate in major urban agglomerations. Raw materials, which were of great significance under the old international division of labor (before the mid-1970s), have declined as an important economic determinant. Efficiency-seeking FDI is more interested in the costs and productivity of the resources of the host country, which are often a function of its administrative system, transportation, and communication network, which invariably favors large urban agglomerations. Recently, membership of the host country in regional corporate networks, particularly trade blocs, is playing an increasing role in attracting FDI. New liberalization measures in the late 1990s have favored FDI investment in industries like telecommunications; broadcasting; energy; and producer

services like banking and finance, insurance, news media, tourism, and transport services. Such measures have further enhanced the urban bias of economic determinants, leading to increasing integration between globalization, FDI, and urban growth in the world as a whole, particularly in the developing countries, where the impact of FDI on their economies and on the growth of key cities is much more marked and intense than in the industrial countries.

Figure 2.1. FDI Inflows as a Percentage of Gross Fixed Capital Formation, South, East, and Southeast Asia, 1995 and 1997



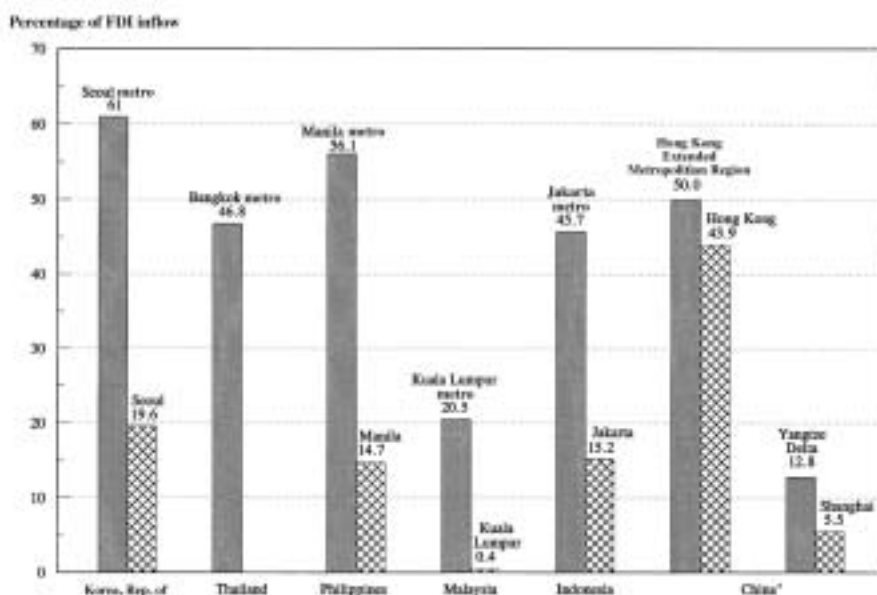
Source: UNCTAD database.

Available data for a number of East and Southeast Asian countries clearly illustrate the high degree of concentration of FDI in their largest urban agglomerations, the national capitals (figure 2.2). In the countries shown, the largest urban agglomeration accounts for 61 percent of the country's total FDI inflow. For Hong Kong, the big center bias is 100 percent. The Hong Kong Extended Metropolitan Region accounted for 50 percent (US\$33 billion) of China's FDI inflow in 1997 (US\$88 billion). The attraction of big urban centers for FDI in services and manufacturing in host developing countries, including newly industrializing countries, is obvious, and includes good strategic locations in the transport and communication networks within the host country, easy access to global market and global information networks, the presence of the central government and major government agencies, the better infrastructure and manpower than in the rest of the country, and the presence of amenities at international standards.

Testing the Relationship between Urbanization and Foreign Direct Investment

In the 1980s, many scholars examined the influence of external factors such as trade and FDI on urbanization (for example, Abumere 1982; Arn 1987; Blackbourn 1982; Forbes and Thrift 1987; Gwynne 1985; Rogerson 1982). Two lines of thinking have emerged. Some believe that the developing countries can actively take part in the world economy while ensuring positive outcomes to their cities (Hein 1992; Kasarda and Crenshaw 1991; Yue 1993). They see foreign investment, other international capital flows, and international production as beneficial for the national urbanization process. Others follow the earlier dependency school of the transnational approach (Castells 1972; Harvey 1975; Roberts 1976) and believe that the urban system and the pace and spatial structure of urbanization in the developing countries are increasingly dependent on their role in the capitalist accumulation process of the industrial countries (Armstrong and McGee 1985; Friedmann 1986; Fuchs and Pernia 1987; Kentor 1981; Portes and Johns 1986; Timberlake and Kentor 1983). They see little escape from dependent urbanization for the developing countries in the new global order.

Figure 2.2. Locational Patterns of FDI in Selected Asian Economies, 1997



a. Includes Hong Kong, data for China refers to 1996.

Source: Japan Development Bank (1996); Hong (1997).

The notion that foreign investment correlates with urban growth is also found in modernization theory. Hoselitz (1960) views urban growth as an inevitable result of development when the developing countries adopt the traits of modern nations through industrialization, because cities offer overwhelming advantages for the efficient absorption of foreign and domestic capital by allowing the widest access to the domestic market. They facilitate capital absorption through the inherent infrastructure, a concentrated pool of labor, cultural and recreational facilities, and easy access to those in political power and other decisionmakers (Crenshaw 1991; Dicken 1986; Edington 1984; Leung 1990; Mattos 1982; Sivalingam 1993).

A number of studies of developing countries in Africa, Asia, and Latin America have noted the metropolitan concentration of FDI (Armstrong and McGee 1985; Fuchs, Jones, and Pernia 1987; Gwynne 1985; Kowarick and Campanario 1986; Mabogunji 1978; Rogerson 1982). Recently, Lo and Yeung (1996,

1998) and Watters and McGee (1997) confirmed the continuing urban bias phenomenon in the 1980s and early 1990s. However, these studies tend not to be detailed spatial analyses of the relationship between FDI and urbanization. Some investigators did attempt macro-quantitative statistical correlations between these two variables for selected groups of developing countries using indirect indicators for FDI. Kentor (1981) carried out one of the earlier attempts. In his analysis of 37 developing countries in the 1970s, he found that investment dependence (measured by per capita debt on investment income, export partner concentration, and export commodity concentration) had a lagged positive effect on urbanization. He found that investment dependence stimulated growth in the tertiary and informal sectors and inhibited growth in the industrial sector, and concluded that investment dependence generated overurbanization in the developing countries. Fry (UNCTAD 1997, p. 90) carried out a more recent study on the effect of FDI on six East and Southeast Asian economies to measure its effect on their international balance of payments. While some correlations between urbanization and economic development have been carried out, such as the United Nations (1996) study of the relationship between urbanization and per capita GDP for major regions of the world, there has been no attempt to test the relationship between FDI and urbanization directly.

This chapter incorporates a correlation exercise involving 12 variables (table 2.2). In a set of 6 regressions, urbanization and FDI were used as dependent variables and the other 10 variables, which cover the gross national product (GNP), the GNP growth rate, population size, and international trade were selected as the independent variables by a stepwise regression process. For FDI, per capita inflows rather than absolute volume have been used to reflect the intensity of inflows for the years 1992 and 1997. Data for 1992 were used for testing FDI's impact on urbanization, and the 1997 values serve as a dependent variable to test the effects of economic and urbanization levels, international trade, and population size on the volume of FDI inflows. For GNP, purchasing power parity (PPP) is used because it is more representative of real GNP for international comparison. The regressions cover 18 to 136 countries for which the necessary data are available. For the lower-scale analysis, 83 developing countries and 18 Asian Pacific and South Asian economies (Bangladesh, Cambodia, China, Hong Kong, India, Indonesia, the Republic of Korea, Laos, Malaysia, the Philippines, Myanmar, Nepal, Pakistan, Singapore, Sri Lanka, Taiwan [China], Thailand, and Vietnam) have been included in an attempt to compare the differential impacts of the independent variables on urbanization and FDI in different groups of countries. This comparison is based on the common belief that FDI has a higher impact on the developing countries, especially the Asian developing countries, and that FDI in the latter countries has been related to a high degree of export orientation and a more developed urban society and infrastructure. Table 2.3 presents simple correlations between the 12 variables. Table 2.4 summarizes the regression results.

The urbanization level in 1995 at the world (equation 1 in table 2.4) and developing world (equation 3) levels has a significant, high, positive relationship with the independent variables, with R^2 equal to 0.560 and 0.572, respectively. At the world level, the level of development of the economy (PPPGNP95), GNP growth, and import growth are major explanatory factors, while in the developing countries exports, imports, and PPPGNP95 are the more important factors. FDI inflows have also been effectively explained by the independent variables, as equations 2 and 4 have high R^2 values (0.699; 0.732). However, in the latter case, FDI inflows at the world level are satisfactorily explained by a single independent variable: exports per capita. This clearly supports the common contention that policy changes such as liberalization and increasing privatization explain changes in FDI flows. The basic economic conditions of host countries, such as their economic attractiveness as measured by the size of the market, economic stability, and growth potential (reflected by the growth of exports and imports) are important determinants of how much capital TNCs will transfer to these foreign production locations (UNCTAD 1991). In South Asia and the Asian Pacific, the situation has been much more so. Per capita 1997 FDI is successfully explained by seven independent variables, with a high R^2 of 0.99. The most important independent variables are per capita exports and imports, while PPPGNP95 and URB95 are third and fourth in significance (equation 6). In equation 5, R^2 is also high, 0.871, showing that the five independent

variables can explain as much as 87 percent of the variance of the dependent variable. Of the five, PPPGNP95, EXGNP95, and EX9095PC are more significant.

Table 2.2. *Variables Used in Regressions*

<i>Variable</i>	<i>Definition</i>
URB95	Urbanization level, (percent), 1995
IM9095GR	Annual growth rate of imports, (percent), 1990–95
PPPGNP95	PPP/GNP per capita [[PLEASE PROVIDE UNIT]], 1995
GNP8595	GNP per capita, Annual growth rate of per capita GNP, (percent), 1985–95
IMGNP95	Imports as a percentage of GNP, (percent), 1995
FDI92PC	Inward FDI per capita, 1992 [[UNIT?]]
FDI97PC	Inward FDI per capita [[UNIT?]] , 1997
EX9095GR	Annual growth rate of exports, (percent) 1990–95
EXPC95	Export value per capita [[UNIT?]] , 1995
EXGNP95	Exports as a percentage of GNP, (percent), 1995
IMPC95	Import value per capita [[UNIT?]] , 1995
POPMID95	Population (millions), 1995

GNP Gross national product.

PPP Purchasing power parity.

Source: Author.

Table 2.3. *Correlation Coefficients between the Variables (1-tailed Sig)*

<i>Variable</i>	<i>URB</i> <i>95</i>	<i>IM9095</i> <i>GR</i>	<i>PPPGNP</i> <i>95</i>	<i>GNP8595</i>	<i>IMGNP95</i>	<i>FDI92PC</i>	<i>FDI97PC</i>	<i>EX90</i> <i>95GR</i>	<i>EXPC</i> <i>95</i>	<i>EXGNP95</i>	<i>IMPC95</i>
URB95											
IM9095GR	0.200										
PPPGNP95	0.660	0.038									
GNP8595	-0.003	0.350	0.301								
IMGNP95	0.199	0.099	0.181	0.196							
FDI92PC	0.437	-0.030	0.602	0.223	0.387						
FDI97PC	0.425	0.025	0.561	0.216	0.484	0.724					
EX9095GR	0.110	0.321	0.199	0.349	0.210	0.111	0.154				
EXPC95	0.471	0.032	0.692	0.235	0.601	0.686	0.836	0.210			
EXGNP95	0.292	0.042	0.369	0.147	0.780	0.479	0.547	0.272	0.693		
IMPC95	0.460	0.045	0.657	0.243	0.641	0.673	0.829	0.192	0.988	0.679	
POPMID95	-0.016	0.103	-0.037	0.167	-0.226	-0.073	-0.060	0.098	-0.077	-0.157	-0.075

Number of cases: 112–144.

Source: Author.

Table 2.4. Summary of Regression Results

Equation number	Region	Regression results
1	World	$URB95 = 31.219 + 0.002PPP95 - 1.757 GNP8595 + 0.674 IM9095GR + 0.154 FDI92PC - 0.001 IMPC95 + 0.039 EXGNP95$ (F = 20.582; Sign. F = 0.000; n = 104, R ² = 0.560)
2	World	$FDI97PC = 9.202 + 0.059 EXPC95$ (F = 311.40; Sign. F = 0.000; n = 136, R ² = 0.699)
3	Developing countries	$URB95 = 26.155 + 0.004 PPPGNP95 - 1.987 GNP8595 + 0.337 IM9095GR + 0.007 EXGNP95 - 0.013 EXPC95 + 0.017 FDI97PC + 0.009 POPMID95$ (F = 12.197; Sign. F = 0.000; n = 82; R ² = 0.572)
4	Developing countries	$FDI97PC = -7.481 - 0.020 IMPC95 - 0.027 PPPGNP95 + 0.091 EXPC95 + 2.220 URB95 + 6.496 GNP8595$ (F = 50.512; Sign. F = 0.000; n = 98; R ² = 0.732)
5	East, South, and Southeast Asia	$URB95 = 40.463 + 0.001 PPPGNP95 + 0.244 EXGNP95 - 1.359 EX9095GR - 0.001 FDI97PC + 0.001 EXPC95$ (F = 16.307; Sign. F = 0.000; n = 18; R ² = 0.871)
6	East, South, and Southeast Asia	$FDI97PC = 21.152 + 1.033 EXPC95 - 0.091 PPPGNP95 - 0.873 IMPC95 - 10.154 IM9095GR + 0.809 GNP8595 - 9.021 URB95 - 0.214 POPMID95$ (F = 255.408; Sign. F = 0.000; n = 18; R ² = 0.990)

Source: Author.

Thus, in the 18 countries, a high urbanization level seems to reflect a higher level of economic attractiveness in terms of local market potential as well as globalization in economic linkages through trade, but the relationship between urbanization and FDI is not as obvious. In general, there is a significant and strong relationship between urbanization, FDI, trade, population size, and economic growth. However, because FDI and urban population are both localized within developing countries, particularly in South Asia and the Asian Pacific (except the city states), macro-quantitative analyses based on the whole country as the unit of measurement may not be able to bring out fully their close relationship. We therefore need to pursue regional or much more localized analyses.

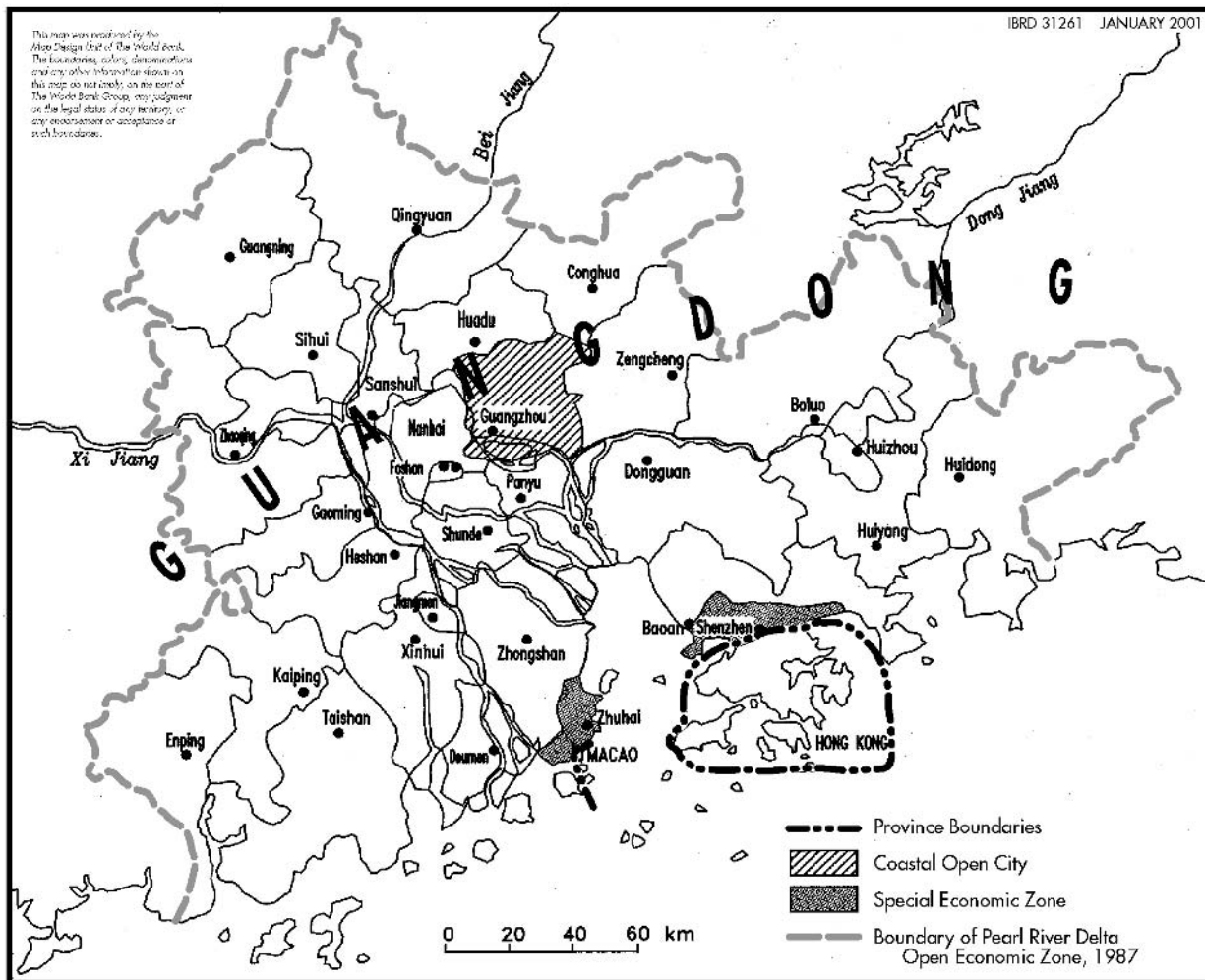
The Case of Exo-Urbanization

A detailed study lays out the relationship among globalization, FDI, and rapid urbanization in the Pearl River Delta of south China (the delta). They showed how FDI in predominantly export-oriented and labor-intensive manufacturing rapidly changed the economic structure of a formerly peripheral community, leading to a high rate of economic growth, intensive integration with the global economy, and a rapid process of exo-urbanization.

The delta comprises 28 cities and counties around the mouth of the Pearl River (figure 2.3). After China adopted its opening and reform policy in 1978, the delta soon became a test ground for economic and administrative reforms, including new FDI policies; labor hiring regulations; sales of land by private contract and auction; and a drastic devolution of economic, planning, and executive powers from the central and provincial government levels to the city and township levels. In 1979 two special economic zones were designated in the delta. In 1984 Guangzhou was given preferential status as an open city, one of 14 along the coast intended for wooing FDI. In 1987 the whole delta was turned into a large open economic zone with more favorable FDI core policies and local administrative and fiscal power. Thus the delta was opened to FDI under the NIDL much earlier than the rest of China and most other developing countries. Combined with local initiatives, it has also been the most successful in attracting FDI and in attaining rapid economic growth. In 1982 the delta was still backward in terms of development. The population of almost 16 million had an urbanization level of about 15 percent, much lower than the national average. Its gross agricultural output was Y 6 billion (using an exchange rate of Y 8.34 to the U.S. dollar) and gross industrial output was Y

15 billion. Since then the delta has been able to transform itself rapidly by exploiting the new liberalization and opening policies and its geographical proximity to Hong Kong in actively participating in the NIDL. By 1996 the delta's industrial output values had soared to Y 797 billion and industrial value added accounted for 42.6 percent of its GDP. An equally hectic increase in FDI inflows, a structural transformation, a massive in-migration of labor, and rapid urbanization have accompanied this drastic economic growth.

Figure 2.3. The Pearl River Delta and Its Different Open Areas



Source: World Bank data.

Table 2.5 shows FDI inflows into the developing countries, China as a whole, and the delta. The average annual rate of increase of FDI inflows into the delta was 31.2 percent in 1980–95, faster than the rate for China as a whole and about double the rate for the developing countries. The annual share of the delta in China's total inflows ranges from one-sixth to a quarter, although it makes up less than 1 percent of Chinese territory and has less than 2 percent of the population. In 1995 the inflows of US\$8.6 billion to the delta were 8.9 percent of all the inflows to the developing countries. Thus, since the early 1980s, the delta has stood out not only within China, but in comparison with the developing countries, as a successful, FDI-oriented economy.

Table 2.5. *FDI Inflows into Developing Countries, China, and the Pearl River Delta, Selected Years*

<i>Year</i>	<i>Developing countries (US\$100 million)</i>	<i>China (US\$100 million)</i>	<i>Delta (\$US100 million)</i>	<i>Pearl River Delta as percentage of China</i>
1980	130	—	1.0	—
1986	250	46.5	7.5	16.1
1988	280	102.3	13.9	13.6
1990	310	102.9	15.8	15.4
1991	390	115.5	21.3	18.7
1992	510	192.0	32.4	16.9
1993	800	338.0	64.3	16.5
1994	870	375.0	83.0	22.1
1995	997	481.3	85.8	17.8
Average growth, 1986–95 (percent)	16.6	29.7	31.3	—

— Not available.

Source: U.N. data and official Chinese statistics.

FDI inflows into the delta accounted for 95 percent of all forms of foreign capital inflow and have been the major source of total investment. For the Shenzhen special economic zone it was as high as 78.8 percent for 1981–95 (Shen, Zhu, and Wong 1998). As noted earlier, foreign affiliates are usually able to raise substantial additional funds both locally and from third party countries, so the actual contribution of foreign affiliates to total investment in the delta should be much larger than the already high percentages shown in table 2.6.

Table 2.6. *Foreign Capital as a Percentage of Total Investment, Selected Locations in China, Selected Years*

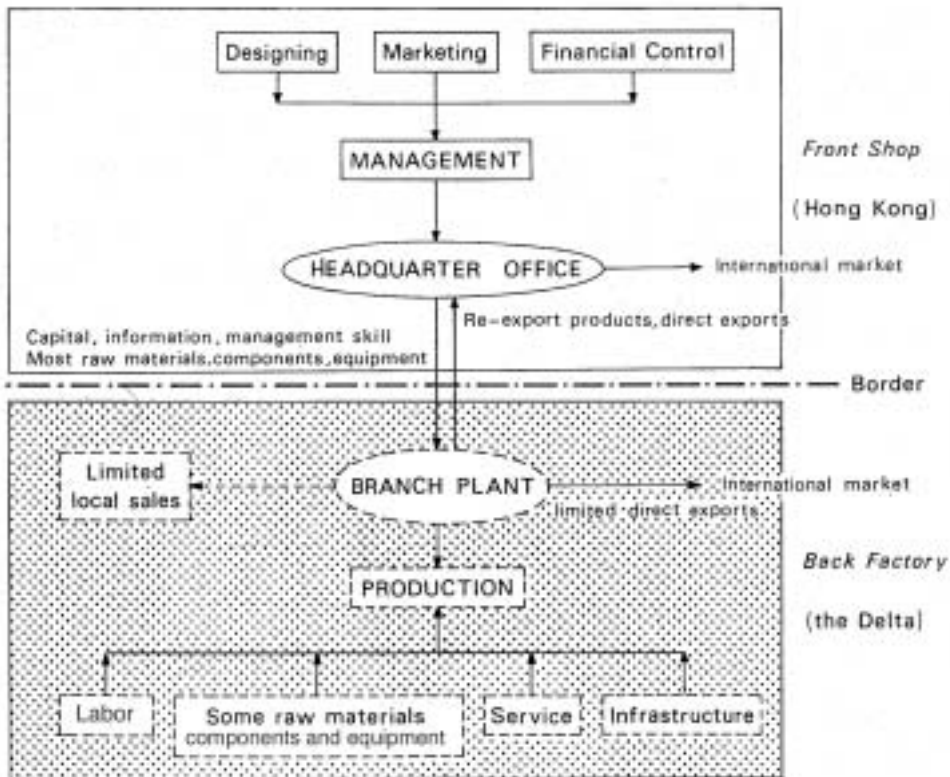
<i>Location</i>	<i>1980</i>	<i>1985</i>	<i>1990</i>	<i>1994</i>
Delta	5.5	8.0	18.5	30.7
Guangzhou	3.0	6.0	8.7	23.7
Shenzhen	16.1	13.8	23.7	34.6
Zhuhai	24.9	14.5	23.1	34.4

Source: Shen, Zhu, and Wong (1998).

Sectorally, FDI is predominant in manufacturing. Data for 1979–92 show that 70.2 percent of FDI went into the secondary sector, 27.2 percent to the tertiary sector, and only 2.6 percent to the primary sector, although figures for 1995 indicate a large increase of FDI into the tertiary sector (to 34.1 percent), with a slight dip for the secondary sector (to 65 percent). Of the FDI stock in the secondary sector, 70.5 percent (US\$35.5 billion in 1995) originates in Hong Kong. Hong Kong-sourced FDI is mostly for “out-processing” projects seeking cheap labor and other costs. The type of manufacturing and the scale of operation follow the basic characteristics of Hong Kong industries of the 1980s, that is, labor-intensive light manufacturing of toys, garments, watches, footwear, and electrical and electronic consumables for export to the international market. Details of this expanded global production system in the NIDL have been dubbed as “front shop, back factory” in a new spatial division of labor (figure 2.4). Within that mode of cooperation, Hong Kong retains and expands the front shop or most of the producer services, while the

assembling or production process, or the back factory role, takes place in the delta. Of course, most of the parts, components, and raw materials required are sourced from the industrial countries (Hong Kong Trade Development Council 1997; Sit 1989, 1993).

Figure 2.4. Hong Kong-Pearl River Delta Cross-border Multinational Corporation Model



Source: Author.

At the end of 1995 the delta had 8,044 foreign industrial affiliates that directly employed 2.14 million people. A large number of local small and medium factories were also engaged in subcontracting for this export sector, with a total of 44,571 establishments and 2.46 million employees. Thus by this time this huge “production bench” of the NIDL had provided 5.2 million job opportunities, with a total gross output value of Y 253 billion, or 30 percent of the total gross industrial output value of the province and 71 percent of its total exports. This sector represented 34.4 percent of the delta’s total employment and 68 percent of its industrial gross output. It has formed the backbone of the delta’s export-oriented industrial economy since the early 1980s.

Many of the productive activities are located outside officially recognized urban districts, leading not only to a structural transformation of the urban economy, but to an equally rapidly changed rural economy and rural labor force (table 2.7). The huge labor demand generated by these labor-intensive productive activities had largely consumed the excess agricultural hands by the mid-1980s, and had thence attracted a huge influx of migrants within and between provinces. The 1990 census reported a floating population of 1.7 million in Guangdong Province engaged in productive enterprises, 70 percent of whom were between 17 and 24 years old and predominantly female. Another 2 million worked in

agriculture, construction, and services. This floating labor force made up 37.5 percent of employment in the secondary sector and 15 percent of employment in the tertiary sector of the delta. In parts of the delta where foreign affiliates proliferated, for instance, in Baoan, Dongguan, and Shenzhen, the floating population was substantial, and even larger than the local permanent population.

Table 2.7. *Composition of Rural Products and the Rural Labor Force in the Pearl River Delta, Selected Years* (percent)

Sector	Rural products			Rural labor force			Annual growth
	1978	1985	1993	1980	1985	1993	
Agriculture	68.4	56.2	27.8	89.5	76.4	59.6	-0.8
Industry	20.6	23.3	53.4	4.4	7.8	13.2	11.2
Construction	4.1	10.7	8.3	3.0	5.0	6.8	9.0
Tertiary	6.9	9.8	10.5	3.1	10.8	20.4	17.6
Total	100.0	100.0	100.0	100.0	100.0	100.0	2.4

Source: Guangdong Agricultural Statistical Yearbook (1993).

The salient features of FDI-led exo-urbanization of the delta are as follows:

- The nonagricultural population increased from 4.8 million in 1980 to 9.1 million in 1993, and the delta's urbanization level increased from 27.4 to 42.4 percent during the period, that is, the rate of urbanization was 5.5 percent per year, much higher than the national average of 3.5 percent.
- Urbanization in the delta has been marked by faster growth of small cities and towns, which grew at an annual average rate of 14 to 23 percent, whereas large centers like Guangzhou registered a slower growth rate of around 2 percent.
- Growth was border-oriented, reflecting the source of FDI, Hong Kong, and the importance of the pull of the front shop function in the location of FDI projects.
- "Invisible" urbanization has occurred as FDI-led industrialization has partly taken the form of a mushrooming of small factories in villages, whose residents and floating population have not been officially classified as urban.
- FDI has played a significant role in the delta's transformation from a closed, self-reliant, and slow-growth agrarian region into an industrialized, urbanized, export-oriented, and rapidly growing economy integrated with the global economy.
- FDI has produced a dispersed pattern of industrialization and urbanization, leading to immense losses of prime agricultural land and serious harm to the environment. In addition, the extensive immigration of labor from other regions has posed a sociopolitical issue of a short-term floating population.

Exo-urbanization in the delta is part of the process involved in the extension of Hong Kong's role in the intensification of globalization, as well as the consequent spatial expansion into the delta, turning it into the ring of the new Hong Kong Extended Metropolitan Region (table 2.8). As the regional focal point of TNCs and international finance, Hong Kong has been increasing its producer services to cover the Asian Pacific region, particularly as a major storehouse and transaction floor for ethnic Chinese capital from the entire world. Since 1993 it has ranked among the world's top five FDI outflow sources. In 1997 it was the fourth largest FDI source area in the world with an absolute FDI outflow of US\$26.4 billion (UNCTAD 1998). Its outflow that year amounted to about half of the total outflow from developing Asia, and two-thirds of it went to China. Thus Hong Kong plays an important role in integrating parts of developing Asia,

particularly southern China and ethnic Chinese capital worldwide, into the global economy, and contributes to these territories' rapid economic growth and their unique process of urbanization.

Table 2.8. *Characteristics of the Hong Kong, China, Extended Metropolitan Area, 1996*

<i>Characteristic</i>	<i>Hong Kong</i>	<i>Macau</i>	<i>Shenzhen</i>	<i>Pearl River Delta</i>	<i>Extended Metropolitan Region</i>	<i>Extended Metropolitan Region as a percentage of China</i>
Population (millions)	6.3	0.4	3.6	26.6	33.0 (23.4) ^a	2.6
Urban population (percent)	100.0	100.0	76.4	32.8	63.8	29.9 ^b
Territory (square kilometers)	1,095	21	2,020	45,005	46,119 (2.3)	0.5
GDP (HK\$ billion)	1,199	58	95	450	1,677 (71.4)	26.4
GDP per capita (HK\$)	189,985	116,107	26,051	20,889	58,924 (322)	5211
GDP growth rate, 1990–96	5.4	5.0	23.4	22.1	—	—
Industrial output as a percentage of GDP (percent)	7.8	n.a.	41.0	42.6	—	—
Industrial output (HK\$ billions)	300.0	13.4	193.4	745.2	10455.2 (28.7)	11.2
Manufacturing workers (thousands)	325	48	427	6116	6489 (5.0)	6.8
FDI (US\$ billions)	33.0	n.a.	2.4	10.9	43.9 ^c	50.0 ^c
Imports and exports (US\$ billions)	376	3.7	52.2	n.a.	—	—
Exports (US\$ billions)	179	1.9	21.2	46.0	225.0 (79.6)	68.2
Exports per person (US\$)	28,398	4,863	8,498	2,476	—	—
Retail sales per person (HK\$)	30,552	n.a.	9,559	7,900	—	—
Revenue per person (HK\$)	33,015	19,203	3,675	1,401	—	—
Savings per person (HK\$)	389,519	n.a.	16,242	17,929	—	—
Actualized FDI per person (US\$)	5,361	n.a.	676	409	—	—
Fixed capital investment per person	7,420	n.a.	9,137	6,724	—	—

a. Figures in parentheses are percentage shares of Hong Kong.

b. Excludes Macau.

c. Level of urbanization in percent.

— Not available.

n.a. Not applicable.

Source: Guangdong Agricultural Statistics Yearbook (1996).

Mega-Urban and Extended Metropolitan Regions

Exo-urbanization in the delta may be seen as an integral part of the growth of mega-urban regions or extended metropolitan regions (EMRs) that were increasingly investigated in urbanization studies of the 1990s. Ginsberg (1991) has defined mega-urban regions as large urban agglomerations comprising core cities, their fringe exurbs, satellite towns, and extensive intervening areas of dense population and traditional agricultural uses. Similar spatially spread out patterns of urbanization were found in numerous areas in South and Southeast Asia in the 1980s, prompting McGee (1995, p. 10) to infer that “operating in Asia is the emergence of what can be described as *regional-based urbanization*, as opposed to city-based urbanization.”

This superficial conclusion is linked to McGee's (1991) concept of "desakota." These are rural-urban transitional areas with an intensive mixture of agricultural and nonagricultural activities that often stretch along transport corridors between large urban centers and exhibit some common features: a densely populated agricultural area with a long history, often based on wet rice; a recent rapid increase of nonagricultural activities and increasing fluidity of population; an intense mixture of land uses, with agriculture, cottage industry, and new industrial estates; an increasing participation by women in nonagricultural labor; and gray zones from the point of view of the state in administration and planning. McGee initially explained his desakota area in terms of local dynamics, including increased availability of transport to nearby large urban centers that allows the dispersal of some industrial activities from such centers and the possibility for some members of rural households to commute to these centers to work in nonagricultural activities. Added reasons for the development of desakota are the higher land and labor costs in the large urban cores and population-land pressure in the rural-urban transitional zone. Although McGee's derivation of desakota areas came from his study of the rural-urban transition zones around Jakarta, Indonesia, he had not linked the area's growth and development to the processes of globalization of and FDI in that core city, which had already been unfolding, nor had he integrated it into the emerging mega-urban region or EMR of Jabotabek (Jakarta and the neighboring Botabek area).

The enlarged urban entity or agglomeration that results largely from globalization and FDI has been labeled as a megacity (MC) or EMR by different authors. The megacity, defined by Fuchs and others (1994) as an urban center with a threshold population of 8 million, occasionally appears in the literature. It does not, however, include the notion of a large (much larger than the administrative territory of the city) rural transitional zone that contains many nonagricultural activities, and is also part of the functional system of that core city in terms of economics, culture, politics, and potential for future growth. The MC is flexible enough to include such a zone, yet it is unable to convey the relative functionality of the core and the rural-urban transitional zone. In any case, the MC may be easily confused with the general concept of urban agglomeration. Thus the term EMR is currently generally accepted. As a special form of urban agglomeration, the EMR is closely linked to globalization and FDI and needs to be seen as a new dynamic in urbanization in the developing countries, as already evident in Asia. It is different from the megalopolis in a number of ways. The megalopolis, proposed in the 1960s to describe the situation of the United States (Gottman 1961), is composed of a number of urban centers, and so is the EMR, but the interstitial areas of the megalopolis are sparsely populated and generally underutilized. In addition, the megalopolis may be seen as a large, extended commuting zone of a number of urban centers with related functions held together by convenient modern communications and transport systems based largely on the truck and private car. In EMRs, the interstitial areas are intensively used for residential, industrial, and institutional functions, in addition to having high-intensity agricultural areas. They are, above all, areas undergoing rapid economic transformation and urbanization coordinated by the invisible hand of globalization and FDI based in the core city.

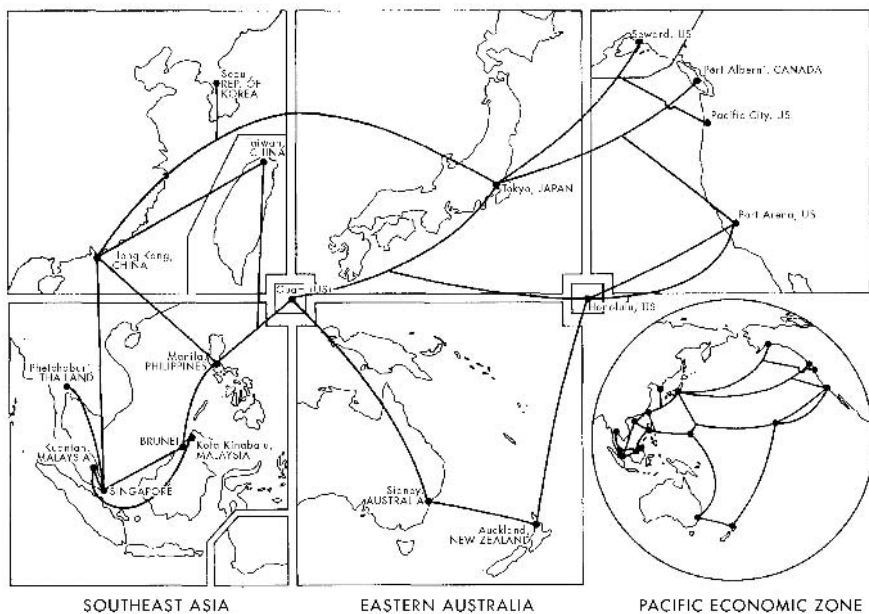
Since the mid-1990s, many studies have regarded the EMR or mega-urban region as one of the most outstanding urban phenomena. Even McGee (1998) finally recognized that the 1980s were dominated by globalization and the emergence of the EMR and directly linked the two together, acknowledging the exogeneity of forces in the latter's formation. He maintained that central to the creation of the EMR is a constant series of transactions of people, commodities, capital, and information nationally and internationally. It is a process of centralization in the urban system. Clearly, this is an important amendment to the concept of regional urbanization.

Rimmer (1995) believes that EMRs of the Association of Southeast Asian Nations are best understood as network hubs of transnational links and flows, for example, networking using optical fibers (figure 2.5). These hubs are embedded in a competitive, Asian, functional, urban hierarchy focused on Tokyo, the product of rapid economic growth and closer economic integration driven by FDI and industrialization.

Choe (1998) also points out that cities are increasingly transnational in character and that they grow by competing for mobile capital; employment; institutions; and even events, for example, major trade expositions or the Olympic games. He also notes that FDI, globalization of finance, real estate, and

international migration of labor are shaping the changing pattern of the urban system in Pacific Asia into a functional hierarchy of EMRs.

Figure 2.5. *Network of Fiberoptic Cables and Dates of Completion, Pacific Economic Zone*



Source: Rimmer (1995).

Lo and Yeung (1996), though labeling the phenomenon “world city formation,” agree that one of the ways to understand the rapid and interdependent changes that have been occurring in Pacific Asian centers is to look at the emerging and critical roles cities have played in the new global economy. These EMRs (which they called world cities) have emerged to be important as network cities, because of various key infrastructure and important global economic functions, such as airports, banking, capital flows, technological innovations, and TNCs’ regional decisionmaking and coordinating activities that serve the regional and global economy.

Calling the phenomenon mega-urbanization, Webster (1995) catalogued some of the features of the large-scale, integrated, and complex systems of EMRs: the presence of rapid regional transit systems; greater interdependence among the component geographical areas, such as industrial estates, business districts, tourist areas, education complexes, government areas, and high-volume airports; a large, dense, ordered, and integrated public utilities system; the trend toward reliance on services that is more regional and international than local; and a more developed communications and media network.

Hamer (1994) directly addresses the question of why mega-urban regions exist in developing countries. His explanation is that they exist by focusing activity in a relatively small proportion of the nation’s landscape when national income is low, and thus developing country governments reap urbanization economies of scale. These EMRs conserve investments in regional infrastructure for transportation, communications, power, and water supply, and cost effectively gather a labor force with an array of skills as well as a large number of suppliers of diversified finance, community services, and venture capital, and provide access to information on foreign markets and technology and the social amenities needed to attract talented managers.

In short, the formation of the EMR can be seen as a twofold process:

- The centralization of producer services in the core city, which serves as the contact point to the global economy. Such a process of concentration is dictated by the network hub status of individual cities, which is determined by their infrastructure, human resources, FDI regime, and other economic determinants, as well as the regional and international networking in terms of all these elements.
- The forces that led to outward expansion of globalization and related activities of the core into the periphery, turning it into the ring of the EMR. These decentralizing forces include increasing land and labor costs in the core, the change in nature of economic activities in the core, industrial decentralization policies of most municipal governments, growing demand for middle-class housing around the core, and increasing demand for leisure activities. These deconcentration forces are needed to support the changed nature of the core in intensifying globalization, leading to demands for expanded spatial and nonspatial resources in the functional urban system.

Hong Kong has served as the core city of the Pearl River Delta, which may be seen as the ring of an EMR. Similar EMRs can be found in India, Indonesia, Korea, and Thailand. In the same vein, we may see the Singapore growth triangle as an EMR, as southern Johore, Malaysia, and Batam, Indonesia, are functionally and structurally very much the ring of the Singapore EMR, which straddles national boundaries and water (Macleod and McGee 1996). However, although many of these EMRs are megacities in terms of population size (except Singapore), it is not size that underlines the nature and status of EMRs. Rather, it is their function and the way they network into the regional and global economy that define them as EMRs. The latter has led to the growth of some of them as burgeoning world cities in Asia (Douglass 1995). They are a marked contrast to the megacities of Latin America, which are more or less equated with problems of unemployment, lack of infrastructure and services, crime, health problems, and social and political instability (Gilbert 1996).

Detailed case studies of EMRs are still few. In addition to the Hong Kong EMR already presented, we shall briefly introduce three others in the Asian Pacific region: the Bangkok EMR, the Seoul EMR, and the Jakarta EMR.

The Bangkok, Thailand, EMR

The Bangkok EMR comprises the Bangkok Metropolitan Area (1,565 square kilometers) and the nearby five provinces (6,193 square kilometers). The EMR seems to be expanding further to incorporate the eastern provinces into an urban corridor, the Extended Bangkok Metropolitan Region (EBMR). In 1995 the EMR's population was 11.3 million, 19 percent of the nation's total population or about half of its urban population, and accounted for some 40 percent of its GNP.

The EMR's primacy in service value added, bank loans, deposits, and FDI is high (table 2.9). However, within the EMR spatial restructuring of the economy has been increasing. During 1983–93, banking, finance, and real estate had the fastest growth in Bangkok's GDP—150.4 percent—and attracted 83 percent of services investment of the EBMR (table 2.10). Manufacturing investment was concentrated (67 percent) in the outer ring of the EBMR, that is, in the eastern provinces. For electronics industries, 64 percent were concentrated in the inner ring. During 1983–93, the Bangkok Metropolitan Area attracted only 23 percent of all manufacturing investment in the period. The spatial restructuring of the EMR's economy is also reflected in figure 2.6, which shows that for the Bangkok Metropolitan Area, the share of services in local GDP was 63 percent in 1995, while that of industry was only 36 percent. By contrast, in the inner ring the share of services in GDP was 28 percent and of industry was 66 percent. As concerns population growth, in the inner ring it was extremely fast in 1990–95, growing at an annual rate of 19.3 percent, while growth in the core had slowed to 2 percent. Growth in the outer ring was also rapid, at 6.7 percent. Thus in 1990–95 population in the EMR and EBMR had grown faster than the national rate of 5 percent. In addition, both will reach a much higher level of urbanization in 2010. By then the EMR will be 93.7 percent urbanized and the EBMR will be 82.1 percent urbanized. The spatial pattern of investment also reflects a spatial shift to the inner ring. While the EMR accounted for 59.9 and 62.1 percent, respectively, of the nation's domestic investment and FDI, the Bangkok Metropolitan Area

accounted only for 19.6 and 15.7 percent, indicating a spatial shift toward the ring. If the EMR rather than the Bangkok Metropolitan Area is considered as the main city, its primacy had increased, indicating that globalization and FDI had strengthened its primacy or tendency toward polarization.

Table 2.9. *The EBMR and Its Extension*

<i>Item</i>	<i>Bangkok</i>	<i>Inner ring</i>	<i>EMR</i>	<i>Outer ring</i>	<i>EBMR</i>
Area (square kilometers)	1,565	6,193	7,758	51,242	59,000
<i>Population (thousands)</i>					
1970	3,804	884	4,688	2,774	7,462
1980	5,701	1,133	6,834	3,503	10,417
1990	7,227	1,363	8,590	4,199	10,289
1995	8,000	3,300	11,300	5,800	17,100
2010 (estimated)	11,500	5,000	16,500	7,200	23,700
<i>Level of urbanization (percent)</i>					
1995	100.0	56.1	89.8	39.3	71.0
2010	100.0	79.2	93.7	64.2	82.1
<i>Percentage national urban population</i>					
1995	36.5	9.8	46.3	9.1	55.4
2010 (estimated)	32.5	11.3	43.8	11.3	55.1
<i>Percentage of national population</i>					
1995	15.5	3.5	19.0	9.8	28.8
2010 (estimated)	17.1	7.4	24.5	10.9	35.4
<i>Annual population growth rate (percent)</i>					
1970–90	3.26	2.19	3.07	2.09	2.73
1990–95	2.05	19.34	5.64	6.67	5.98
1995–2010 (estimated)	2.45	2.81	2.56	1.45	2.2
<i>Board of Investment approved investment (amount, percent)</i>					
1986	16	29	45	22	67
1989	30	10	40	29	76
1979–90					
Domestic	19.6	40.3	59.9		
Foreign	15.7	52.1	67.7		
<i>Primacy index (1995)</i>					
Service value-added			49.7 (48)		
Industrial value-added			76.8 (43)		
Deposits			74.1 (60.5)		
Loans			74.6 (70.7)		
GDP			37.3 (40.5)		
FDI (1996)			46.8		

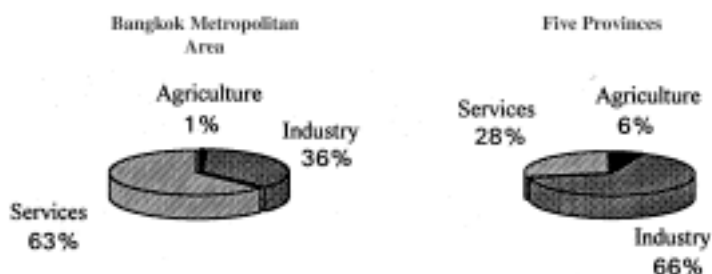
Source: Douglass (1995); Kaothien (1995); Kittiprapas (1998); Krongkaew (1996).

Table 2.10. Board of Investment Approved Investment, 1988–93 (B millions)

Sector	Bangkok	Vicinity	Eastern
Textiles and garments	45,424	19,135	18,411
Light industry	116,685	29,476	30,709
Electricity	6,641	58,533	26,068
Fabricated metals	5,656	27,169	106,792
Chemicals and paper	1,861	16,844	274,197
Ceramics and glass	77	1,671	34,441
Agroindustry	1,749	11,720	22,953
Services	388,582	27,167	53,731
Total	566,675	191,715	567,282

Source: Kittiprapas (1998).

Figure 2.6. Structure of GDP Share for the Bangkok Metropolitan Area and the Five Provinces, 1995



Source: Author.

The Seoul, Korea EMR

The Seoul EMR has a total area of 4,415 square kilometers, embracing Seoul (615 square kilometers) and the two adjacent provinces of Incheon and Kyunggi (table 2.11). In 1995 its total population was 20.2 million, shared almost equally between Seoul and the ring. While Seoul's growth had slowed down since 1980, and even declined absolutely in 1990–95, the ring had been gaining population faster than the nation's urbanization rate. Thus superficially, primacy reversal has occurred (Richardson 1980), but in reality, the primate city attained further growth through expansion into the ring. With 42.7 percent of the total population and 61.2 percent of the urban population of Korea, the growth of the Seoul EMR to a large extent represents the urbanization of the nation. The growth in population in 1980–90 was faster than the national population growth rate of 1.5 percent and the national urban population growth rate of 3.3 percent. In 1990–95, these rates further exceeded the national figures of 0.4 and 1.8 percent, respectively. Again, the EMR has witnessed rapid and concentrated growth of producer services, particularly business services, semiconductor products, and tourism, whereas manufacturing and industrial research and development have been increasingly decentralized into the ring. In 1990–96 the EMR attracted 46.6 percent of the nation's FDI inflow, which was roughly equally split in terms of manufacturing (52 percent) and service sectors (47 percent). However, 86.2 percent of the service sector FDI inflow was concentrated in Seoul, underlining the increasing opportunity for Seoul to develop services as it plugs more into the global economy through liberalization (Kwon 1998).

Table 2.11. Seoul EMR

<i>Item</i>	<i>Seoul</i>	<i>Incheon, Kyunggi</i>	<i>EMR</i>
Area (square kilometers)	615	3,800	4,415
<i>Population (thousands)</i>			
1970	5,433	3,358	8,791
1980	8,364	4,934	13,298
1990	10,613	7,974	18,587
1995	10,231	9,958	20,189
<i>Annual population growth rate (percent)</i>			
1970–80	4.3	3.8	4.1
1980–90	2.4	4.8	3.3
1990–95	-0.7	4.4	1.7
<i>Manufacturing employment (percent)</i>			
1973	70.6	29.4	100.0
1983	45.7	54.3	100.0
1995	26.8	73.2	100.0
<i>Percentage of national total</i>			
Population, 1995	24.4	18.3	42.7
Urban population, 1995	31.0	30.2	61.2
International call, 1989	64.4	11.9	75.3
Producer services , 1986	—	—	49.7
Business services , 1989	59.8	8.2	68.0
<i>FDI, 1989 (percentage of national total)</i>			
Manufacturing	9.3	29.1	38.4
Services	90.9	0.8	91.7
<i>FDI, 1990–96 (US\$ millions)</i>			
Manufacturing	608 (10.9)		
Services	4,328 (86.2)		
Total	4,936 (46.6)		
Tourist hotel rooms, 1989	46.5	4.3	50.8
<i>Research and development, 1989</i>			
Semiconductor production	60.0	—	—
Hi-tech products	—	—	50.0
Industrial research and development institutions	25.0	41.0	66.0

Figures in parentheses are the percentage of the national total.

— Not available.

Source: Hong (1996); Kwon (1998).

The Jakarta, Indonesia EMR

The Jakarta EMR comprises Jakarta and three nearby administrative units that together are 10 times as large as Jakarta (table 2.12). This large ring of the EMR is known as Botabek. Jabotabek, as the EMR is locally called, had a population of about 20 million in 1995, 10 percent of the national total or about 25 percent of the national urban population. The rate of population growth of the EMR again exceeded the national average in both total and urban growth rates. Within the EMR, Jakarta had grown slowly, whereas the ring had grown much faster. In one of the three constituent units of the ring, the average

annual growth rate of population in 1980–95 exceeded 8 percent. The rapid pace of urbanization transformed the ring from a largely rural area with a level of urbanization of only 7.8 percent in 1971 to about 60 percent urbanized in 1995. This growth was particularly rapid in 1980–95, when a total of 5 million people were added, accounting for a substantial increase in the EMR's urban population. Its structural transformation from a rural to a mixed rural-industrial economy can also be seen in table 2.12.

Table 2.12. *The Jabotabek (Jakarta) EMR*

<i>Item</i>	<i>Jakarta</i>	<i>Botabek</i>	<i>EMR</i>
Area (square kilometer)	661	5977	6639
<i>Population (thousands)</i>			
1971	4,579	3,761	8,340
1980	6,503	5,414	11,917
1990	8,254	8,878	17,132
1995	9,100	10,800	19,900
<i>Level of urbanization (percent)</i>			
1971	90.0	7.8	58.3
1980	93.7	24.1	65.5
1990	100.0	54.8	76.6
1995	100.0	—	—
<i>Percentage of national urban population</i>			
1971	—	—	—
1980	19.8	4.0	23.8
1990	14.9	8.8	23.7
1995			
<i>Percentage of national population</i>			
1971	—	—	—
1980	4.4	3.7	8.1
1990	4.2	4.5	8.7
1995	4.6	5.4	10.0
<i>Annual population growth rate (percent per year)</i>			
1971–80	3.97	4.13	4.05
1980–90	2.41	5.07	3.70
1990–95	2.09	4.59	3.03
<i>Employment (percentage share)</i>			
1971			
Primary	4	44	—
Secondary	18	14	—
Tertiary	78	42	—
1990			
Primary	2	29	—
Secondary	28	25	—
Tertiary	71	45	—

— Not available.

Source: Dharmapatni and Firman (1995); Soegijoka (1996a, b); Soegijoko and Kusbiantoro (1998).

In 1995 the EMR accounted for 21.8 percent of Indonesia's GNP. In 1997 it accounted for 60 percent of the country's air passengers, 40 percent of its exports, 59 percent of its imports, 80 percent of its bank loans, 35 percent of its FDI, and 27.5 percent of its international tourists. The concentration of finance,

utilities, services, trade, transport, and manufacturing in the EMR had been noted as early as the late 1980s (table 2.13), and the trend was maintained through the late 1990s. However, like the other EMRs discussed, there has been an obvious spatial division of labor, with trade, transportation, communications, warehousing, other services (mainly finance), and hotels and restaurants concentrated in Jakarta, and manufacturing industries in the ring. This is reflected by the spatial choices for FDI and domestic investment. It is also evident that FDI inflows into the EMR have gone mainly into two categories of activities: in the core, more than 85 percent was invested in producer services and tourism, closely related to Jakarta's specialization in financial and high-level business services as the national capital and the national headquarters for FDI. By contrast, about 80 percent of the FDI that went into the ring (Botabek) or the *desakota* area was invested mainly in labor-intensive manufacturing.

Table 2.13. *Jabotabek in Relation to Indonesia's Economy, 1985 and 1989*

Category	Jakarta		Botabek		EMR
	1985	1989	1985	1989	1989
<i>Share of the national economy (percent)</i>					
Finance	43.9	41.9	0.9	0.8	42.7
Utilities	40.5	39.7	5.9	6.3	46.6
Construction	19.4	19.5	5.6	6.1	25.6
Services	12.0	11.7	3.2	3.4	15.1
Transport	18.8	21.1	5.3	5.2	25.3
Trade	15.9	13.4	4.1	4.9	18.3
Manufacturing	13.0	13.6	5.1	5.0	18.6

Source: Dharmapatni and Firman (1995); Soegijoka (1996a, b); Soegijoko and Kusbiantoro (1998).

Generalizing the Causes and Impacts of the EMR Phenomenon

The foregoing EMR cases show that they have led their respective countries in population growth, urbanization, globalization, and FDI inflows. Their share of their countries' total and urban population and their significance in the national economy have increased. However, congestion, environmental issues, and high land and labor costs have led to a dispersal of labor- and land-intensive activities from the core city into its expanding rural-urban transitional zone. In the process, the core city has become increasingly specialized in high-level tertiary and high value added manufacturing, taking advantage of its developed infrastructure; higher-quality labor; global networking convenience, such as the presence of an international airport and port, telecommunications facilities, and regional TNC headquarters; and its national capital status.

This, however, is not genuine primacy reversal, as the decentralized activities, mainly industrial activities, have congregated in the former rural fringe rather than in lesser cities some distance away, particularly the second or third largest cities. This indicates the continual presence of a strong polarization tendency in urbanization in many developing countries in East, South, and Southeast Asia and increased inflows of FDI, in which the largest urban core remains the most attractive location for both foreign and domestic capital.

At the micro level, congestion and high costs have led to a spatial division of labor between the core and its rural-urban adjunct. In the future, polarization economies of the big city in developing countries will still be crucial, and hence will continue to exert a strong pull on the national pattern of urbanization. Those cities that enjoy the convenience of networking in the global economy because of their modern infrastructure and nodal location in the transactional space of the new economic order will enjoy faster growth in the form of an EMR. However, diseconomies resulting from congestion, cost inflation, and environmental problems in the cores of these big centers have caused simultaneous and micro-level dispersal.

For small or medium countries like Korea and those in Southeast Asia, the largest city tends to be the national capital and the sole economic hub for networking into the global economy. However, a vast country like China can have several economic and network hubs, and hence several EMRs may develop. We have referred to the Hong Kong, cross-border EMR, which incorporates Hong Kong as the core and the delta as the ring. Zhou (1991) believed that a similar phenomena is present in China in six locations, all of them along the coast, and with a good transportation and communication infrastructure for plugging into the regional and global economy. They are referred to as metropolitan interlocking regions (MIRs). They are the Yangtze Delta MIR, the Pearl River Delta MIR, the Liaoning MIR, the Beijing-Tiranjing-Tangshan MIR, the Shandong MIR, and the Fujian Coastal MIR. Each MIR includes several major metropolises and a large number of small and medium towns and cities with vast desakota areas in between. There is division of labor and specialization among the constituent metropolitan centers. The desakota areas are rapidly urbanizing, serving as reception areas for dispersed economic activities from the metropolitan centers. Most of the MIRs have developed on the basis of internal dynamics that spread out among a few centers in the region, while a few, notably the Pearl River Delta MIR, the Fujian Coastal MIR, and to some extent the Yangtze Delta MIR, are centered around a key coordinating core city, namely, Hong Kong, Xiamen, and Shanghai. For these latter cases, their economy has been significantly integrated with the global economy through FDI, and they exhibit many functional and spatial features of an EMR and may be appropriately considered as EMRs. Some even regard the National Capital City Region around Tokyo as an EMR in an industrial country (Kidokoro 1998; Takahashi and Sugiura 1996). Further research is therefore needed to chart the spread of such urbanization in and beyond developing Asia.

Cities as Centers for New Opportunities and Competitiveness

The end of the Cold War has been one of the major reasons for countries' increased openness and their participation in the global economy. Since the early 1990s, many countries have devoted substantial and consistent efforts to creating more favorable conditions for FDI, both in the form of bilateral treaties and regional initiatives. The number of bilateral investment treaties totaled 1,513 by the end of 1997 (UNCTAD 1998). Many countries have also been amending or introducing regulatory changes in order to be more competitive in attracting FDI (table 2.14). As many as 90 percent of these changes are in the direction of streamlining approval procedures, adding new promotional measures, and decreasing tariffs. One notable feature is the liberalization of industries like telecommunications; broadcasting; energy; tourism; and major urban infrastructure services, such as water supply, transportation, and education.

Table 2.14. *Regulatory Changes, 1991–96*
(number)

<i>Item</i>	<i>1991</i>	<i>1992</i>	<i>1993</i>	<i>1994</i>	<i>1995</i>	<i>1996</i>	<i>1997</i>
Number of countries that introduced changes in their investment regimes	35	43	57	49	64	65	76
Number of regimes	82	79	102	110	112	114	151
Moved in the direction of liberalization or promoting investment ^a	80	70	101	108	106	98	134
Moved in the direction of control ^b	2	—	1	2	6	16	17

a. Including measures aimed at strengthening market supervision and incentives.

b. Including measures aimed at reducing incentives.

— Not available.

Source: UNCTAD data.

In international trade, the 1990s also witnessed a general reduction in average tariffs and nontariff barriers. In the mid-1980s East Asia had an average tariff rate of 22 percent, the lowest among the major world regions (Sandrey 1997; UNCTAD 1987). At that time Latin America and the Caribbean had tariffs of 34 percent. By 1993 some East Asian countries, such as Indonesia and Malaysia, had already lowered their average tariff to about 10 percent, while many Latin American countries had narrowed the gap by lowering their tariffs from 15 to 4 percent. In East Asia, China's effort was commendable. China's average tariff in January 1992 was 47.2 percent. Through a series of five downward adjustments, by October 1997 it had been lowered to 17 percent. The effective tariff was actually lower than the nominal 17 percent rate, because 62 percent of China's imports in 1997 were not taxed, a product of numerous tariff concessions provided to export processing activities, foreign industrial enterprises, and industries promoted by the government. As concerns nontariff barriers, since 1992 China has reduced the number of products that require import licenses from 1,247 to 374 (June 1997) and reduced the number of products subject to import quotas from 26 to 13. Except for 14 price-sensitive raw materials and products that remain under state control, trade for all products has been liberalized (Hong Kong Trade Development Council 1998). These changes, coupled with more liberal entry and operation rules and guarantees against privatization, have improved the macroeconomic environment for FDI.

In the 1990s, the opening of domestic markets to products of foreign affiliates and of service sectors to foreign participation have also been significant developments in fostering increased globalization and FDI inflows into the developing countries. Taking China as an example, in the 1980s, with rare exceptions, foreign affiliates in China had to export all their products. This requirement was gradually relaxed during the 1990s (Hong Kong Trade Development Council 1998). By 1998 a foreign firm in China was generally allowed to sell 30 to 40 percent of its goods in the domestic market, and municipal authorities are entrusted with flexible implementation of this policy. Since 1997, Shenzhen has been used as a pilot case to test the possibility of complete national treatment status for foreign affiliates, that is, they can decide what percentages of their output should be sold domestically and abroad.

Privatization of infrastructure industries is another important new development that has boosted globalization and FDI, although this was a slow process in the 1980s. Because infrastructure investment involves high costs, long gestation periods, possible price ceilings and other regulations on operations, and a much higher political risk than investments in other industries, it was still not widespread in the developing countries in the 1990s. However the development of new technologies and their increasing application have led to rapid expansion of the demand for most such industries and services. The vast amount of firm-specific and untradable elements of the technologies and management involved have changed the attitudes of governments of developing countries somewhat, leading to increasing liberalization in these sectors to allow active participation by TNCs on their home turf. A 1996 survey indicated that in 1991–95, a total of 25 developing countries had introduced measures to liberalize FDI in infrastructure (UNCTAD 1997). For Asia, they include China, India, Indonesia, Pakistan, the Philippines, Taiwan (China), and Vietnam. For 1988–95, of the total revenue derived from infrastructure privatization in the developing countries, 51.1 percent came from FDI (UNCTAD 1996). Although FDI remains a small fraction of the total investment in infrastructure industries in most developing countries, for example, in 1992 only 0.3 percent in Korea, 4.1 percent in Pakistan, and the highest level of 7.4 percent in Kenya, the potential of foreign participation (direct investment and portfolio investment) is great.

Since 1990, realizing the great importance of modern telecommunications, transportation, and power industries in China's drive for modernization and economic development, and aware that TNCs can not only see China through a short-term capital deficiency, they can also build and operate such facilities much more cost-effectively and allow China to realize quicker benefits from the technology transfer involved, China has quickly expanded the scope for foreign participation in infrastructure and services. By the end of 1996, China had signed contracts for such projects involving contractual FDI amounting to US\$190 billion, which was 36.3 percent of the contractual FDI amount for the year (Hong Kong Trade Development Council 1998). The sectoral distribution of FDI in Chinese service industries in 1997 is shown in table 2.15.

Table 2.15. *FDI in China's Service Sector, 1997*

<i>Industry</i>	<i>Contract amount (US\$ millions)</i>	<i>Invested amount (US\$ millions)</i>
Construction	3,120	1,438
Real estate	5,113	3,844
Wholesale, retail, and catering	1,839	1,402
Transportation, warehousing, and telecommunications	2,622	1,655
Hotels	200	507

Source: Hong Kong Trade Development Council (1998).

To further liberalize investment in these sectors, in 1996 China announced its liberalization plan that would see it into the next century (Hong Kong Trade Development Council 1998):

- *Banking*—1997–2000: increase the number of foreign banks and allow renminbi business in key cities on a trial basis; 2001–10: allow the spread of foreign banks and trials of renminbi business in a wider geographical area
- *Insurance*—1997–2000: increase the number of designated foreign firms in pilot cities; 2001–10: increase the number of pilot cities and allow more foreign firms
- *Securities*—1997–2000: allow more foreign firms; 2000–10: allow foreign firms to trade A-shares on a trial basis
- *Retail*—1997–2000: allow joint ventures to operate in 11 designated cities and wholesale joint ventures on a trial basis; 2000–10: allow joint ventures in all provincial capitals and enlarge the scope for joint venture chain stores and wholesale enterprises
- *Tourism*—1997–2000: allow 5 joint venture travel agents in 12 national-level tourist resorts; 2000–10: permit more pilot projects
- *Transport*—2000–10: open water and road transport markets after China enters the World Trade Organization
- *Energy*—raise the ratio of foreign equity in energy
- *Communication*—2000–10: ensure that trade in value-added communication services conforms with international norms.

As an illustration of the potential size of the demand for FDI in infrastructure in East Asia during 1995–2004, the *Far Eastern Economic Review* (1995) estimated that the total investment required for power, telecommunications, transport, and water and sanitation could amount to US\$1,477 billion (table 2.16). If 20 percent of the investment were to come from FDI, this would amount to US\$295 billion, or 3.4 times the total FDI inflow into Asia and the Pacific in 1997.

Obviously, most infrastructure projects and investment in services by FDI in the developing countries have been and will continue to be concentrated in their key cities. This is not only where the demand is, but such projects will enhance the producer services of these cities, making them more competitive in the global economy as focal points for global services and production, and strengthening their economic and network hub function and status. Many of the liberalization measures, such as those concerning local versus foreign sales ratios in China, have been left to individual municipalities to decide and to implement. Similarly, liberalization of services in China takes on a clear urban bias in the form of the pilot cities. Investment and FDI in these important sectors will forge better links between these cities and important nodes in the larger region, as well as with world cities, while their links with their hinterlands and the rest of the country will also be improved.

Table 2.16. *Indicative Investment Requirements in Infrastructure in Developing East Asia, 1995–2004*

<i>Country</i>	<i>US\$ billions</i>	<i>Percentage of GDP</i>
China	744	7.4
Indonesia	161	8.1
Korea, Rep. of	269	5.6
Malaysia	49	4.8
Philippines	48	6.6
Thailand	145	7.1
Others	61	7.5
East Asia	1,477	6.9

Source: Far Eastern Economic Review (1995).

An examination of the export propensity of Japanese and U.S. investment in five East Asian countries provides further support for this view (table 2.17). Some FDI manufacturing, for instance, electrical engineering and primary activities, are highly export oriented. These activities usually seek cheap labor, cheap land, and low-wage locations. They also tend to locate close to the port city for convenient transport. Chemicals and transport equipment manufacturing are mostly import substitution activities, best located at or near the port city for convenient access to import shipments and to be close to the nation's largest market and distribution center. Investment in services is mainly in producer services, real estate, hotels, and modern retailing facilities. For them location in the largest port city is also a logical choice.

Table 2.17. *Export Propensity of Investment by Japanese and U.S. Affiliates in Selected Asian Countries, 1995*

<i>Sector and industry</i>	<i>Japanese^a</i>	<i>United States</i>	
		<i>Republic of Korea</i>	<i>Other^a</i>
Primary	76.0	14.0	—
Manufacturing	39.9	4.0	42.0
Chemicals	18.5	19.0	4.0
Electrical engineering	70.7	—	—
Transport equipment	8.1	1.0	—
Services	25.3	6.0	2.0
Total	35.9	10.0	34.9

— Not available.

a. Indonesia, Malaysia, Philippines, and Thailand.

Source: Author.

The message derived from the foregoing discussion about the increasing trend toward liberalization and privatization, as well as new developments in technology, product design, and product nature, is clear. There will be increasing globalization in production and consumption and FDI will continue to expand its role in developing economies. Spatially, this will be manifested in the increasingly global nature of the economies of major cities of the developing countries, particularly in East, South, and Southeast Asia. This is currently where most FDI inflows into the developing countries have been concentrated, and where a process of concentrated exo-urbanization and EMR formation is present and is shaping the urbanization and economic development of many of these countries.

More specifically, opportunities will exist in the following:

- Producer services in the core city, such as finance; insurance; accounting; legal, audit, and business services; data processing; design; research and development; trade; and engineering
- Hotels and tourist facilities in the core; superinfrastructure such as mega-airports, container ports, and infoports for regional and international links
- Infrastructure in the ring of the EMR in energy, regional optical fiber networks, and regional transportation facilities
- Land- and labor-intensive productive activities, as well as trading and warehousing facilities in the ring.

In East, South, and Southeast Asia, such opportunities have been boosted by regional cooperation that intensifies the flow of information, enhances long-term regional commitments in developing mutually beneficial relationships, and eases domestic capacity constraints in local policies and infrastructure. The Association of Southeast Asian Nations Investment Area, Asia-Pacific Economic Cooperation, and the EU's European Investment Promotion Action Plan, which were revised or created in the late 1990s, provide new and significant avenues to coordinate legal and regulatory measures and further investment liberalization; maintain a constant information flow and contact; and provide training, promotion, facilitation, and networking activities to enhance the flow of FDI into the region from within the Pacific Rim as well as the EU.

Future opportunities for key cities, especially the EMRs, which have already charted two decades of success and accumulated experience, may be seen as lying in the following three areas:

- They will be the telematic gateways of the host countries' drive toward modernization and increasing globalization in the 21st century. In 1991–95 China spent US\$7 billion on telecommunications infrastructure (Rose and Tang 1998). China plans to spend a further US\$20 billion in 1996–2005, which would imply huge domestic and FDI inflows into such key cities as Shanghai, which enjoys geographic, market, and policy advantages for winning such investment. Besides telematics, super-airports, in particular, cargo airports known as global transparks, will become important gateways for cargo movement in the 21st century when just-in-time production and retailing and logistics play a crucial role in globalized production and consumption (Kasarda 1998; Kasarda and Rondinelli 1998). Pharmaceuticals will become significant market-seeking FDI industries located in these cities catering to an expanding market as people live longer and are willing to spend more to stay healthy.
- The outflow of FDI from the newly industrializing economies will be maintained, particularly from Hong Kong, Korea, Singapore, and Taiwan (China). Part of this will be investment in services, an outcome of the created assets of these sources and the role of Hong Kong and Singapore as financial and regional TNC headquarters. Others will be in industries following the so-called flying geese pattern, seeking global, low-cost, production bases for capital- and technology-intensive industries, such as electronics, automobile manufacturing, petrochemicals, and oil refining. These industries will be increasingly moving up the skill ladder and looking for cost savings in skilled labor and created assets.
- For most national governments, when many of the host country determinants mentioned before are applied, they are subject to local modification because of the attitudes and initiatives of metropolitan governments. In the case of China, exemptions from tariffs, local taxes, and fees are a significant part of local initiative packages for attracting FDI. The privileges given to various types of open areas, for example, Pudong in Shanghai, which has granted renminbi business to foreign banks, and the pilot city of Shenzhen, which treats foreign affiliates like national firms, form a significant macroeconomic milieu of centers for globalization and FDI. In China there is a correlation between high-priority open areas and coastal cities (table 2.18), as well as between coastal cities and the concentration of FDI. The record of growth and increasing economic significance of the open areas has been well documented,

another testimony to the significant positive relationship between liberalization, globalization, FDI, and metropolitan location (figure 2.7).

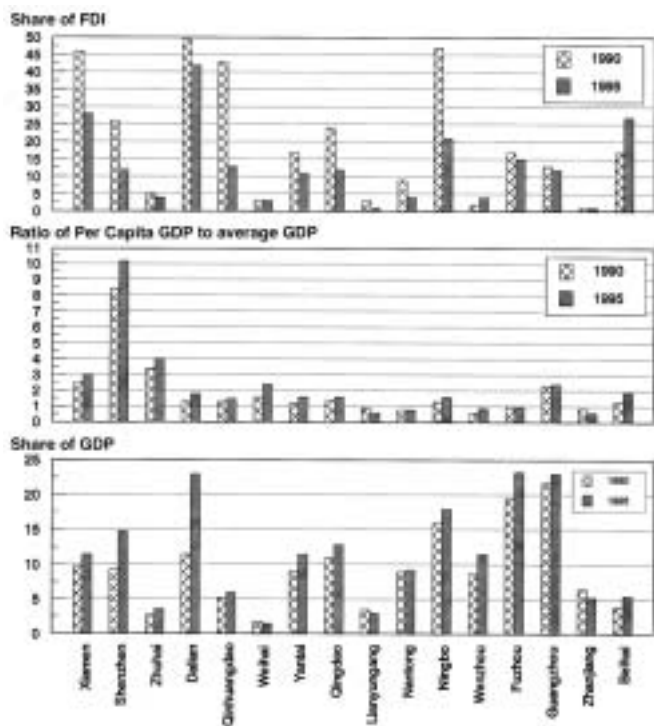
Table 2.18. *Distribution of Open Areas and FDI Inflow into China, 1996*
(number of areas)

<i>Open areas</i>	<i>East China</i>	<i>Central China</i>	<i>West China</i>
Bonded area	13	0	0
Special economic zone	5	0	0
Economic and technological development zone	25	4	1
Coastal open city	14	0	0
Coastal open area	260	0	0
Riverside open city	0	5	1
Border open city	2	5	6
Provincial capital	2	8	8
High-tech enterprise zone	29	14	9
National tourist area	10	0	1
Total	360	36	26
FDI inflow share (percent, 1987–93)	88.5	7.6	3.9

Note: Open areas are ranked in descending order of attractiveness of incentives and infrastructure.

Source: Jin and Chen (1996).

Figure 2.7. *Significance of Special Economic Zones and Open Cities in Their Provinces, 1990 and 1995*
(percentage share in the province)



Source: Author.

Thus, in China, and equally so in other developing countries, the policy bias toward the metropolitan centers is likely to continue. It will create for these countries new opportunities for FDI and domestic investment, and is an important dynamic in affecting the nature and spatial pattern of the countries' urbanization.

In the future, key cities in the developing countries and the newly industrializing economies will increasingly compete against each other as regional centers in the global economy in attracting FDI in producer services and high-tech industries. This trend will also spread to megacities in other developing countries outside Asia, particularly in Central and Latin America. The EMRs and emerging EMRs in Asia will be looking for high-quality investments and will adopt a selective approach to FDI for upgrading their skill levels, technology, and value added of their economic activities. As Choe (1998) said, in the future, the source of a city's growth will remain global. There will be no hierarchical functional roles; each will be in direct competition with others. Economic competition will thus likely be between cities across national borders, not between countries, and cities will represent countries in the global economic system. They will rely substantially on global capital transfers and the way they plug into the new economic order. In short, the growth strategy of many countries will, to some extent, be city based.

Although it is common to rank order the attractiveness for investment of countries and cities based on conventional factors, such as financial and political reforms, consumer confidence, and enterprise performance (table 2.19), the new competitiveness of cities in the global economy will lie mainly in the following:

- Removing the constraints that inhibit efficient functioning of the regional urban system, that is, the EMR
- Developing super-infrastructure, such as airports, seaports, and teleports that will enhance a city's logistical position to minimize costs and maximize quality and market coverage
- Marketing to enhance the city's image through prestigious projects and business facilitation.

Table 2.19. *Foreign Bank Loans to Selected Economies in Asia, 1996*

<i>Economy</i>	<i>Short-term loan (percent)</i>	<i>Public loan (percent)</i>	<i>Private loan (percent)</i>	<i>Total amount (US\$ billions)</i>
China	48.9	15.4	43.1	55.0
Korea, Rep. of	67.5	5.7	28.3	100.0
Indonesia	61.7	12.5	60.2	55.0
Malaysia	50.8	9.0	61.8	22.0
Thailand	65.2	3.2	59.6	70.1
Taiwan, China	84.4	2.1	40.0	22.4
Philippines	60.4	12.2	42.6	19.7
Asia total	61.5	9.0	47.6	367.0

Source: The Financial Daily, Hong Kong (December 3, 1998).

In the sphere of super-infrastructure, competition in the construction of container ports and super-airports was already keen in the 1990s. The rivalry between Hong Kong and Singapore, and to a lesser extent Kaoshiung, in container port development is well known. Each has worked hard to increase productivity, lower unit costs, and add capacity. Hong Kong has completed the new Cheklapkok Airport, which will have an annual passenger capacity of 89 million people and cargo capacity of about 9 million metric tons. The new Seoul Airport will be completed in 2001 and will have an annual passenger capacity of 100 million people and a cargo capacity of 7 million metric tons. There are, in addition, the new Singapore Airport, Kuala Lumpur Airport, Kansai Airport, Zhuhai Airport, Pudong Airport, and Guangzhou Airport, all professed to have final full capacity of 20 to 60 million passengers per year.

Attention to the significance of logistics and time saving in production and marketing have led to a new wave of plans to construct specialized air cargo airports, which will also serve as sites for FDI in high-tech industries. Thailand has approved the plans for such a global transpark south of Bangkok. There are plans to convert Zhuhai Airport in south China and Subic Bay Airport in the Philippines into global transparks. There is also interest in converting part of the new Seoul Incheon Airport for such a purpose; and preliminary planning for a global transpark is under way in Taiwan, China. Singapore has been active in winning the role of the Asian Pacific logistics hub. In addition to having a modern airport and container port, it is making the investment so as to become the Asian Pacific junction of the optical fiber highway for business information and data. In 1996 Shanghai, the largest of China's three designated nodes in telematics started a 15-year program to build an infoport. The first phase of investment alone (1996–2000) cost US\$5 billion (Rose and Tang 1998).

The new competitiveness, however, is unlikely to be achieved within the traditional administrative confines of cities. Efficient producer services and global production will lead not only to the growth of the EMR in space, but also to the coalition of major nearby cities. Rimmer (1995) believes that in the Asian Pacific region, as the international economy changes, even EMRs will develop into vast metropolitan regions of urbanization linking large cities and metropolitan areas into development corridors straddling international borders.

Thus the key words for the new competitiveness are nodality, density, efficiency, logistics, access, and connectivity. The future of key cities in the developing world will be strongly influenced by the right FDI policy, as well as by regionally and globally competitive transportation and communication infrastructures. The success of these cities or alliances with nearby cities will further enhance the globalization of urbanization in the 21st century.

Conclusion: Response to the Asian Financial Crisis and Policy Suggestions

The Asian financial crisis of 1997–98 disrupted the spatial cost surface of the global economy, particularly for East and Southeast Asia, and calls for policy responses that impinge on metropolitan competitiveness and governance. The devaluation of local currencies of 53 to 231 percent against the U.S. dollar and rapid hikes in interest rates raised international doubts about the possibility of the region's quick recovery and shook confidence in globalization and FDI as major dynamics in economic and urban growth.

An examination of the actual inflow of foreign capital in selected countries in the Asia Pacific region provides some explanation from the point of view of structural and policy flaws and the popular cause of the crisis: attacks by foreign speculators. In 1997, among the private inflows into Korea and Thailand, FDI accounted for a very small portion, as the inflows were overwhelmingly dominated by loans and portfolio investment, many of which are short-term loans. In 1996 borrowing from overseas banks in Korea amounted to US\$100 billion and in Thailand to US\$70 billion, compared with their FDI of US\$2.32 billion and US\$2.27 billion, respectively. While the ratio of FDI to overseas borrowing was almost 1:1 for China, it was 1:43 for Korea and 1:30 for Thailand (table 2.20). Korean corporations tend to borrow huge sums to finance their outside expansion, as indicated by the country's large FDI outflow and negative net inflow. Korea's collapse during the crisis was clearly financial in nature, as creditors called back loans, leading to insolvency and bankruptcy. In Thailand, the inflow of large volumes of short-term borrowing went mainly into real estate and trade. This is also reflected in Thailand's FDI statistics for 1988–97 (Kittiprapas 1998). In 1988, 58 percent of FDI inflows were in industrial projects, while real estate accounted for only 5 percent. The turnaround came in 1994, when 33.5 percent of FDI inflows went to real estate, and industry obtained only 16 percent. Since then, real estates' share was maintained at least one-third of the total inflows. Together with trade, real estate accounted for about 60 to 64 percent of FDI inflows in 1994–96, building up a huge bubble in some three years.

Table 2.20. *Economic Competitiveness of Selected Asian Economies, 1998*

<i>Economy</i>	<i>Financial reform</i>	<i>Political reform</i>	<i>Consumer confidence</i>	<i>Enterprise performance</i>	<i>FDI</i>
Hong Kong, China	B+	B-	C+	A-	A-
Singapore	B+	C	B-	A	C+
China	C+	D	B-	C-	B+
Taiwan, China	B	A-	B	A	B
Japan	C	C	D	B-	B+
Thailand	B+	A-	C-	C	C
Korea, Rep. of	B	B-	D	C	C-
Indonesia	D	C-	D	D	C-
Malaysia	D	F	C+	F	C
Philippines	B+	A	C-	C	B-

Source: Business Week (1998, October).

In terms of the volatility of the flows and short-term balance of payments, short-term loans and portfolio investment are potentially much more risky than FDI. They need a satisfactory international reserve position to balance them and to serve as a safety net in times of balance of payments difficulties. The Asian financial crisis has revealed the different nature of FDI and short-term loans and portfolio investments. Such a lesson will enhance the future efforts of the developing countries (including the newly industrializing economies) to woo FDI. In 1997 the combined FDI inflows of the five Asian economies most affected by the crisis remained at much the same levels as in 1996.

Another obvious reaction to the crisis is for countries to become more cautious in liberalizing finance. In October 1998 member governments of Asia-Pacific Economic Cooperation agreed to study ways to avoid excessive speculation in currencies, shares, and stocks by international hedge funds. There are at least two areas in which action may be taken:

- Monitor the flow and sectoral distribution of international capital and device measures to regulate some of the flows.
- Set up quantitative targets for real estate development for the entire EMR as a way to avoid building up a bubble, as most of the bubble that led to the crisis was located within EMRs.

Clearly these measures may mean cutting back some of the liberalization efforts for the financial market and the construction and trading sectors and extending planning and administrative jurisdiction of core city metropolitan governments to the EMR ring.

The devaluation of local currencies will also decrease FDI outflow from the region, which in 1997 amounted to 40 percent of FDI inflow into the developing countries. However, such a decline will likely be compensated by increased inflow from the United States and the EU. The latter's share of FDI inflow into the Asia Pacific region has already increased and the share of mergers and acquisitions is rising rapidly, reflecting the inflow of capital from core countries to buy up cheap assets. Thus the Asian cities' networking with Tokyo in the functional hierarchy of globalization in the 1980s and 1990s may change. Asian Pacific cities may need to extend their networking to key cities in the United States and EC to improve their competitive position in the postcrisis new global economic order.

In the new round of competing for FDI and improving infrastructure, the developing countries need to pay more attention to and increase the pace of liberalization of their services, implementing national treatment to FDI and removing nontraditional barriers, such as state monopolies. National governments also have to realize the logic of and need to frame FDI policies in the context of not only national, but also regional and EMR levels, and coordinate them with technology, international finance, and trade policies.

At the city level, the building of super-infrastructure has already been a commonly adopted strategy, although a few countries, like Thailand, have been forced by economic depression to put off their global transpark project (Kittiprapas 1998). Municipal governments are also engaging in new and increased efforts to improve internal and external infrastructure, engage more actively in place-marketing activities, and help cut the cost of operation. Singapore enforced an across-the-board wage cut of 15 percent from January 1999, while the government of Hong Kong froze pay increases for civil servants for 1999 and the utilities companies there also froze or lowered their charges. Both governments too have lowered taxes, including the basic corporate profit tax rates, and cut or eliminated some government service fees.

Other FDI-dominated urban economies, such as Fuzhou and Xiamen in China, are implementing a package of measures to improve their economic conditions and business facilitation, as well as place-marketing efforts. They too have extended their promotion focus to the United States and EU. For example, in 1998 Xiamen started a system of annual updating of the city's investment guide and FDI target projects, and the information has been posted on the Internet for worldwide distribution. Urban district authorities are given the responsibility of promoting FDI and have to follow up with postinvestment facilitation and progress monitoring. The Saturday Complaints Meeting system was established in 1998 for efficiently dealing with complaints by foreign affiliates, and was chaired by the mayor. It is complemented by a regular luncheon attended by city government officials and members of the foreign enterprise association. The increased pace of patching up legal loopholes in the operation of foreign affiliates, the added transparency, and the decreased government service fees and "one-window" handling of executive fee payments was also implemented in 1998. The Xiamen September 8 Investment Expo was raised to national status from 1997, and increased the city's link to the world (Chen 1998).

Douglass (1995) described five major dimensions of restructuring due to globalization of the urbanization process: (a) the polarization of development in a limited number of urban regions, (b) the emergence of mega-urban regions, (c) the development of world cities and international urban links, (d) the formation of transborder regions, and (e) the significance of international networking and development corridors in development. Despite the Asian financial crisis, the nature and tendency of globalization and FDI in the future will likely reinforce these dimensions.

Within the EMR or enlarged metro system, Dharmapatni and Firman's (1995) suggestions still deserve attention when formulating detailed local policies (in addition to suggestions already mentioned), that is:

- Implementing new city management arrangements
- Decentralizing legal authority to the local level
- Devising policy to deal with losses of farmland
- Taking measures to take advantage of the increasing role of the private sector
- Coping with environmental deterioration
- Increasing local government income
- Introducing mechanisms for flexible spatial plans
- Setting up information systems to cope with rapid change
- Providing skill training so that labor can cope with rapid economic and social changes.

Clearly, these policy suggestions are not simply for redressing the problems of management, finance, and environment of existing EMRs, some of which are proactive in fostering the future capability and competitiveness of the mega metro system in an increasingly globalizing economy. The future prospects of the developing countries, both in economic and urbanization terms, will thus increasingly hinge on existing and emerging EMRs. The management of EMRs or globalization of urbanization will therefore be a critical task for development in many developing countries at the dawn of the century.

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3

Global Environmental Imperatives and Institutions to Ensure Sustainability

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A society can be thought of as having achieved a sustainable growth path if it meets three conditions of sustainability: ecological, economic, and social. My observations here are concerned with ecological and economic sustainability. Yet, as the World Bank frequently emphasizes, the three aspects of sustainability should not and cannot be separated. This fact is of special importance for the developing world.

Economic history teaches us that economic growth has been fed equally by the increased use of natural resources of all kinds, by growth of the labor force, and by new technologies. In the past, new technologies helped people replace the natural resources that had become scarce through overexploitation with resources that were still abundant. The switch from charcoal to hard coal was such an event in European regions where forests were under the threat of extinction. Today, many environmental problems have a similar character. However, it is not the quantitative scarcity of a natural resource that is of concern, but the threat to human health imposed by the deteriorating quality of environmental resources.

What global environmental imperatives will move the world toward a sustainable growth path? What institutions will be appropriate for achieving such a path? To answer these questions, we need to look at the global environmental problems that will accompany us into the 21st century. Then we will examine their causes and their interactions with other problems. Finally, we need to identify imperatives and institutions that can help move the world economy toward a sustainable growth path.

Growth, the Environment, and Sustainability

In the past 20 years, knowledge about the nature and extent of environmental problems and natural resource scarcity has increased remarkably. Local, national, and transfrontier problems all pose different challenges for policymakers. Efficient ways have been found to internalize negative environmental externalities through mechanisms such as taxes, charges, tradable emissions rights, and—where possible—through the establishment of private property rights that create incentives for the efficient use of environmental resources.

The static analysis of environmental problems has recently been supplemented with a closer focus on intertemporal problems. Problems such as climate change, water resource availability, the loss of biodiversity, and the relationship between economic growth and the environmental and sustainability issues have moved to the center of attention, thus requiring a more long-term view for policymakers and researchers.

Economic activity should aim to improve the well-being of individuals through income growth. The three main sources of income growth are

- Increases in reproducible factors of production such as labor and capital
- Increases in knowledge that result in new technologies
- Increases in the use of natural and environmental resources, both renewable and nonrenewable.

These sources can increase the number of goods a country produces, but they do not necessarily contribute to achieving a steady long-term growth path or sustainable levels of consumption or well-being.

Measuring Sustainability

The public attention that the terms sustainability and sustainable development have received has also revived academic interest in an appropriate intertemporal indicator of sustainable income. The pioneering insights of Hicks (1946), and later Weitzman (1976), have been extended to include natural and environmental resources. The Hartwick Rule states—based on a simple neoclassical growth model—that a sustainable level of consumption can be achieved if rents from the extraction of nonrenewable resources are invested in the capital stock of the economy (Hartwick 1977). Several authors have used this basic insight to empirically assess the sustainability of economies by measuring genuine savings, an indicator of savings that accounts for changes in the stock of natural and environmental resources (Hamilton 1994; Pearce and Atkinson 1993; World Bank 1995). Empirical findings suggest that resource-rich countries with low savings rates have development models that are unsustainable. Many such countries are developing countries.

Weitzman (1997) challenged these findings and claimed that indicators of sustainability such as savings and net national product systematically understate the potential sustainable growth path of an economy by neglecting the contribution of technical progress (Weitzman 1997). Weitzman's estimate of the influence of technical change on sustainable consumption is that expected income could be about 40 percent higher than conventional measures suggest, meaning that sustainability may not be as serious a problem as conventional indicators suggest.

The Implementation Problem

While findings on the importance of technological change for long-term sustainability are good news, they are based on the assumption that economies follow efficient policies in their use of environmental resources. This is often far from the case. Even though the economics profession has made remarkable progress in identifying different types of environmental externalities and in finding mechanisms for internalizing them, economists' recommendations are frequently not implemented. This may happen for several reasons. First, by focusing on measures and instruments' efficiency, economic analysis has left out distribution issues that are often decisive in determining the outcome of the policy process. Second, issues of the practical implementation of environmental policy instruments have not been dealt with adequately. Third, political and economic constraints—especially where transfrontier pollution is concerned—make implementation difficult. Finally, knowledge about the interaction between environmental change and its causes is still weak in many areas.

Overall, it has become apparent that achieving sustainability in ecologically, economically, and socially sound ways is more difficult than previously thought. Therefore, analysis and policy in the 21st century should focus on the complexities of and interactions between ecological constraints, economic objectives, social needs, and political opportunities.

The Issues Ahead

In the past, the environmental problem was mostly seen as one of scarcity of nonrenewable natural resources, especially minerals and fuels as factors of production. Today, the focus is more on renewable resources and on the irreversible consequences of unsustainable management of these resources. In addition, we are increasingly aware that ecological sustainability (or lack thereof) can only be estimated over long periods, most notably in the cases of climate change and the irreversible reduction in biodiversity. Attention has also shifted from local or national environmental problems to global

environmental and natural resource problems, including transfrontier pollution. This shift has partly been a result of remarkable success in controlling pollution problems in industrial countries.

Efforts to solve transfrontier and global environmental problems, such as emissions into the atmosphere, and manage international common access resources, such as those in international waters, are still in their early stages, but the number of international treaties is slowly increasing. This process is accompanied by an increased understanding and increasingly advanced interpretation of the role of international law. However, we still need to resolve many issues and gain practical experience before efficient internalization of global externalities through international environmental agreements becomes a more standard practice.

Problems in Negotiating Environmental Agreements

The following partial list highlights some issues that will need to be dealt with in future international environmental agreements:

- Negotiating international environmental agreements is a complex process where parties can sometimes reach agreement more easily if the problem is well defined. In some cases linking issues may be especially successful, as it provides an opportunity for implicit or explicit compensation (Barrett 1998).
- Because international environmental agreements must be self-enforcing, they need to be adaptable to changes in the costs and benefits of their signatories' participation. Renegotiation will be especially important for longer-term environmental problems.
- International environmental agreements need to contain more than just the obligations that the signatories have agreed to. Rules for noncompliance, for free-riding of nonsignatories, and for the entry of additional signatories must be established. These issues often involve conflicts with other international treaties, as in the case of trade sanctions that conflict with the World Trade Organization's regulations or other sanctions that conflict with international law.
- All the difficulties involved in reaching international environmental agreements combine in the case of climate policy. In the Kyoto agreement, climate policy issues are strongly linked to other policy areas. As a result, neither participation nor the institutional structure of environmental measures to take have been determined and an end to the negotiating process is not yet in sight.

Issues Related to Insufficient Understanding of Environmental Problems

Another notable reason for governments and international negotiators' unwillingness to effectively tackle many environmental problems is the problem of climate change. We really do not know much about the environment and its impact on long-term economic development. As a result, the costs and benefits of action and inaction are known only with a large margin of error. Although research has made some progress in increasing our environmental knowledge, the knowledge issue will accompany us well into the next century.

Several important roadblocks to understanding, and by extension to policy, exist. Especially for environmental problems that occur and can only be resolved over a long time, the lack of knowledge—and consequently the disagreement—about both the optimal timepath or using an environmental resource and the choices made to influence this timepath has made agreement on policies difficult. Research on the interaction between economic growth and environmental degradation has moved from theory to empirical data. However, the empirical results are still inconclusive. The postulated Kuznets curve—an inverted U-shaped relationship between pollution and income—found some support in early studies (Grossman and Krueger 1995), but later studies could not confirm such a general relationship (Hettige, Mani, and Wheeler 1998). If the Kuznets curve does not describe the relationship between income growth and environmental degradation, the easy policy prescription of improving the environmental situation by promoting income growth cannot be supported.

Because the simple relationship between growth and the environment breaks down in many cases, the search for the true causes of environmental degradation must go beyond correlating income and environmental resource use. The link between poverty and the use of environmental resources is important—many of the urgent environmental problems occur in poor areas of the world—but so far this link is not understood as well as it should be. Detailed studies of poverty's impact on resource use show that it is too early to generalize any causal relationship between poverty and environmental degradation. The findings suggest that causality can go either way. A small environmental resource base can lead to more poverty, but poverty may also accelerate the destruction of the environmental resource base. Even the relationship between population growth and environmental degradation is not clear. Markandya (1998) concluded that an important factor in explaining changes in environmental degradation over time is the development of institutions and their adaptability to exogenous changes. If institutions are so important, the insights from Kuznets-type studies may be of little relevance for long-term environmental policy choices.

Economic analysis often focuses on the efficiency of environmental policies, but pays little attention to distribution questions. As policymakers have long recognized, policy interventions must take into account the people that do and do not benefit, not only from a moral point of view, but also because the political acceptability and effectiveness of instruments depends on the distribution of their costs and benefits. This is the case at the national level and, especially, at the international level. Including distribution issues in the analysis requires a deeper understanding of the costs and benefits of environmental policies. Today, there is good knowledge about the short-term costs of abatement measures, but little about the benefits of abatement, as these benefits usually cannot be measured in terms of prices and observable quantities. In the long term, even knowledge about costs is fuzzy, and the assessment of future benefits for future generations is even more complex, because it depends on intergenerational preferences, which is an area where ethical considerations go far beyond economic analysis.

As far as global and transfrontier pollution problems are concerned, the intertemporal distribution of costs and benefits also raises difficult questions. Some countries may prefer a growth path in which they first expand the exploitation of their resource base to quickly raise income levels, then implement environmental measures. This growth path mimics the historical development of industrial countries. Because people in industrial countries tend to value the tradeoff between additional income and environmental quality differently from people in developing countries, policy coordination requires a compromise that balances these different preferences.

Possible Effects of Globalization

Since World War II the world economy has grown about 4 percent a year. However, the increase in the international division of labor has been even more rapid, with the number of exports increasing about 6 percent a year. An even more remarkable development started in the mid-1980s: the rapid increase in international capital flows and foreign direct investment.

Globalization of the world economy initially meant capital flows between industrial countries, but today increasing amounts of capital exports from industrial countries go to developing countries. Theoretically, the increase of foreign direct investment has an ambiguous impact on the environment. On the one hand, strict environmental regulations in richer countries may force a relocation of economic activities into less regulated areas. The effects of the resulting emissions leakage have been studied intensively for climate policies and for the regulation of hazardous substances. On the other hand, foreign direct investment is often a vehicle through which technology transfers take place. Such technology transfers could potentially improve the environmental situation in countries receiving foreign direct investment. So far the overall effect of globalization on the environment is indeterminable; case studies of the impact of foreign direct investment on technology transfers are still rare.

The globalization of the world economy will likely continue well into the 21st century. It is therefore important to gain knowledge about whether this process helps solve environmental problems in

developing countries and to determine which aspects of globalization may contribute to a positive impact, so that appropriate policy interventions can be made.

The findings of Weitzman (1997) on the importance of technical change for achieving a sustainable growth path mirror a number of bottom-up studies that detail the roles of efficiency and technology in determining the amount of environmental and natural resources needed to produce a specific amount of consumption services. In industrial countries a non-negligible potential for efficiency gains and technological advances still exists (see, for example, Deutscher Bundestag 1994). This potential is greater in developing countries, for the following reasons:

- Environmental and natural resources are often underpriced when compared with the resources of industrialized countries
- Institutions for environmental enforcement do not function well
- Firms and households lack information about potential efficiency gains
- Advanced, environmentally-friendly technologies are either not available or too expensive.

These facts indicate that there are a number of win-win situations for the preservation of the environment. However, they also reveal that some important institutional and market failures prevent these win-win options from being implemented. Such market failures can often be attributed to inadequate environmental policies, but they may also stem from inadequacies in other policy arenas—such as capital market regulation and competition policy—that distort incentives for production to be efficiently combined with environmental protection.

Global Environmental Imperatives

In the 21st century, the world faces a mixed environmental picture. While remarkable success has been achieved in delinking economic growth from natural resource extraction and pollution, a variety of environmental threats remain, some of which are on the rise. These threats include degradation in the quality of local resources such as soils and water; health-threatening air pollution, especially in urban areas of developing countries; continued decline in biodiversity; overexploitation of common access resources; and future threats of climate change. If no action is taken, these problems are likely to become more severe by the middle of the next century, when the population of the earth will have doubled and the world's gross domestic product will be about five times as high as it is today.

The available knowledge about the effects of economic activity on natural resources and the environment—and the institutions governing their interaction—still has large gaps about the basic forces leading to unsustainable development. This lack of knowledge makes it difficult to find the appropriate policy responses and puts decisionmakers in a situation of uncertainty about the costs and benefits of policy alternatives. Nevertheless, from the insights that we have today we can derive some global environmental imperatives for the 21st century.

Cultivate Linkages

Regulation of local environmental problems in industrial countries has yielded two important lessons. First, incentives for environmentally friendly behavior need to be set by the government; moral suasion is insufficient. Second, price incentives often have advantages over command and control measures.

Once environmental policies are in place, they need to be supplemented by policies that are directed toward the links between economic decisions and the demand for environmental resources. Examples of synergies include the relationships between public transportation infrastructure and private demand for fossil fuels and between building regulations and demand for heating energy. These linkages require environmental policies to cover all policy fields instead of just focusing on emissions.

Linkages are even more important in developing countries, where markets and institutions are far less well developed than they are in the industrial world. In these countries the best way to correct environmental externalities may not involve a focus on direct emission control, but on indirect factors such as the availability of substitutes for pollutants or the establishment of local institutions for internalizing externality problems at the local level.

Even linkages between the local situation and global objectives need to be considered if effective policies are to be implemented. More efficient use of fossil fuels or the preservation of carbon sinks, for example through sustainable forestry, cannot be made successful merely by introducing internationally tradable carbon permits that transfer resources into developing countries. International activities need to be complemented with local policies and institutional changes that can pave the way toward the introduction and diffusion of new technologies and toward a more educated, and hence more efficient, allocation of resources. Institutional capacity building is an important linkage between efficiency in production and environmental protection.

Pay Attention to Distribution

Environmental degradation and natural resource scarcity affect people to different degrees depending on geographic location and social and economic status. Policies designed to reduce environmental problems have a similarly differential impact. Such distributional effects are likely to become more pronounced in the future, when developing countries will need to make major changes in the way they use environmental resources to cope with increasing population pressure and—at least in some regions—a quickly deteriorating living environment.

Distributional concerns are important at both national and international levels. For both local and global pollution problems, designing successful environmental policies depends greatly on knowing how different social groups may react to policymakers' incentives. Such knowledge can significantly improve the effectiveness of mechanisms designed to achieve sustainability.

It has long been recognized that the political economy of different policy arenas has an important influence on policy outcomes. This is true for environmental policies, although so far the importance of political economy is not as well recognized for environmental policies as it is in areas such as trade policy or industrial policy. Nevertheless, the political economy of environmental issues may undergo changes that are more rapid than the changes in the political economy of trade or industrial policy (Klepper 1992).

The distribution of costs and benefits of political action is most important in negotiating and designing international environmental agreements. Unlike contracts, no international institutions can currently enforce international environmental agreements, hence they need to be self-enforcing. Reaching such agreements requires creating a net benefit for each participating country. In addition, to assess potential areas of compromise, negotiators need reliable information about the distribution costs and benefits for their own country and for other countries. The more reliable this information is, the more likely it is that agreements can be reached. Mechanisms for creating and disseminating such information may be helpful.

Focus on Institutions

The use and often overuse of environmental and natural resources in a market economy is to a large extent due to the failure of markets to correctly price the externalities of using environmental resources. At the local level, traditional allocation rules for environmental and natural resources have often collapsed in the process of economic development, and have not yet been replaced by new mechanisms. At the level of global pollution and common access resources, the problem has in the past been less severe, but will grow in importance as the pressure on global resources and the threat of global pollution to human health and economic development continue to grow. So far, international mechanisms mainly

consist of many international environmental agreements, some of which are more successful than others. Recurring problems of international environmental agreements have been the free-riding of nonparticipants and the noncompliance of participants. The creation of an international body for environment and sustainability ought therefore to be thoroughly discussed. A group of scientists in Germany have proposed a world organization for the environment and development (Biermann and Simonis 1998). Such an institution might smooth the processes for reaching international environmental agreements and might be able to coordinate an ever growing number of international environmental agreements. However, other institutional structures should also be investigated.

Conclusion

The 21st century will present increasing environmental challenges as population pressure and economic growth—possibly accelerated by the ongoing globalization of the world economy—lead to greater demand for the earth's resources. In addition, the impact of the overuse of environmental resources, which has a long time lag, will begin to be felt within the next few decades. Therefore, adaptation to irreversible changes and precautionary measures to prevent further deterioration are necessary.

The following three factors should be kept in mind when people analyze causes of environmental problems, design policy instruments, or create institutions for allocating scarce environmental resources:

- Linkages are important. The interactions between the environment and economic and social issues, the linkages between global environmental problems and local causes, and the interactions among different policy areas all suggest that achieving sustainability will require a more holistic approach to policymaking (Rayner and Malone 1998).
- Distribution matters when one assesses the costs and benefits of environmental policies. It also matters to the political acceptability of policies from the local to the global level.
- Institutions that support a sustainable growth path will need to receive more attention. The use of environmental resources should not be regulated on an ad hoc basis, but should become integrated into societal decisionmaking processes, for which the appropriate institutional structure should be developed locally and globally.

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Part II
East Asia and Globalization

4

The Greater China Growth Triangle in the Asian Financial Crisis

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This chapter focuses on economic cooperation between Hong Kong, China (henceforth referred to in this chapter as Hong Kong); Taiwan, China (henceforth referred to as Taiwan); and Mainland China to examine (a) the impact of the Asian financial crisis on trade and investment flows among the three entities and (b) their longer-term implications for China as a whole in the context of economic integration among nations. Throughout the chapter, the term Greater China will be used to refer to the three Chinese locations.

Greater China as a Process of Economic Integration

Hong Kong and Taiwan, small as they are in population and geographic area, are by no means unequal economic partners of their huge Mainland Chinese neighbor. Hong Kong's gross domestic product (GDP) per capita in 1997 stood at US\$26,369 and Taiwan's was US\$13,233, compared with probably not more than US\$860, for Mainland China. Dollar for dollar, that is, without adjusting for possible implications of the purchasing power disparities between the respective currencies), the combined GDP of Hong Kong and Taiwan is surprisingly some 51 percent of China's (in absolute terms, China's GDP was US\$900.88 billion in 1997). The Hong Kong government's budget expenditure alone, totaling US\$22.4 billion in 1997, is equal to around 35 percent of China's national budget expenditure of US\$64.81 billion. In short, the remarkable economic importance of both Hong Kong and Taiwan impinges significantly on their economic relationships with China.

There are several important aspects to the emergence of Greater China as a regional economic growth triangle in the past 20 years or so.

First, economic integration within Greater China has taken place essentially by way of foreign direct investment (FDI) flows from Hong Kong and Taiwan to Mainland China, especially to Guangdong Province. It is associated with the continuous relocation of export-oriented manufacturing activities from both Hong Kong and Taiwan to take advantage of low land and labor costs available across the border from Hong Kong, and hence has resulted in what Hong Kong government statistics refer to as outward processing trade flows to China. This is therefore a clear case of FDI and trade being "twin travelers," whereby together with FDI, industrial materials and semimanufactures are shipped together with machinery and equipment to the Chinese hinterland for export processing.¹

Second, the processing trade covers a wide range of export manufactures. Some are often regarded as sunset industries; some are relatively new lines of production` but all are labor-intensive manufacturing undertakings. They include garments, clocks and watches, toys, games and sport requisites, electrical appliances, and video recorders. Taken together they represent the traditional backbone of light industry

¹ Viewed this way, FDI flowing from Hong Kong (and Taiwan) into Mainland China represents a complete migration of manufacturing plants.

in Hong Kong and Taiwan and, in each case, since the 1960s have been the single most important source of foreign exchange earnings and employment.²

Third, virtually all export commodities processed on behalf of Hong Kong and Taiwanese investors are shipped back to Hong Kong for re-export, as this represents the most direct and cost-saving transport route to final overseas markets. In addition, under Taiwan's "third country" rule (intended to avoid any direct contact with the Mainland authorities), virtually all Mainland-bound FDI and processing trade flows have also been channeled through Hong Kong. Similarly, Mainland Chinese exports to Taiwan, irrespective of the degree of control exercised by Taiwan in respect to commodity categories and quantities, also have to be routed via Hong Kong or elsewhere. Hong Kong therefore plays a pivotal role in linking Taiwan with the Mainland Chinese economy.

Fourth, since 1979, an increasing volume of Chinese exports has also been routed through Hong Kong to overseas destinations to take advantage of the international marketing expertise of Hong Kong and its highly efficient banking, finance, insurance, and telecommunications services, as well as its highly advanced shipping and port facilities (Hong Kong is the largest container port in the world). This is in addition to the huge quantity of intermediate input supplies from various overseas countries en route to the Mainland for export processing. Hong Kong has thus become the largest entrepôt of the entire Chinese economic complex, surpassing by far the importance of Shanghai.

Fifth, to take advantage of the many opportunities arising from the two-way trade flows between Hong Kong and Mainland China, Chinese capital has also increasingly moved into Hong Kong. Traditionally, there has long been a Chinese presence in Hong Kong's banking, finance, commerce, and retail trade sectors, associated with the regular massive Chinese shipments to Hong Kong of wage goods and clothing for local consumption or re-export and industrial, chemical, and mineral materials needed for the region's own highly export-oriented industries.³ From the 1980s, however, not only has China's visibility in such trade-related investment in Hong Kong been greatly raised, but Mainland Chinese capital has also been diverted to a wide variety of activities, most notably to aviation (Cathay Pacific Airways and its affiliate, Dragon Air), power generation, highway construction, telecommunications, manufacturing, and real estate development. In addition to the highly visible China International Trust and Investment Corporation, which is a national agency, most major Chinese provinces also have their own international trust and investment corporations in Hong Kong, engaging in fund raising, portfolio investment, and equity sharing in large, long-term capital projects locally and abroad. These, together with internationally syndicated bank loans often arranged in Hong Kong for large Chinese national or provincial governments' infrastructure projects, have helped to make Hong Kong the financial center of Greater China (see Jao 1997 for an excellent discussion of the various aspects of Hong Kong as an international financial center).

The overall process of economic integration within Greater China has been so powerful that within a decade, from around 1985 when the relocation of Hong Kong's manufacturing activities to the Chinese

² Because the complete transfer of manufacturing operations from Hong Kong to Mainland China is generally to take advantage of abundant cheap labor across the border, it is normally not associated with investment in new technology. That is not to say, however, that FDI's impact on Chinese economic growth is minimal. The fact is that in addition to employment and income creation in China, the highly export-oriented FDI from Hong Kong and Taiwan also helps to ease China's foreign exchange constraints, enabling the country to import more advanced technology from the West, as embodied in new machines and equipment, for accelerating industrial modernization. Note that more than 40 percent of China's total exports for 1997 were exports from various types of foreign-invested enterprises (State Statistical Bureau 1998).

³ These used to be the single most important source of China's foreign exchange earnings in the past, accounting for one-quarter to one-third of the country's total. From the Hong Kong perspective, the imports were inputs needed for its own export manufacturing. With the relocation of Hong Kong factories to the hinterland, however, Chinese exports previously retained in Hong Kong for local consumption have now become China's liability in exchange for its claims on part of Hong Kong's foreign earnings in the form of what is commonly referred to by the Chinese as *gongjiaofei* (processing fees). For an elaboration and interpretation of this changing regional context of specialization within Greater China, see Kueh and Voon (1997).

hinterland started to gain momentum, the entire Hong Kong economy was radically transformed into a Manhattan-type services industry. By 1998, the manufacturing sector's contribution to GDP had fallen to a mere 8 percent from 29.6 percent in 1985 and 24.9 percent in 1991, while the share of the service sector had rapidly expanded to more than 90 percent in 1998, from 69.7 percent in 1985 and 74.8 percent in 1991.

Similar changes also took place in Taiwan, following political decontrol instituted by the Taipei authorities in 1987 that allowed residents to visit Mainland China. Taiwanese manufacturers moved swiftly to imitate their Hong Kong counterparts in investing in China. However, by 1992 the government in Taipei was already fearful of a "hollowing out" of the island's industrial structure through the relocation to Mainland China of such export earning industries as electrical, engineering, footwear, plastics, and textile production, having markedly curtailed the share of light industry in national income and employment.⁴ Note that since 1992 Taiwan has surpassed both Japan and the United States as the second largest FDI supplier to Mainland China, although its accumulated FDI stock is still far behind that of Hong Kong.

Capital Flows within Greater China during the Asian Financial Crisis

Capital flows within Greater China are overwhelmingly dominated by FDI flows from Hong Kong and Taiwan to Mainland China. In 1998 their combined total made up nearly half of China's total FDI intake of US\$ 45.6 billion (table 4.1). Taiwan does not allow any Mainland capital to be invested in the island. In 1997 the Taiwanese government recorded only a small amount of investment from Hong Kong, a mere US\$73 million. By contrast, Mainland China's investment in Hong Kong totaled US\$14.6 billion by the end of 1996, US\$337 million in manufacturing and US\$14.3 billion in nonmanufacturing industries (Hong Kong Trade Development Council 1998a,c). This makes China the second largest outside investor in Hong Kong, after the United Kingdom. Dollar for dollar, the Mainland's cumulative investment in Hong Kong amounted to as much as 11 percent of Hong Kong's cumulative FDI stock of US\$135 billion in Mainland China as of the end of July 1998. The figures do not include Mainland-backed enterprises that have long been based in Hong Kong.

According to Chinese official estimates, more than 1,856 Mainland-backed enterprises are registered in Hong Kong, with an estimated gross asset value of US\$185 billion and a net asset value of US\$23.5 billion at the end of 1996 and employing more than 53,000 employees by the end of 1997). These include such relatively new arrivals as the China International Trust and Investment Corporation (HK) Holdings, China Everbright, and Guangdong Investment, as well as traditional Mainland-backed Chinese enterprises, such as the Bank of China and China Resources (the latter having operated in Hong Kong for many decades).

Portfolio capital flows within Greater China essentially involve listing China's 41 state-owned enterprises on the Hong Kong Stock Exchange. As of November 1998, total capital raised by these "H" share companies amounted to US\$7.9 billion. Together with the 72 "red chips," Mainland-backed enterprises accounted for 16 percent of the stock market's total market capitalization of US\$343 billion at the end of October 1998. An index called the Hang Seng China-Affiliated Corporation Index was introduced on June 16, 1997, for all red chips listed in Hong Kong, alongside the familiar Hang Seng Index.

Under the full impact of the regional financial turmoil, the red chips have been as volatile as, if not more vulnerable than, the broader Hang Seng Index, which plummeted to as low as 6,500 from a record high of around 16,500 shortly before the crisis. Amid persistent speculation in 1997–98 that a devaluation of the Chinese currency was imminent to maintain the country's export competitiveness against Southeast Asian rivals (whose currencies had been devalued by 40 to 70 percent against the U.S. dollar since July 1997), red chip prices suffered severely. As a result, the anticipated flotation of a number of significant state-owned enterprises on the Hong Kong Stock Exchange had to be postponed.

⁴ According to the head of the Industry Bureau in Taipei, the large-scale transfer of sunset industries to the Mainland China has more than anything else accounted for the rapid increase of heavy industry's share in total manufacturing output in recent years from 47 percent in 1986 to 56 percent in 1991 (see Kao, Lee, and Lin 1992).

Table 4.1. Shares of Hong Kong, Taiwan, and rest of the world in the realized FDI intake by the Mainland of China, 1987–98

Year	China FDI intake		Hong Kong			Taiwan			Rest of the world	
	Total (US\$ million)	Yearly change (percent)	Share (US\$ million)	Percent	Yearly change (percent)	Share (US\$ million)	Percent	Yearly change (percent)	Share (US\$ million)	Percent
1987	2,313.53		1,587.94	68.6					725.59	31.4
1988	3,193.68	38.0	2,067.60	64.7	30.2				1,126.08	35.3
1989	3,392.57	6.2	2,036.90	60.0	-1.5				1,355.67	40.0
1990	3,487.11	2.8	1,880.00	53.9	-7.7	224.26	6.4		1,382.85	39.7
1991	4,366.34	25.2	2,405.25	55.1	27.9	469.89	10.8	109.5	1,491.20	34.2
1992	11,007.51	152.1	7,507.07	68.2	212.1	1,050.50	9.5	123.6	2,449.94	22.3
1993	27,514.95	150.0	17,274.75	62.8	130.1	3,138.59	11.4	198.8	7,101.61	25.8
1994	33,766.50	22.7	19,665.44	58.2	13.8	3,391.04	10.0	8.0	10,710.02	31.7
1995	37,520.53	11.1	20,060.37	53.5	2.0	3,161.55	8.4	-6.8	14,298.61	38.1
1996	42,350.00	12.9	20,677.32	48.8	3.1	3,474.84	8.2	9.9	18,197.84	43.0
1997	45,278.00	6.9	20,630.00	45.6	-0.2	3,290.00	7.3	-5.3	21,358.00	47.2
1998	45,582.00	0.7	18,508.00	40.6	-10.3	2,915.00	6.4	-11.4	24,159.00	53.0

Note: The 1997 share for Taiwan was obtained by applying the 1997/96 rate of increase of the broader category of to the 1996 figure.

Source: Ministry of Foreign Trade Economic Cooperation (various issues); for 1998, China Statistical Information and Consultancy Service Center (various issues).

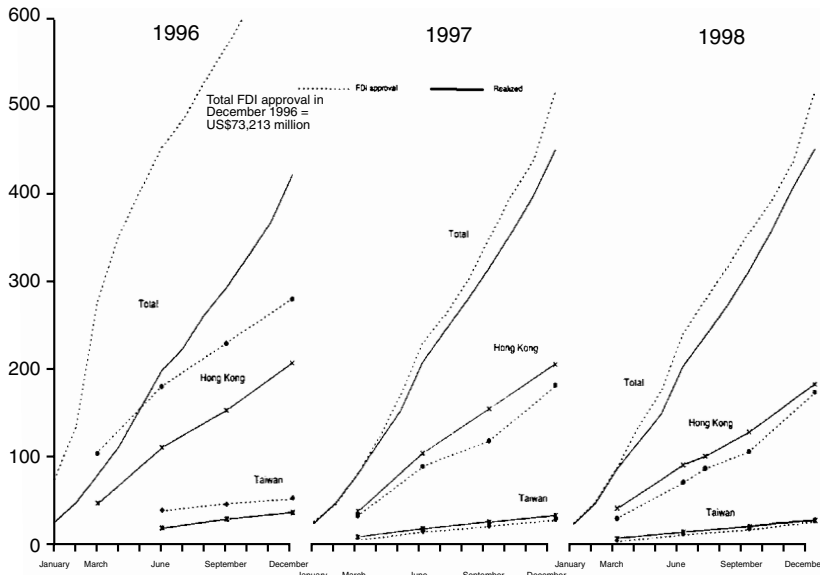
Moreover, as a result of the extreme volatility of the stock market and the withdrawal of billions of U.S. dollars from the Asian Pacific region because of the financial crisis, Hong Kong's role as a leading center for arranging syndicated loans in Asia (mostly for large government infrastructure projects in China) has also been seriously eroded. The total value of syndicated loans arranged by banks in Hong Kong plunged from a high of US\$17 billion in the first half of 1997 to a mere US\$2.1 billion in the first half of 1998, having previously accelerated from US\$14.6 billion in 1995 to US\$19.3 billion in 1996 (Hong Kong Trade Development Council 1998b).

Notwithstanding the volatility of portfolio flows and capital borrowing, FDI flows into China have emerged basically unscathed from the Asian financial crisis; indeed, they have exhibited a remarkable degree of resilience. This is certainly the case for global FDI inflows, and seems also to be the case for Hong Kong and Taiwan, even if the trends with respect to the two small Chinese entities are not fully endorsed by official Chinese statistics.

Specifically, total cumulative FDI intake by China, in terms of both approved FDI (contractually pledged value of investment) and utilized FDI flows (realized intake), showed a consistent growth trend in 1998 that was virtually as robust as that experienced in 1997 (figure 4.1). For the whole of 1998, both cumulative FDI approval and actual FDI flows were still marginally higher than those recorded for 1997. Similarly, monthly fluctuations in China's total FDI intake throughout 1998 did not reveal any noticeably adverse impact of the Asian crisis in relation to observed trends since January 1996 (figure 4.2).

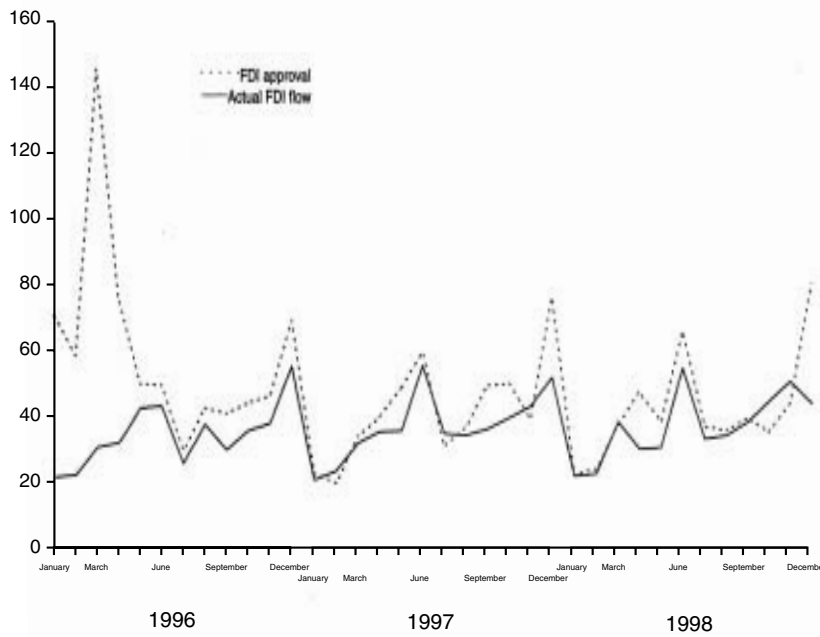
As for FDI inflows from Hong Kong and Taiwan alone, the 1998 quarterly, official, Chinese statistics so far available suggest some slowdown, albeit marginal, compared with trends in both overall FDI intake in 1998 and FDI inflows in 1997 (figure 4.1). Cumulative FDI approval was down by 4.2 percent for the first quarter of 1998 and down 8 percent for the second quarter. Actual FDI flows recorded an impressive 15 percent increase for the first quarter, but by June 1998 the cumulative gains had fallen by 11 percent compared with the record of the previous year. The decline continued through the fourth quarter, but the total reduction for Hong Kong and Taiwan combined for the whole of 1998 amounted to just around 10 percent.

Figure 4.1. Monthly Cumulative FDI Inflows into China and the Quarterly Share of Hong Kong, 1996–98 (hundreds of millions of U.S. dollars)



Source: China Statistical Information and Consultancy Service Center and Hong Kong Trade Development Council.

Figure 4.2. Monthly Fluctuations in China's FDI Intake, 1996–98 (hundreds of millions of U.S. dollars)



Source: China Statistical Information and Consultancy Service Center and Hong Kong Trade Development Council.

While the implications of such random fluctuations remain ambiguous, one important factor, hitherto concealed, is likely to have a significant impact on any interpretation of the possible effect of the regional financial turmoil on FDI flows within Greater China. This critical factor relates to such unlikely FDI suppliers as Bermuda, the Cayman Islands, the Virgin Islands, and even Samoa in the remote South Pacific. In 1997, the year in which Hong Kong was returned to China, total utilized FDI flows into Mainland China from the Virgin Islands alone increased dramatically by more than threefold to half that of Taiwan, or nearly one-tenth of that of Hong Kong. Undoubtedly, the sources of such inflows were mostly, if not wholly, Hong Kong and Taiwanese investors in disguise (but also many Mainland-backed Chinese enterprises based in Hong Kong). For various reasons, these investors wanted to protect their anonymity by reregistering in the Caribbean islands. Their motivation was not, however, that which drove the earlier nominal removal from Hong Kong to Bermuda of Jardine Matheson, namely, the fear of possible political reprisals after the reversion of Hong Kong to Chinese sovereignty.

Specifically, if these “prodigy” shares were restored to the Hong Kong or Taiwanese account, their combined contribution to China’s utilized FDI intake in 1997 (as reflected in figure 4.1), would undoubtedly rise sharply and substantially surpass their comparable share for 1996. A similar conclusion is likely to apply to the potential bona fide contributions of Hong Kong and Taiwan investors to China’s FDI intake in 1998, accelerated increases in China’s FDI approval for investors from the Caribbean islands tending to compensate for the reductions in officially recorded FDI approval for Hong Kong and Taiwan in recent years.

In 1997, for the first time, the value of China’s FDI approval by both Hong Kong and Taiwan was notably lower than their utilized FDI flows into China (figure 4.1). There is little doubt that this signaled a continuing replacement by the Caribbean islands and many other similar puppet investors. Note, in particular, that compared with the lackluster trends in FDI approval for Hong Kong and Taiwan, global FDI inflows into China continued to accelerate impressively throughout both 1997 and 1998 (figure 4.1), although the absence of separate FDI approval statistics from China for the Caribbean islands for 1997 still makes it difficult to estimate the likely size of the true shares of Hong Kong and Taiwan investors in total realized FDI flows into China in 1998.

Overall, there seems little reason to suggest that FDI flows into China have been adversely affected by the Asian crisis to any significant extent compared with portfolio investment flows. The asymmetry is not wholly inspiring, because portfolio flows are vulnerable to stock market volatility, interest rate regimes, credit crunches, and the risk of foreign exchange fluctuations, particularly in the wake of increased global economic integration and interaction. FDI, however, represents long-term fixed commitments that require prudent cash flow planning to avoid the danger of liquidity traps, bankruptcy, and capital losses. Nonetheless, in the context of the Asian financial crisis as it has affected the Greater China triangle, the difference between portfolio and FDI flows cannot be explained by such simple textbook reasoning.

Several factors explain the relative resilience of the observed FDI flows within Greater China amid the regional financial turmoil. They offer a diversity of perspectives, but taken together are all related to the fact that most FDI flows from Hong Kong and Taiwan to China are, directly or indirectly, closely associated with export processing, as in the case of the power generation project established by the Cheung Kong Group in Shantou or the Hopewell highway project linking Guangzhou and Hong Kong. They all underpin the rapid development of the highly export-oriented industries dominated by outside investors in the region.⁵

⁵ FDI in infrastructure (and in services) is still quite limited in China. For example, FDI pledged in electric power plant and gas and water supply declined from US\$5.2 billion in 1996 to US\$3.7 billion in 1997, while FDI approved for the combined category of transportation, storage, and postal and telecommunications services increased from US\$1.2 billion in 1996 to only US\$2.6 billion in 1997. Taken together, FDI in infrastructure and services amounted to only 12 percent of total FDI approval in 1997, compared with 53 percent for manufacturing (State Statistical Bureau 1998). Similarly, while an increased number of foreign firms have been able to gain a foothold in China’s wholesale and retail trade and catering services in recent years (McDonalds; KFC; and notably the well-known garment brand,

The first and most important factor is that both the United States and Western European countries—the single most important export markets for China, Hong Kong, and Taiwan taken together—were not seriously drawn into the Asian financial whirlpool, except for difficulties associated with reduced import demand from affected Asian countries (members of the Association of Southeast Asian Nations [ASEAN] and the Republic of Korea, in particular). This helped guarantee a stable and continuous stream of export earnings for China-based Hong Kong and Taiwan exporters who were also investors.

Second, the continuous, albeit erratic, weakening in 1998 of the Japanese yen against the U.S. dollar (to which both the Hong Kong dollar, officially, and the renminbi, unofficially, are pegged) helped to enhance cost savings for Hong Kong and Taiwanese investors in Mainland China, as they all rely heavily on Japan for imports of equipment and machinery, as well as for industrial materials and semimanufactures for export processing. The savings have come in tandem with reduced credit costs from the yen depreciation for financing their imports, as well as their FDI ventures at large. Indeed, in conjunction with the massive import of intermediated goods from Japan, a substantial proportion of FDI flows from Hong Kong and Taiwan into China are financed by Japanese banks based in Hong Kong (personal communication from a former Japanese consul-general based in Hong Kong, who said that more than half of Hong Kong's FDI in China was so financed).

Third, in the interests of promoting exports and mitigating increased pressures for a devaluation of the renminbi, Mainland Chinese banks had begun, exceptionally, to grant renminbi credits to foreign-invested enterprises by Hong Kong and Taiwanese investors during the crisis. This helped to compensate for fund shortages associated with the severe credit crunch that accompanied the efforts of the Hong Kong government to defend the U.S. dollar peg (Mainland-backed Chinese banks based in Hong Kong were also fearful of a renminbi devaluation, and thus preferred to hold U.S. dollars, rather than lending to Hong Kong investors). Similarly, ad hoc increases in value added tax rebates for a wide range of export commodities were decreed both to promote export incentives and enhance the liquidity of foreign-invested enterprises (FIEs). The effect of a 1 percent increase in value added tax rebates is estimated to be comparable to a 1 percent reduction in the export costs for general merchandise trade, and hence tantamount to a devaluation of the renminbi against the U.S. dollar (*Ta Kung Pao Daily*, Hong Kong, June 24, 1998).

Fourth, from the perspective of China's FDI intake, it is fortunate that the Asian financial crisis was preceded by the Chinese government's restoration in mid-1997 of the customs duties exemption for imports by FIEs of the equipment, machinery, and industrial materials needed for export processing. Note that the 1996 suspension of this exemption may have contributed to the sharp reduction of FDI approval in early 1997, in addition to the observed nominal shift in favor of the Caribbean islands. However, by December 1997, FDI approval for Hong Kong investors, in value terms, had already been restored to the June 1996 level when the retraction was announced (figure 4.1). This, as well as the contributions made by Hong Kong and Taiwanese investors in disguise should have helped to sustain the actual FDI inflow in 1998.

Another important policy initiative the Chinese government took in the wake of the Asian financial crisis may not fall within the purview of promoting export-oriented FDI inflows, but it seems to have averted the possible redirection of FDI flows from China toward the hard-hit Southeast Asian countries (which had become much more attractive to foreign investors following massive devaluations of their currencies). This relates to the deliberate attempt to open up industrial and service sectors hitherto closed to foreign investment. It is still too early to estimate to what extent FIEs, especially large transnational corporations, have already taken advantage of the new FDI regime. However, given that Hong Kong and Taiwanese investors have been anxious to move into retailing and other service undertakings in China, and that acquisitions of and mergers with Chinese state-owned enterprises have become quite popular in recent years as a way for transnational corporations to gain a foothold in the huge import substitution investment markets there, this is likely to become a crucial means of enhancing and stabilizing the growth of future FDI flows into China.

Goldlion, from Hong Kong), foreign capital registered by the end of 1997 for this sector was no more than 4 percent of the total, compared with 58 percent for manufacturing (State Statistical Bureau 1998).

From a microeconomic perspective, and to understand the likely trends in Chinese FDI intake in the context of the Asian crisis, distinguishing between replacement and new investments in terms of FDI intake may be useful. For most of the 20 years that China has courted FDI, the value of realized FDI has moved closely in tandem with FDI approval in terms of investment contractually pledged. The implications are clear. After the initial period of any accelerated FDI expansion, subsequent FDI approval will, for the most part, become replacement investment needed to sustain existing undertakings, plus new investment for marginal capacity expansion to cope with secular growth in overseas markets. In short, aside from cyclical fluctuations, China's FDI inflows from Hong Kong, Taiwan, and the world at large will likely sustain their long-term pattern of growth in the years to come.

Impact on Trade Flows within Greater China

By virtue of the particular pattern of economic integration among Mainland China, Hong Kong, and Taiwan, trade flows within Greater China are overwhelmingly dominated by export processing. Thus, outward processing goods consistently make up around half of Hong Kong's total exports to Mainland China (table 4.2). Within the category of materials to be processed for export flowing from Hong Kong into China, the share of re-exports (goods imported from overseas without undergoing any minimal processing in Hong Kong) accelerated from 58 percent in 1989 to a startling high of more than 80 percent in 1998. The corresponding share of domestic exports meanwhile fell to a mere 19 percent, including many that could barely fulfill the country of origin requirements for exports to be classified as such.

Hong Kong's imports from China are even more heavily dominated by the shipment of processed export commodities and by 1998 accounted for more than 80 percent of total imports (table 4.2). At the same time, processed goods for export (outward processing goods) imported on behalf of Hong Kong investors based in China constituted nearly 90 percent of Hong Kong's re-exports of all goods of "Chinese origin" to all countries other than Mainland China, with an estimated export markup ranging from 18 to 24 percent for different years.⁶ Given that Hong Kong's total re-exports of Chinese origin (comprising both outward processing goods and non-outward processing goods) are generally 11 to 14 percent higher than its total imports (of which only around 20 percent are non-outward processing goods) from China, it seems certain that virtually all outward processing goods flowing from China to Hong Kong are re-exported to third countries, especially the United States and Western European countries. Indeed, the United States alone has consistently taken up more than 40 percent of Hong Kong's re-exports of Chinese origin of these kinds of export commodities (Kueh and Voon 1997).

By contrast, about 50 percent of Hong Kong's total exports to China constitute commodities other than goods bound for export processing in Mainland China. That is, Hong Kong not only serves as a universal agency for China's processing trade, but also represents an important sourcing venue for end users in China of imports of equipment and machinery, vehicles, computer software, CD-ROMS, and the like from the West.

Overall, the economic significance of Hong Kong to China in terms of entrepôt trade is summed up in the fact that around 40 percent of the Mainland's foreign trade is currently handled via Hong Kong, excluding the trans-shipment of goods to and from the Mainland, which has also become an increasingly important service trade for Hong Kong. More important, China's export processing trade, which now accounts for more than 50 percent of China's total external trade, is virtually all channeled through Hong Kong.

Two additional points should be considered in assessing the potential impact of the Asian financial crisis on trade flows within Greater China. First, to the extent that under the third country rule adopted by Taiwan FDI flows and exports from the island to Mainland China for processing are channeled

⁶ As a rough estimate, the export markup rate is simply taken as the percentage difference between the value of columns (9) and (7) in table 4.2. To the extent that part of the imports of outward processing goods from China may be retained in Hong Kong for local consumption, the estimated markup rate is clearly biased on the low side.

through Hong Kong, the outward processing goods flowing from Hong Kong to China, as shown in table 4.2, clearly also include Taiwanese contributions. Similarly, barring direct navigational links between Taiwan and Mainland China, the outward processing goods flowing from China to Hong Kong also cover imports made on behalf of Taiwanese exporter investors.

Table 4.2. *Processing Trade in Hong Kong—China Economic Relations, 1989–98*

Year	HK exports to China (HKD millions)					HK imports from China (HKD millions)					
	Share of OP goods		Share in OP goods (percent)			Share of OP goods		HK re-exports of OP goods of Chinese origin		Implicit value-added proportion [(7)–(2)]/(7)	
	Total	Value	Percentage (2)/(1)	Domestic exports	Re-exports	Total	Value	Percentage (7)/(6)	Value		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
1989	146,764	76,868	52.4	41.58	58.40	196,676	113,581	57.8	—	—	32.32
1990	158,378	91,914	58.0	39.62	60.78	236,134	145,103	61.5	—	—	36.7
1991	207,722	113,931	54.9	35.43	64.57	293,356	187,384	63.9	221,450	74.1	39.2
1992	274,061	141,639	51.7	31.26	68.74	354,348	254,013	71.7	299,833	78.3	44.2
1993	337,928	160,678	47.4	28.09	71.59	402,161	295,203	73.4	364,536	80.8	45.7
1994	383,844	181,179	47.2	23.16	76.84	470,876	354,912	75.4	422,544	82.0	49.0
1995	444,108	217,613	49.0	20.17	79.83	537,052	399,567	74.4	492,461	82.2	45.5
1996	474,038	222,324	46.9	19.38	80.62	566,821	452,890	79.9	552,822	86.0	50.9
1997	503,881	244,886	48.6	19.22	80.78	604,855	491,142	81.2	595,511	88.4	50.1
1998(Q1)	109,806	48,095	43.8	18.23	81.77	126,403	101,628	80.4	126,082	87.8	52.7
1998(Q2)	125,857	61,106	48.6	20.00	80.00	147,212	120,821	82.1	133,292	84.5	49.4
1998(Q3)	112,261	56,355	50.2	19.42	80.58	157,700	131,364	83.2	155,327	88.7	57.1

— Not available.

OP Outward processing.

Q Quarter.

Notes: Outward processing statistics are not available before 1989, as the Hong Kong government did not start to compile such statistics until that year.

Source: Hong Kong Government Census and Statistics Department (various issues).

Second, the statistics in table 4.2 may not reflect the full magnitude of outward processing trade flows within Greater China. Thus, with FDI intake from Hong Kong and Taiwan being increasingly directed northward since the early 1990s (Kueh 1996), some processed goods must have also been directly exported through Shanghai and other major ports in north China to, for example, Japan and the United States. To the extent that this occurred, the estimated, implicit value added involving the export processing trade for Hong Kong may understate its true magnitude (table 4.2). Nonetheless, the estimated values for more recent years are generally in accord with the frequent official Chinese claims that imported input materials and components make up around 50 percent of the value of the Chinese processing trade. This seems to provide sufficient incentives for both Hong Kong and Taiwanese investors, as well as their Chinese collaborators, to sustain and further develop the processing trade.

It is difficult to gauge exactly the possible impact of the Asian financial crisis on trade flows among Hong Kong, Taiwan, and Mainland China. For one thing, the crisis did not really begin to seriously affect relationships within Greater China until mid-1998. Any assessment of the possible long-term implications of

the crisis on trade flows within Greater China must therefore be regarded as preliminary. In any case, the complexity of the problems involved simply do not permit definitive conclusions to be drawn at this stage.

One important question is whether the massive devaluation of the Southeast Asian currencies after July 1997 really eroded the price competitiveness of Greater China's labor-intensive export processing trade, and thereby broke the flying geese pattern of industrialization in Asia (see UNCTAD 1998). It would be premature to answer affirmatively. For example, the extent to which Greater China's exports to third countries, notably the United States and European Union (EU) countries, overlap, and thus compete directly with its Southeast Asian neighbors, is not clear. Dai Xianglong, the governor of China's central bank, estimated that the overlap was around 15 percent of China's total exports to the United States, and viewed this as a reason for not seeking to maintain export competitiveness by devaluing China's currency. That figure may, of course, also translate into a sizeable margin in China's total exports, and bear significantly on Hong Kong's re-export earnings, especially in the wake of enhanced Asian competition.

However, any increased export price benefits for Southeast Asian countries deriving from their currency devaluation may be offset by resultant increases in the cost imports needed for export processing. The reality is that as in China, most Southeast Asian export producers rely heavily on imported inputs.

More important, export producers in Indonesia, Malaysia, and Thailand—central actors in the regional financial turmoil—suffered enormously under the impact of high interest rates and an especially severe credit crunch that resulted from the International Monetary Fund's severe prescription for restoring monetary and fiscal order. Many export factories were forced to close down altogether. By contrast, in Hong Kong, while increased financial illiquidity resulting from the government's massive efforts to defend the U.S. dollar peg may have made it difficult to do business there, the disarray appears to have had only a marginal impact on the Chinese hinterland through its effect on the export processing undertakings of Hong Kong investors.

In fact, as part of the Mainland authority's policy to prevent potential export problems, Hong Kong and Taiwanese exporter investors based in Mainland China benefited from the rare privilege of obtaining renminbi advances from domestic Chinese banks, in addition to increased value added tax rebates for exports. Such privileges are, of course, not unrelated to the unusual circumstances prevalent in China in 1998 of declining interest rates coupled with negative inflation. Clearly, because of its capital account control, Mainland China was largely spared the contagion of the Southeast Asian financial crisis, thereby giving the Chinese government the luxury of being able to pursue its own, independent, export promotion policy.

Nonetheless, if despite the Asian financial crisis trade flows within Greater China generally succeeded in maintaining their established course, the single most important contributory factor was the economic sustainability of the final export destinations, that is, the United States and EU. The outward processing trade statistics provided by the Hong Kong government (table 4.2) do not provide country breakdowns in terms of re-exports, but the major proportion of outward processing goods flowing from China to Hong Kong are undoubtedly destined for the North American and Western European markets.

An alternative approach is to distinguish between exports and imports by domestic enterprises (non-FIEs) and FIEs. The latter clearly represent the thousands of U.S.- and EU-bound Hong Kong and Taiwan export producers. Thus, amid declining overall growth in Chinese exports, FIE exports performed remarkably well, in contrast to sharp declines suffered by non-FIEs in 1998 (figure 4.3). By December 1998, when the overall growth rate of China's exports had fallen to a mere 0.5 percent from a high of 20.9 percent a year earlier, the FIEs' exports were still increasing by 8 percent, compared with 22 percent for 1997. By contrast, the absolute level of cumulative exports by non-FIEs had declined by nearly 5 percent in 1998.

The background to this divergent export performance by FIEs and non-FIEs lay in the continuous growth of exports to the United States and EU, side-by-side with the declining or negative growth of exports to East and Southeast Asia as a result of sharply reduced import demand caused by the regional financial upheaval. This drained any foreign exchange reserves held by all these countries, except Japan.

Figure 4.3. Monthly, Year-to-Date Changes in Cumulative Exports (X) and Imports (M) by Nonforeign- and Foreign-invested Enterprises (FIEs) in China 1996–98 (percent)



Source: China Statistical Information and Consultancy Service Center

Recent Chinese customs statistics confirm that 85 percent of the total net increases in exports for the first three-quarters of 1998 derived from the processing trade. Exports to the United States and EU increased for the same period, year-on-year, by 16.5 percent and 22 percent, respectively, while those to Korea, ASEAN countries, and Japan fell, respectively, by 32, 16, and 6.5 percent (*Ta Kung Pao Daily*, Hong Kong, October 13, 1998). Note also that Chinese exports to Asian countries essentially consist of resource-based products, such as mineral fuel, iron and steel, and cotton, all of which witnessed substantial absolute declines in exports in the first half of 1998.

Government Policies, Economic Consequences, and Longer-Term Implications

The governments of Hong Kong and Mainland China shared one common feature in terms of their policy response to the Asian financial crisis. As noted earlier, both governments vigorously sought to maintain the existing exchange rate of their respective currencies in relation to the U.S. dollar. In Mainland China, under the managed float regime, the renminbi rate has consistently remained at around Y 8.27 to the dollar. This has been so despite frequent speculation that China would be forced to devalue. In Hong Kong, the U.S. dollar peg at HK\$7.8 (intact since October 1983) also successfully withstood several massive currency attacks amid the escalating Asian crisis.

However, the shared desire to defend their currencies concealed widely divergent economic underpinnings in Hong Kong and Mainland China. Moreover, the implications of defending their currencies were also quite different. We will examine each case in turn to assess the economic implications and relative merits of the currency defense, especially as they relate to capital and trade flows between Hong Kong and China from a longer-term perspective.

In China, first, the inconvertibility of the capital account eliminated the fear of capital flight out of the country and rendered inoperative the associated need to defend the value of the renminbi. Attempts by individual Chinese exporting and importing enterprises to evade official foreign exchange control may have appeared to proliferate amid widespread fears since early 1998 of a renminbi devaluation, but the Chinese government was able to use familiar administrative fiats to deal relatively easily with any such instances.⁷

Second, a renminbi devaluation would almost inevitably trigger another round of competitive currency devaluations by the hard-hit ASEAN countries, which believed, rightly or wrongly, that the 1994 Chinese devaluation had severely undermined their export competitiveness and contributed to their current misfortune. From the Chinese perspective, therefore, any export price benefits to be derived from a renminbi devaluation in this context might be wholly offset by an emulative response by the ASEAN. This is quite separate from the questionable potential economic benefits of a renminbi devaluation as discussed earlier.

Third were the potential implications of a renminbi devaluation for Sino-Japanese economic relations. For China, as for the ASEAN countries, Japan is the single most important trading partner in the entire Asia Pacific region. As China's largest trade partner, in 1997 Japan accounted for 17 percent of China's global exports and nearly 20 percent of China's total imports. This compares with a mere 3.6 percent and 5.3 percent, respectively, for the ASEAN four combined (Indonesia, Malaysia, the Philippines, and Thailand), or 6 percent and 8.4 percent, respectively, if Singapore is included. A renminbi devaluation would merely have raised the cost of imports from Japan for domestic end-user industries that depended on Japan for supplies of advanced equipment and machinery, and thus for the much needed technology transfer for industrial upgrading. Equally important, China's vast export processing trade also relies heavily on Japan for input supplies, so that any export price advantage from a renminbi devaluation might have been offset by increased import costs.

⁷ For the first eight months of 1998, China's trade surplus and net FDI inflows amounted to US\$58.7 billion, but total foreign exchange reserves increased by only US\$1.2 billion (*Ta Kung Pao Daily*, Hong Kong, November 28, 1998). The leakage is attributed to defaults in bank clearing of foreign exchange earnings, illicit remittances overseas by way of fake import documentation, and other illegal practices.

It was only when the free fall of the Japanese yen against the U.S. dollar to around—145 in June 1998 threatened effectively to tilt the balance at the expense of Chinese exports to Japan that the Chinese authorities reconsidered their persistent pledge to uphold the external value of the renminbi. Fortunately, the unrestrained yen depreciation was eventually arrested before it could make the Asian crisis even worse.

Consideration of how the Chinese economy fared during the Asian crisis provides a useful context for assessing the longer-term implications for trade and investment flows within Greater China. The observed slowdown in China's export growth in 1998 was clearly more a matter of reduced import capabilities in East and Southeast Asian countries than a relative appreciation of the Chinese currency. Indeed, the reduction resembled the drastic curtailment in U.S. cotton exports to these countries since early 1998. Nonetheless, the Chinese government evidently saw the slowdown as impinging on its much celebrated target of 8 percent GDP growth in 1998, given estimates that between 1992 and 1997, net export earnings had contributed to about 16 percent of GDP growth (State Statistical Bureau various issues). The GDP target was of paramount importance to the Chinese leadership, as it was closely bound up with employment generation and other crucial macroeconomic variables. According to a high-level Chinese estimate, GDP growth of 1 percent would help to create 1.25 million jobs in the nonfarm sector (*Ta Kung Pao Daily*, Hong Kong, August 4, 1998). The difficulties of achieving this target growth were also compounded by the great Yangzi flood in mid-1998.

The remedial policy measures the Chinese government adopted included the following:

- Abolishing, in January 1998, the conventional bank loan quotas imposed by the People's Bank of China in order to extend fully-fledged lending autonomy to the commercial banks.
- Reducing the legal reserve ratio requirements from 13 to 8 percent in late March 1998, coupled with reforming the reserve system to enable the commercial banks to use their fiscal reserves, held by the Ministry of Finance, to fulfill the new, reduced reserve requirements. With the new bank deposits as estimated for 1998, this would have helped to enhance the commercial banks' total lending capacity by a massive US\$18.5 billion.
- Reducing the central bank's interest rate in March, July, and December 1998, thereby enabling all industrial and commercial borrowers to save at least US\$29 billion in interest cost payments from the five successive interest rate curtailments between 1996 and July 1998.
- Increasing by US\$4.5 billion the amount to be extended by the state banks as fixed asset investment loans under the national guidelines for investments, as decreed by the central bank in April 1998.
- Resuming open market operations for repurchasing treasury bonds by more than US\$6 billion in May 1998.
- Issuing treasury bonds totaling some US\$33 billion in May 1998 to enhance the state banks' capital injection to the Basle capital adequacy ratio of 8 percent.
- Issuing treasury bonds amounting to US\$12 billion in August 1998 to boost infrastructure investments, to be synchronized with bank loans of a similar amount for complementary projects.

The various monetary and financial policy measures may or may not have been directly targeted at compensating for the export earnings losses incurred (see Beijing University 1998 for a broader discussion of the policy measures adopted). However, taken together, they already represented an increase in financial liquidity of more than the national budget expenditure of US\$69.5 billion for 1998. The vice-minister of finance estimated that the additional infrastructure investment expenditure alone would, via its income multiplier effect, help to raise the GDP growth rate by 2.5 to 3 percent (*Ta Kung Pao Daily*, Hong Kong, November 19, 1998). Together with the strictly imposed capital account control, the reflationary policy measures effectively protected China from becoming the next financial domino in the Asian crisis. The realized GDP growth rate for 1998 is now officially confirmed to have been 7.8 percent, only slightly lower than the original target of 8 percent.

It is against this background of continuous economic prosperity and stability that FDI has continued to pour into China at the expense of Southeast Asian countries (where, in the mind of foreign investors, potential political and economic instability seems to have outweighed the prospects for improved profitability arising from currency devaluation). It is apparent that throughout 1998, total FDI inflows into China showed little sign of abatement (figure 4.1), although admittedly large transnational corporations have increasingly played a key role in sustaining overall FDI inflows into China.

Against this background, let us look at the Achilles heel of Hong Kong during the context of the Asian financial crisis. By the end of 1997, Hong Kong was endowed with foreign exchange reserves to the tune of some US\$92.8 billion, third only to Japan (US\$220.8 billion) and China (US\$139.9 billion). It had hardly any external debt or any serious balance of payments deficit. The government's budget was, as usual, in solid balance, and the economy had been enjoying robust GDP growth of around 5 to 6 percent per year for a number of years. Clearly, Hong Kong was dragged into the regional financial meltdown by virtue of being the world's most open economy.

Specifically, in the absence of any form of capital account control, the Hong Kong dollar became a prime destination of international hedge funds for speculative attacks, following the predators' spree through Indonesia, Korea, Malaysia, and Thailand. A surrender on the part of Hong Kong government to allow for a free fall of the Hong Kong dollar would obviously have prompted massive capital flight, as under such circumstances portfolio flows normally do not care about economic fundamentals. However, the decision by the Hong Kong Monetary Authority to put up a massive defense for its U.S. dollar peg sent the Hong Kong economy reeling.

Under the severe credit crunch and high interest rate pressures, both stock market and asset prices plummeted by 50 to 60 percent in 1997–98. While Mainland China was confidently looking toward meeting its 8 percent GDP target for 1998, by late November Hong Kong's GDP growth had already been forecasted to be a negative 5 percent for 1998 (confirmed to be -5.1 percent in March 1999), with the unemployment rate reaching a 25-year high of 6 percent by February 1999.

The Hong Kong government adopted a number of significant financial measures to cope with the economic meltdown. These include the unprecedented use of the Exchange Fund's money in August 1998 to purchase Hong Kong stocks to prop up the stock market and restore investors' confidence. The stake was later officially made known to be worth around US\$15 billion, making the Hong Kong government by far the largest investor of its kind in the world, but nonetheless, the prestigious Heritage Foundation was poised to downgrade the status of Hong Kong as the freest economy in the world for 1999.⁸

Equally significant was the Hong Kong Monetary Authority's September 1998 package to directly fend off international currency speculators. The rescue measure had two main features. The first was to greatly reinforce the Currency Board's discipline by committing the government to convert the Hong Kong dollars held by all licensed banks in their clearing accounts with the Exchange Fund (rather than just the legal tender in circulation) into U.S. dollars at the fixed exchange rate of HK\$7.50 to the U.S. dollar, which was even higher than the official benchmark of HK\$7.80 for cash arbitrage. The second was to greatly enhance the financial liquidity of the entire banking system by replacing the restrictive liquidity adjustment facility with a discount window, whereby the banks could repeatedly borrow from the authority with their holdings of Exchange Fund bills and notes as collateral to cope with any drastic overnight demand for liquidity (see Hong Kong Monetary Authority 1998 for details and Hang Seng Bank 1998 for a brief interpretive study).

Clearly, the new measures were backed by the government's sizeable foreign exchange reserves. Prior to the stock market buy-up by the government in August 1998, reserves had stood at around US\$96.5 billion, or quadruple the entire monetary base of US\$23 billion. That position was eroded by no more than 15 percent by the massive stock market intervention.

⁸ Since 1995 the U.S.-based Heritage Foundation and the *Wall Street Journal* have compiled the Index of Economic Freedom for comparing more than 160 economies. Hong Kong was rated first for the first five consecutive years.

Subsequent to the launching of the Hong Kong Monetary Authority's package, the prime lending rate of the Hong Kong Association of Banks declined from a high of 10 percent in October 1998 to 9.25 percent in early December 1998. As a result, the gap with the comparable U.S. interest rate narrowed from 3 to 2.5 percent, although clearly the interest rate arbitrage for the U.S. dollar peg was still very much in operation. In essence, however, the interest rate reductions in Hong Kong seem to have been prompted by the similar move by the Federal Reserve Bank, and perhaps more so by the withdrawal of the international hedge funds following their collapse in Brazil, Russia, and elsewhere than by the enhanced financial maneuverability in Hong Kong arising from the authority's bold Currency Board reform measures adopted earlier in September. Similarly, both the stock market and the property market in Hong Kong rebounded quite remarkably, as elsewhere in the Southeast Asian countries, which have, in addition, also seen their currencies recover substantial ground against the U.S. dollar.

Taiwan's story is quite different from that of both Hong Kong and Mainland China. The island is not as restrictive as the Mainland in terms of capital account control, but it nonetheless lags far behind Hong Kong in financial liberalization. Unlike Hong Kong, access by foreign investors to the Taiwanese capital market is still quite strictly regulated. By July 1997, foreign capital contributed only around US\$6 billion to Taiwan's stock market. The subsequent capital flight of some US\$4.86 billion toward the end of 1997 was therefore relatively limited in scale, causing the Taiwan Weighted Index to fall by a mere 0.4 percent during the year, compared with the 42 to 75 percent drops (in U.S. dollar terms) registered by all other Asian markets (Chen 1998)

The Taiwanese economy was also strongly underpinned by solid economic fundamentals. For example, its foreign exchange reserves stood at around US\$90 billion by June 1997, trailing closely behind Hong Kong's. This is considerably more than triple the size of its external debt, while the reverse is generally the case with Korea and the ASEAN four (table 4.3).

The favorable macroeconomic setting clearly enabled the Central Bank of China in Taiwan to defend the new Taiwan dollar against speculative assaults following the eruption of the financial turmoil in July 1997, and eventually to leave it entirely to the foreign exchange market to find the equilibrium rate. By early January 1998 it had settled at NT\$34.5 to the U.S. dollar, down only 19 percent, compared with the precipitous fall of the Indonesian rupiah by 70 percent, the Thai baht by 55 percent, the Korean won by 50 percent, and the Malaysia ringgit by 42 percent.

Compared with the high price of US\$15 billion paid by the Hong Kong Monetary Authority to salvage the stock market in August 1998, the opportunity costs for the central bank in Taiwan to dispose of its foreign reserves (US\$7 billion out of a total holding of some US\$90 billion in July 1997) to defend the new Taiwan dollar were minimal.

To summarize, the remarkable success of the Taiwanese authorities in shielding the island's economy from the contagion of the Southeast Asian financial epidemic comprised the following basic elements: a workable policy endowed with adequate foreign exchange reserves and a continuous current account surplus to ward off currency attacks; a cautious approach to capital account liberalization that helped to contain the international hedge funds; and, perhaps most important, the courage of the Taiwanese authorities in eventually floating the new Taiwan dollar after the initial abortive attempt to defend it in late 1997. The Taiwanese approach therefore appeared to blend the relative merits of Chinese capital account control with elements of trade and financial liberalization as adopted by Hong Kong, without, however, being painfully trapped, like Hong Kong, by the Achilles heel of defending the U.S. dollar peg system.

An important question is how the divergent policy approaches adopted by the three Chinese economic entities in coping with the impact of the Asian crisis may bear on longer-term trends in capital and trade flows within Greater China. The answer hinges essentially on three major factors, all of which are basically external to the parties concerned.

By far the most fundamental factor is the sustainability of the U.S. and EU markets, which are the most important outlets for exports from Greater China. Undoubtedly, these export markets represent the ultimate *raison d'être* for the well-established pattern of FDI and trade flows from Hong Kong and Taiwan

to Mainland China for export processing since the 1980s. However, this regional framework of specialization is unlikely to be adversely affected by the Asian financial crisis to any substantial extent in the foreseeable future. This is to ignore Soros's (1998) apocalyptic scenario, in which a seemingly inevitable slowdown in economic growth in the United States from 1999 on would have eroded its capacity to tolerate the huge trade deficits, and hence undermined the global system of free trade.

Table 4.3. *External and Internal Balances of Korea, Taiwan, and the ASEAN Four, 1996–97*

<i>Category</i>	<i>Taiwan</i>	<i>Korea, Rep. of</i>	<i>Thailand</i>	<i>Malaysia</i>	<i>Indonesia</i>	<i>Philippines</i>
1. <i>Current account balance (US\$ billions)</i>						
1990–94 average	9.1	-3.3	-7.1	-3.0	-3.0	-2.1
1995	5.5	-8.3	-16.3	-7.4	-7.0	-2.0
1996	11.0	-23.1	-14.7	-3.6	-7.0	-4.8
2. <i>Foreign reserves, Jan–June 1997 (US\$ billions)</i>	90.0	34.1	31.4	26.6	20.3	9.8
3. <i>External debt, Jan.–June 1997 (US\$ billions)</i>	25.2	116.8	92.9	45.2	113.6	44.8
4. (2) – (3)	64.8	-82.7	-61.5	-18.6	-93.3	-35.0
5. <i>Domestic savings 1990–96 (percentage of GDP)</i>	28.0	35.0	34.2	32.1	28.9	18.8
6. <i>Fixed capital formation 1990–96 (percentage of GDP)</i>	22.6	36.7	40.4	38.3	27.4	22.5
7. (5) – (6)	5.4	-1.7	-6.2	-6.2	1.5	-3.7

Source: Chen (1998).

For Hong Kong, despite its parlous situation, the latest government statistics have confirmed that for 1998 as a whole, total exports of goods were curtailed by a relatively small margin of 4.3 percent in real terms, consisting of a 7.9 percent fall in domestic exports and a 3.7 percent fall in re-exports (Hong Kong Government Financial Secretary 1999, p.3). The president of the Hong Kong Exporters Association was, however, reluctant to accept this as an indication of Hong Kong's deteriorating export performance, arguing that at least Hong Kong toy manufacturers based on the Mainland, whose exports were channeled directly through the Chinese ports (rather than Hong Kong) actually showed growth of 6 percent for the first nine months of 1998. These figures seem to be substantiated by official Shanghai statistics for the first ten months of 1998, which also indicated that the share of exports by FIEs increased to a remarkable 47 percent of the municipality's total exports of US\$13.77 billion, and its total exports to the United States and EU grew by more than 20 percent during the same period, as against a drastic decline of 7.1 percent to US\$6.132 billion for other Asian countries (*Ta Kung Pao Daily*, Hong Kong, December 6, 1998).⁹

The situation with Taiwan seemed to have been somewhat different. Unlike Hong Kong, Taiwan, which represents a more complete, independent economic structure, is not entirely dependent on Mainland China for export processing. The continuous exodus to Mainland China of its sunset industries in the past 10 years or so has served to precipitate an industrial upgrading in the island. By the late 1990s, capital- and technology-intensive products (electronic components, equipment, chemicals, and other

⁹ This was also later confirmed by the financial secretary when he explained that "our exports to the United States and Europe grew, but this growth was unable to compensate for the marked shrinkage in our exports to East Asia. The growing volume of Mainland products being shipped out directly from Mainland ports instead of through Hong Kong also trimmed our export performance" (Hong Kong Government Financial Secretary 1999, p.3).

industrial materials) have made up more than 40 percent of Taiwan's total exports, increasingly squeezing the share of traditional labor-intensive products.

At the same time, however, coupled with Taiwan's increased FDI flows to ASEAN, the island has also become substantially dependent on these countries for its exports, to the tune of around 50 percent by 1998, compared with only 25 percent in 1996. As a result, the financial crisis severely affected Taiwan's exports. For the first 11 months of 1998, the island's exports to Indonesia, Malaysia, the Philippines, Singapore, and Thailand fell by a hefty 30 percent to around US\$9.63 billion, compared with a more modest fall in shipments to Japan by 21.3 percent and to Hong Kong by only 11.9 percent (*South China Morning Post*, Hong Kong, December 9, 1998).

Under such circumstances, the longer-term questions are clearly whether Taiwan would really further substitute Mainland China for ASEAN as a target of FDI outflow. Such a move would almost certainly compromise its politically inspired South-oriented strategy for avoiding any significant economic dependence on the Mainland. Given that probably only secular, marginal export growth can be expected to both U.S. and EU markets, a breakthrough in this regard may only come around with a turnabout in China's FDI strategy to allow for greater import substitution foreign investment in place of export-oriented FDI. Undoubtedly, both Hong Kong and Taiwan investors have long been poised to cash in on such a prospect.

The second important factor that might affect capital and trade flows within Greater China in the near future is the pace at which potential rivals in Southeast Asian may emerge from their difficulties to reactivate their economic and export activities. There are two aspects to the implications of an early recovery. The first is that it will help to enhance demand for Greater China's exports. For Hong Kong and Mainland China, this may not be essential given the small share of ASEAN in China's external trade. However, for Taiwan it definitely is important. A speedy Southeast Asian economic recovery may well help Taiwan to generate additional export earnings for possible recycling as FDI for Chinese investment markets. Perhaps even more important, the second implication is that an early ASEAN recovery, especially in terms of a reappreciation of the various currencies, may help to mitigate the countries' potential export competitiveness against Greater China exporters.

The third important factor for a sustainable early recovery from the Asian crisis for Greater China and Asia as a whole is clearly whether a new global financial order can be put in place. As Harvard economist Dani Rodrik remarked, it is simply inept to subject the policy of any government to "what 20 or 30 foreign-exchange dealers in London, New York and Frankfurt think" (*New York Times*, September 4, 1998). In fact, the consensus that arose from the 1998 annual meeting of the World Bank and International Monetary Fund was that a new global system of financial regulation should be put in place to counter the international hedge funds, in particular.

Prospects for Further Economic Cooperation within Greater China

In the wake of the Asian economic crisis, how can the three Chinese entities cooperate with each other, formally or informally, to promote Greater China as a regional economic entity in the global context of economic integration? Any realistic solutions must be sought against the broader Chinese economic background, which sets the overall parameters for the existing mode of capital and trade flows within Greater China. There are two main aspects to this.

The first is that, astonishing as the pace has been at which Mainland China has been drawn into the worldwide process of globalization during the past two decades or so, the vast Chinese economy can at best be described as half reformed and half opened. We can view it as being divided into two disparate entities to form a system of two economies within one country. Specifically, a highly protected, strictly import substitution industrial system co-exists with a widely open, export-oriented sector catering to foreign investment and exports (for an elaboration see Kueh 1990, 1997). Clearly, Hong Kong is now fully,

and Taiwan increasingly, integrated with the new economic system along the Chinese coastal belt, which has in turn become part of the integrated global system of free trade.

The second aspect is that the two-economy dichotomy not only implies absolute denial of a strategy of full integration of the real economic sector with outside economies, but, by extension, it also precludes capital account convertibility (as is indeed the case), so as not to deprive the protected priority industry sector of necessary investment funds. The chief objective of the open, export-oriented sector has been to use FIEs to help generate sufficient foreign exchange earnings to finance industrial investment.

The foregoing illustration of the Chinese strategy may overlook some crucial elements, to the extent that, for example, China has welcomed selective “intrusion” by transnational corporations with favored high technology into the closed industrial system. In addition, China has shown clear signs of relaxing its policy with respect to the lesser industrial and services sectors, retail trade in particular, to allow for investments from Hong Kong and Taiwan. However, there is little doubt that the current account convertibility, in effect since December 1996, is essentially meant to be for the open export processing sector principally involving Hong Kong and Taiwanese investment.

The World Trade Organization ranks Hong Kong as the seventh largest trader in the world. Hong Kong derives virtually all its trading opportunities—of which the processing trade is predominant—from Mainland China. China itself ranks 10th as an exporter and 12th as an importer, while Taiwan is 14th for exports and imports combined. Taken together, the Chinese entities have amassed a foreign exchange reserve of some US\$300 billion, around 25 percent higher than that of the long-established trading giant, Japan.

This may be seen as a matter of Confucian frugality and prudence or, in the case of Hong Kong, the legacy of British conservatism in hedging against eventual political uncertainty surrounding the handover of Hong Kong, and for Taiwan, perceived political imperatives for ensuring the island’s security in relation to the Mainland. Whatever the imponderables may be, the stakes could turn out to be enormous for any drastic departure from the proven exchange rate regimes adopted by all three Chinese entities, which are all basically tied one way or the other to the U.S. dollar.

In more practical terms, given the basic Chinese policy orientation and the fundamental economic rationale underlying capital account control, restricting currency convertibility to the processing trade at a fixed rate to the U.S. dollar, there seems little room left for the Hong Kong or Taiwanese authorities to engage in an independent exchange rate policy, because of their heavy dependence on the Mainland for FDI outflows for export processing activities. For example, a depegging of the Hong Kong dollar from the U.S. dollar would almost surely result in a devaluation, and in the absence of a simultaneous move on the part of Mainland China, would inevitably result in increases in new FDI costs on the Mainland. However, the processing trade, which caters to Western export markets, may not be affected, to the extent that imported materials for processing and the exported commodities are both priced in foreign currency.

More seriously, perhaps, a devaluation of the Hong Kong dollar or new Taiwan dollar would only help to thwart the emerging access, long fought for by investors from Hong Kong and Taiwan, to the domestic Mainland market. The devaluation of the new Taiwan dollar in late 1997 is a good case in point, in that, as a result, many consumer goods industries of Taiwanese origin operating on the Mainland, especially food processing, which relies extensively on Japan and Taiwan for imports of spices and packaging materials, had to immediately suspend their production because of their inability to withstand price competition from domestic producers (personal communication from a major Taiwanese investor in the food processing industry).

Thus, to enhance stability in the processing trade and to facilitate further economic integration, a Bretton Woods type of agreement among Hong Kong, Taiwan, and Mainland China, tacit or otherwise, would seem to be desirable. Whether this should develop further to a formal monetary integration in the direction of, say, a yuan bloc, following full convertibility of the renminbi by 2020 or before (China’s pledge to Asia-Pacific Economic Cooperation in 1997), is, of course, a matter for conjecture.

A more sustainable form of economic cooperation within Greater China should be sought in the real sectors against the background of increased economic interaction between the three Chinese entities

during the past two decades or so. To recapitulate, for Hong Kong, conventional labor-intensive, export-oriented manufacturing activities have almost wholly relocated to Mainland China. The process has not, however, resulted in any degree of technological upgrading for the remaining, dwindling number of factories in Hong Kong. In addition, the sunset industries that were removed to the Mainland have not received any policy impetus from the Mainland authorities for technological innovations. Rather, the enormous pressures for generating employment on the Mainland have tended to postpone indefinitely the application of any capital-intensive, labor-saving production techniques to these industries.

It was not until after the 1997 handover that the new Hong Kong government looked for ways to cooperate with the Mainland in developing new technology and high value added industries to create a new industrial profile for the Special Administrative Region (SAR).¹⁰ While new and practical technological frontiers may eventually be identified and new marketable products with high value added created, the new initiatives represent, nonetheless, a lag of more than 10 years behind Korea, Singapore, and Taiwan, which have all gained strong footholds in the global market in electronics and computers. The new approach adopted by the Hong Kong government is, therefore, not entirely uncontroversial. Apart from relative abundance in capital supply and perhaps some comparative advantage in accessing global technological and market information, it seems questionable that, in the long run, the Mainland collaborators will have to continue to depend on the SAR for such new ventures. Against this background, many major Hong Kong industrialists prefer rather to see Hong Kong developed into a fully-fledged Manhattan for the whole of China.

Taiwan appears to be quite different from Hong Kong with respect to industrial cooperation with the Mainland. While similar to the Hong Kong exodus, a wide range of labor-intensive light manufactures (garments, toys, games and sport requisites, clocks and watches, metal products, plastic articles, and so on) have been removed to the Mainland, the vacuum has been rapidly filled by the high valued added new industries alluded to earlier. This is a clear case of regional specialization within the Greater China context. More important, the relocating of the sunset industries to the Mainland has also been increasingly accompanied by larger upstream industries from Taiwan, and increasingly matched by the necessary input supplies from Mainland sources as well to substitute for imports from Japan and elsewhere.

The upshot is that the export processing industry on the Mainland involving Hong Kong and Taiwanese investors is now basically divided into two different sectors. The first, lower-tier sector (comprising conventional export processing lines) relies essentially on input supplies from Taiwan and Mainland sources. The second, higher-tier sector, (which includes food products, pharmaceuticals, metal processing, machine parts and components, and the like, continues to derive its input supplies from overseas, principally from Japan. This clearly reflects increased sophistication in regional economic specialization in East Asia, and there is little doubt that the evolving pattern of regional cooperation will transcend the Asian financial crisis to become even more firmly established in the 21st century.

In retrospect, economic cooperation within Greater China as it has evolved over the past two decades was single-handedly triggered by China's drastic policy reorientation in 1978-79 in favor of reintegrating China with the global economy. It was also greatly facilitated by the equally unexpected political relaxation in Taiwan in 1987 that allowed Taiwanese residents to visit China, and eventually to invest on the Mainland. Viewed this way, two crucial factors may eventually trigger another significant breakthrough to bring the Chinese economy fully into the aegis of globalization. The first is the Taiwanese authorities' possible abandonment of the third country rule, coupled with full liberalization of FDI and trade flows across the straits.

¹⁰ A high-powered Commission on Innovation and Technology was established under the Chief Executive's Office in late 1997. Headed by the prominent American-Chinese scholar Tien Chang-Lin, former president of the University of California at Berkeley, the commission's objective is to draw up a blueprint for long-term technological development in Hong Kong. A special mandate is to explore feasible ways to capitalize on the Mainland's expertise in high technology and basic research for commercial applications and international marketing.

The second crucial factor relates to the admission of China into the World Trade Organization, with all the ensuing implications for trade and investment liberalization in relation to the highly protected Chinese industrial system. Given the increased size of the Chinese economy, this might help to alter the global context of FDI and trade flows in the longer term, and both Hong Kong and Taiwan would clearly be the first to be fully integrated with the entire Chinese economic system to ensure an even more stable and sustained economic relationship.

Given also current Chinese economic relationships with the outside world, admission into the World Trade Organization is likely to further enhance China's integration with the advanced, industrial West, rather than to affect its relationship with its Southeast Asian neighbors. That is not to say, however, that growing Chinese economic power will eventually marginalize the importance of the Southeast Asian countries. A more likely scenario is that as China gradually becomes an industrial powerhouse in Asia, it will fuel growth and industrialization, and join Japan to become a crucial supplier of the bulk of industrial producer goods to their Asian neighbors. Moreover, the huge and highly diversified Chinese economy promises to provide sufficient market niches for the highly export-oriented ASEAN countries to diversify their overseas markets. This will all help to create a more integrated Asian Pacific economic setting, with enhanced and sustainable economic stability for all countries concerned.

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5

Regional Development Policies in Brazil, China, and Indonesia

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Of 75 developing countries with a population of more than 5 million, 60 have started to decentralize state power and resources to local governments (Dillinger 1995). Many countries view decentralization as a measure of regional development and a way to correct regional disparities. However, it sometimes increases regional disparities if it is implemented without an appropriate reallocation of resources or capacity building of local governments. Regional disparities lead to macroeconomic instability through friction among regions caused by unbalanced growth.

The objectives of this chapter are to

- Study the reasons behind slow development in backward regions
- Identify the problems of current regional development policies
- Derive lessons and recommendations for efficient and effective regional development.

Two large countries in East Asia are used for the first objectives, that is, China and Indonesia, which rank, respectively, as the largest and second largest recipients of Japan's official development assistance loans. Regional disparities in Brazil are also studied to compare the situation there with that in China and Indonesia. A large country generally has larger economic and social disparities than small countries because of its diversified ethnic groups and geography. Regional disparities in such a country are therefore more likely to lead to social and political instability. Identifying such problems may help Japan and the Japan Bank for International Cooperation to draw up an assistance policy for more effective and efficient regional development.

A number of researchers have studied decentralization and regional development in Brazil, China, and Indonesia. Wu and Takahashi (1996) characterized China's regional development model as the Guangdong model, which relies on foreign demand and exports, and the Jiangsu model, which depends on domestic demand. They concluded that the latter was superior to the former taking into account the circumstances of the world economy and the huge potential of China's domestic market.

The World Bank (1997) pointed out that China's increasing inequality was driven by the rural-urban gap. It recommended redressing the urban policy bias in housing; food; migration; credit; and state employment, which provides subsidies for urban residents. At the same time, the intergovernmental transfer scheme should be reformed to adjust the size of transfers, especially from the coastal areas to the interior, to reduce disparities. It concluded that additional research was needed to devise an appropriate package of regional growth policies given the lack of systematic analysis of the situation in China in the past.

As concerns Indonesia, Omura and Anwar (1994) found that Indonesia was not pursuing a coherent regional development strategy. Almost all the provincial governments lacked the institutional capacity to mobilize their resources. Although some local groups claim that they have undertaken further decentralization under the recent deregulation policy. Regional development accompanied by decentralization can succeed only under a suitable policy framework.

The World Bank (1994) found that fiscal centralization burdened Indonesia's central government and prevented it from providing adequate public services at the local level. It recommended that the government reconsider its extensive centralization of fiscal policy from the viewpoint of regional

development. However, Smoke and Lewis (1996) noted that weak capacity among local governments in Indonesia hampered effective decentralization.

In relation to Brazil, Nakata (1996) addressed the vicious circle between education and poverty observed in northeastern Brazil. Lavinias (1996) observed that expanding fiscal transfers to the poorer states and the self-revenues of local governments did not help correct regional disparities in Brazil. The institutional capacity of local governments was also a factor in regional development.

Dillinger (1996) proposed examining fiscal balances and carrying out financial risk analysis and management risk analysis as indications of the creditworthiness of state governments in Brazil.

Regional Disparities

This chapter focuses on regional disparities in China, Indonesia, and Brazil in terms of income and social development.

China

China is divided into 22 provinces, 5 autonomous regions, and 5 municipalities; however, this chapter will refer to all of them as provinces. The current status of regional disparities can be analyzed from two standpoints, income and the standing of each province on the Human Development Index (HDI). The province with the highest income level was Shanghai, with a per capita annual income of ¥ 15,204 (US\$1,764), 9.8 times higher than in Guizhou, the province with the lowest income. Reform and openness after 1978 brought a temporary downward trend in this disparity, bringing it briefly down to seven times in 1990, but it has been growing again in recent years.

In terms of HDI, Shanghai also has the highest score, placing it 29th on a ranking of 173 countries, with a score at the same level as Lithuania and Uruguay. Tibet has the lowest score in China, placing it between 127th-ranked Kenya and 128th-ranked Madagascar. That is, there is a gap of 98 country ranks between the two regions. In Brazil, which is said to suffer from dramatic regional disparities between the highest-scoring states in the south and the lowest-scoring states in the northeast, there is a disparity of 100 country ranks. However, in terms of social indicators, China's disparities are smaller than Brazil's, because such social services as education and health services have been brought up to minimum levels.

Indonesia

Indonesia has 26 provinces and 1 autonomous city, Jakarta. The western part of Indonesia, Jawa and Sumatra, equivalent to only 32 percent of the country's total area, has more than 81 percent of the population and accounts for 83 percent of national gross domestic product (GDP).

Looking at GDP per capita (excluding petroleum and gas), there is a large disparity of as much as 9.6 times between the province with the highest GDP, Jakarta, and the province with the lowest, Nusa Tenggara Timur. This disparity comes close to that of China (9.8 times), and is larger than that of Brazil (7.4 times). In a comparison using fluctuation coefficients, the disparities among the provinces of Indonesia are the highest among the three countries, and are increasing.¹

Social disparities are also extensive in Indonesia. The disparity in the literacy rate is 47 percent between Jakarta, which has the highest literacy rate with 98 percent and Timor, where the literacy rate is 51 percent. This disparity is higher than that of both Brazil (35 percent) and China (35 percent).

¹ The fluctuation coefficient is the standard deviation of the per capita income of provinces divided by the average value of the per capita income of provinces. A larger value indicates greater disparity.

Brazil

Brazil has 26 states and 1 federal district. Substantial regional gaps persist in terms of income and social development. As concerns per capita income by state, residents of Sao Paulo enjoy the highest incomes of all states in Brazil, and 7.4 times those at the lowest income level in Piaui. In terms of the HDI, the gap between Rio Grande do Sul with the highest HDI score and Paraiba with the lowest HDI is so wide that 100 countries are positioned between them.

The economic gap among Brazilian states, which decreased gradually in the 1970s, remained virtually the same throughout the 1980s, and began to widen in the 1990s. Analysis of the economic situation since 1990, after decentralization, shows that economic growth in the low-income regions has been sluggish compared with a marked recovery in the better-off regions.

Reasons behind Regional Disparities

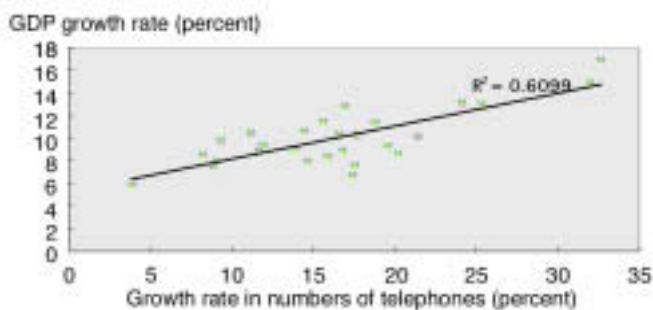
Several factors explain the slow development of backward regions in the three countries. This chapter focuses on infrastructure, human resources (education), and fiscal transfer systems.

Infrastructure

The development of infrastructure can, to some extent, explain the economic development of regions in all three countries.

In China, short-term analysis does not necessarily show a positive correlation between economic development and transport sector infrastructure, but in the long term, transport infrastructure is positively correlated with economic growth. Figure 5.1 shows a positive correlation between the rate of increase in the number of telephones and China's GDP growth rate.

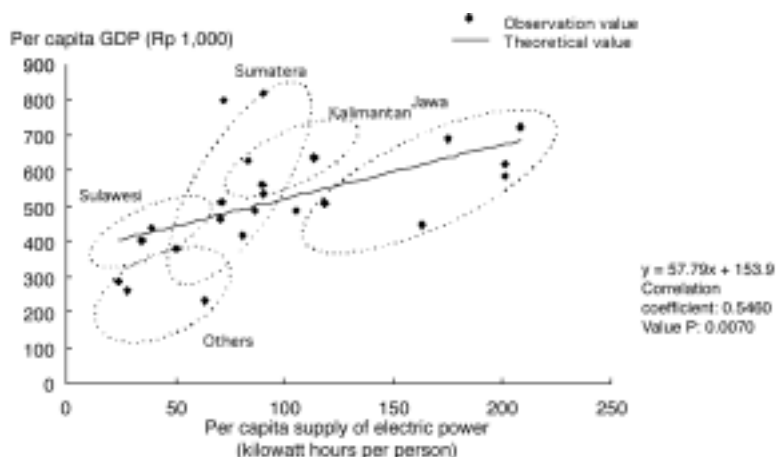
Figure 5.1. Correlation between Growth Rates of Numbers of Telephones and GDP Growth Rate, 1986–94



Source: Yamada (1999)

Similarly, a significant correlation is observed in Indonesia between infrastructure development (roads, electric power, telephones, and so on) and economic growth, as shown in figure 5.2 for per capita GDP and the per capita supply of electric power. This demonstrates that a level of the infrastructure in a province is correlated with its economic development, hence, government investment in infrastructure does play a substantial role in the development and reduction of regional disparities.

Figure 5.2. Correlation between GDP Per Capita and Per Capita Supply of Electric Power, Indonesia



Source: Takeda (1998).

The results of regression analysis for Indonesia indicate that provincial GDP per capita (excluding petroleum and gas) is significantly correlated with private sector investment (domestic and overseas) and the government's development expenditure (table 5.1). In other words, the government's expenditure on infrastructure development using its abundant revenues from petroleum and gas has prompted private sector investment and economic growth.

Table 5.1. Provincial GDP Per Capita and Amount of Per Capita Accumulated Investment, Multiple Regression Analysis, Indonesia, 1990 and 1993

Per capita GDP (excluding petroleum and gas)	Government development expenditure ^a	Private sector investment ^b	Constant	Adj. R ²
1990	0.0053**	0.2064**	165.4*	0.6416
1993	0.0052**	0.4943**	382.8	0.6237

* Significance level of 5 percent.

** Significance level of 1 percent.

a. The first entry indicates the accumulated per capita provincial government development expenditure by provinces (1987–90). The second entry indicates the accumulated per capita provincial government development expenditure (1987–94).

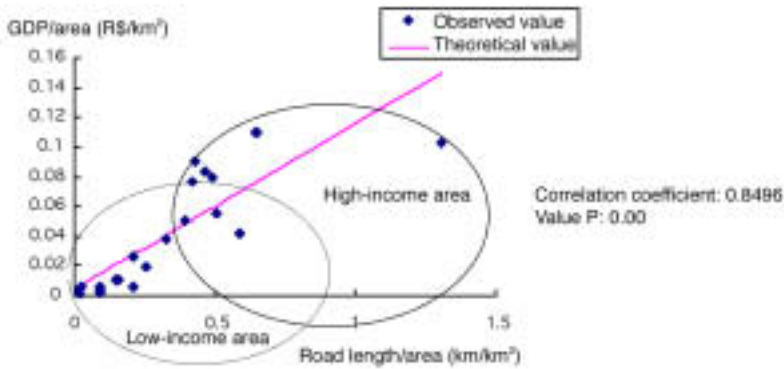
b. The first entry indicates the total value of the accumulated per capita provincial domestic private sector investment (1968–90) and the accumulated overseas private sector investment (1967–90). The second entry indicates the total value of the accumulated per capita provincial domestic private sector investment (1968–93) and the accumulated overseas private sector investment (1967–93).

Note: Per capita GDP excludes petroleum and gas.

Source: Computed from Bank of Indonesia (various issues).

Regional disparities in Brazil are also correlated with infrastructure development. For example, figure 5.3 shows the positive correlation between the development of roads and economic growth. Figure 5.3 also shows that some states in low-income areas have a similar level of road density as states in high-income areas. This suggests that road development does not automatically lead to economic development. Thus, infrastructure is not the only factor to determine economic development.

Figure 5.3. Correlation between GDP Per Area and Road Length Per Area, Brazil, 1994

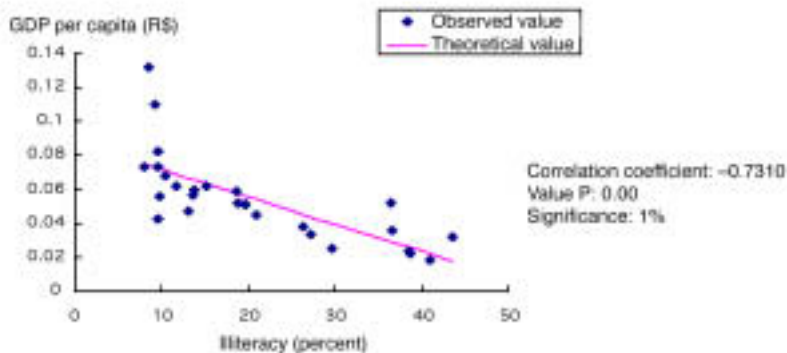


Source: Sano (1997).

Human Resources

Figure 5.4 shows the relationship between the illiteracy rate of each state in Brazil and its GDP per capita. At first glance, a huge gap is apparent between high-income areas and low-income areas. The illiteracy rate in the low-income states varies from 44 to 26 percent, in stark contrast to the average illiteracy rate of 10 percent in the high-income states.

Figure 5.4. Correlation between GDP Per Capita and the Illiteracy Rate, Brazil, 1990

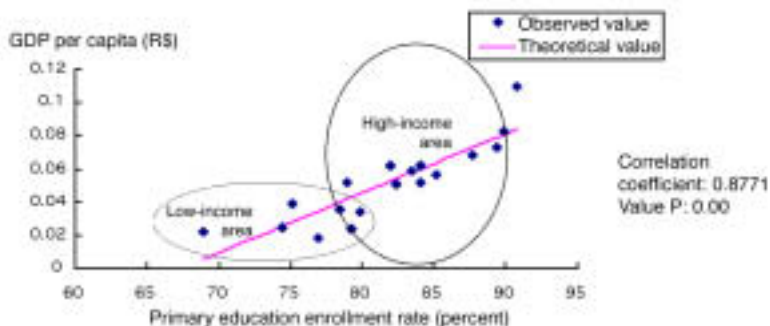


Source: Sano (1997).

Figure 5.5 shows the strong correlation between per capita GDP and the primary education enrollment rate in Brazil. While states in high-income areas enjoy a high primary education enrollment rate of 80 to 90 percent, states in low-income areas have a corresponding rate of less than 80 percent.

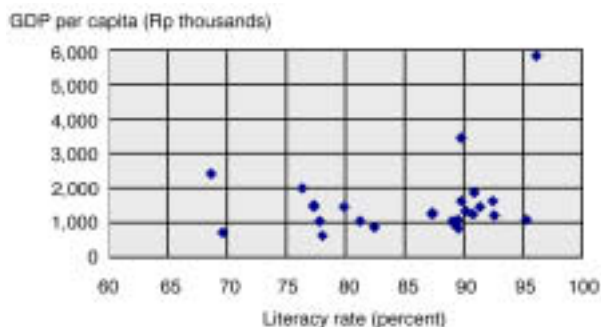
By contrast, in China and Indonesia the literacy rates of provinces are not significantly correlated with economic development. Figure 5.6 shows a weak relationship between the per capita GDP of each province and its literacy rate in Indonesia. This is because the East Asian countries have already achieved a good level of human development, as illustrated by the fact that the lowest literacy rates of Indonesian and Chinese provinces are 72 percent.

Figure 5.5. Correlation between GDP Per Capita and the Primary Education Enrollment Rate, Brazil, 1990



Note: Excludes Tocantins.
Source: Instituto d Pesquisa data.

Figure 5.6. Correlation between GDP Per Capita and the Literacy Rate, Indonesia, 1990

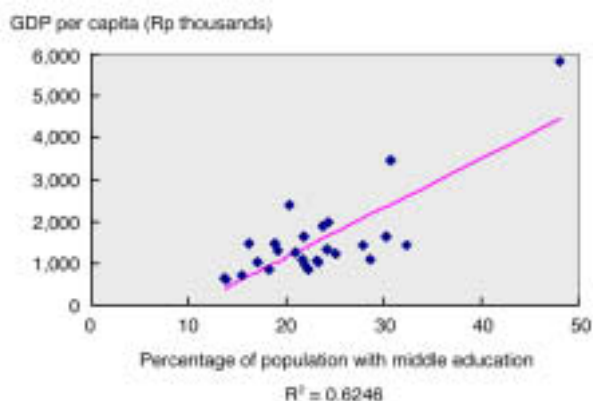


Source: Author.

However, secondary education is still a bottleneck to economic development in both China and Indonesia. Figure 5.7 shows the correlation between the ratio of the population with a secondary education and per capita GDP by province in Indonesia. The correlation between per capita GDP and secondary education is more significant than between per capita GDP and the literacy rate.

Even though education is essential for development, the construction of school buildings and the provision of equipment and teachers alone cannot contribute to the improvement of human development. The important point for human development is to consider demand-side factors as well. The factors that could influence the demand for education include the direct costs of education, the indirect costs of education (for example, the income lost by children going to school instead of working), and income from future employment. Substantial problems are not found in the direct cost of education in Brazil. However, as a factor of indirect costs, more children are working among the poor than among better-off families, and many more in rural areas than in urban areas. This means that the indirect or opportunity cost for poor families to send children to school is large.

Figure 5.7. Correlation between GDP Per Capita and Lower Secondary, Indonesia, 1990



Source: Author.

Regarding the economic returns to investment in education in Brazil, table 5.2 shows that the increase in the coefficient of wages per additional year of education among the group with eight years or more of education is larger in the northeastern region than in other regions. However, the coefficient of the group with fewer years of education is lower in the northeast than in the south and east. This indicates that returns to primary education are lower in the low-income states than in the richer states.

Table 5.2. Wage Increase per Additional Year of Education, Selected Areas in Brazil, 1990 (percent)

Area	0-4	4-8	8-11	11-15	11-16
Rio	0.099	0.121	0.161	0.185	0.201
Sao Paulo	0.134	0.114	0.120	0.143	0.160
South	0.133	0.132	0.167	0.136	0.158
East	0.147	0.136	0.163	0.150	0.159
Northeast	0.124	0.111	0.188	0.203	0.200
North/Central-west	0.118	0.104	0.152	0.155	0.162

Source: Nalcata (1996).

The large gap in returns on educational investment between regions may indicate that the labor market is segmented by region. The lack of people with more years of education creates a shortage of highly qualified workers in the northeast region, potentially raising returns to investment in more years of education. The poor, however, face many constraints that hinder turning their potential demand into effective demand; for example, low mobility between social classes and low employment opportunities reduces their expected returns to educational investment.

Fiscal Transfer Systems

Government investment should play a major role in the development of infrastructure and human resources, which, as noted earlier, are essential for economic growth. Given the revenue limitations of undeveloped areas, a major portion of the revenues of poor provinces or poor state governments are fiscal transfers from the central government. Thus, fiscal transfers might also play an important role in regional development.

In Indonesia, regional governments' budgets are insufficient. In 1994 the total revenues of provincial governments reached Rp 9,709 billion, which represented only 13 percent of the revenue of the central government that same year. As table 5.3 shows, this total provincial revenue is much less than that of Brazil (356 percent of central government revenue), China (92 percent), and Japan (69 percent).

Table 5.3. International Comparison of Provincial Revenues and Central Government Revenue, Selected Countries, 1990

<i>Country</i>	<i>Central government revenue</i>	<i>Provincial revenues</i>	<i>Provincial revenues as a percentage of central government revenue</i>
Indonesia (Rp billions)	353	9,709	13
China (Y billions)	325	298	92
Brazil (R\$ millions)	481	1,710	356
Japan (¥ billions)	73,430	933	69

Source: Financial Statistics (BPS), China Statistics Yearbook, Government Finance Statistics Yearbook (IMF), Financial Statistics of 1996 (Survey Department of Budget Bureau, Ministry of Finance, Japan), Regional Financial Statistics Yearbook of 1996 (Regional Finance Research Society of Japan).

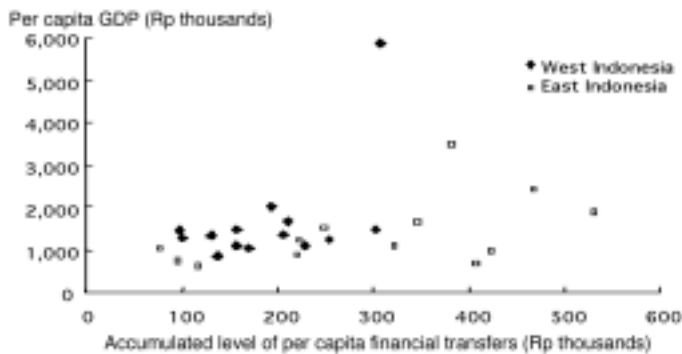
The provincial revenues of Indonesia consist of own revenues (31 percent), revenue distribution from the central government (8 percent), central government subsidies (55 percent), and the amount carried over from the previous year (6 percent). Provincial governments can spend their own revenues and some portion of the central government subsidies, which means that 57 percent of total revenues under their control.

Therefore, fiscal transfers have a major role in correcting regional disparities. Figure 5.8 shows the relationship between the level of fiscal transfers and income (per capita GDP) in provinces in Indonesia. Regression analysis between accumulated amounts of per capita fiscal transfers from the central to provincial governments and provincial GDP per capita does not reveal any significant correlation. Consequently, fiscal transfers do not necessarily help reduce disparities between provincial GDP and infrastructure development.

In China during the planned economy period, 1964–72, 63 percent of total investment was directed to inland regions. Since 1978, the policy guidelines for investment have given priority to the efficiency of investment. Under this new emphasis, the share of investment directed to inland regions fell to 41 percent during 1982–90. In the latter half of the 1980s, the contract system was introduced in tax collection. Under this system, the provinces are responsible for collecting all taxes and cede a portion of tax collections to the central government. This led some wealthy provinces to conceal their resources, which led to a further decline in the redistributive functions of fiscal administration. In response to this problem the central government introduced the tax separation system in 1995, under which collection was divided between central taxes, regional taxes, and common distribution taxes. The central government distributes common distribution taxes to the regions based on their shares of tax collection. This change was an effort to secure financial resources for the central government. However, recent research reveals that the following results have not yet been obtained:

- The delineation of administrative authority between central and regional governments remains unclear.
- The new policy fails to establish a rational mechanism for fiscal redistribution between regions, so it can have little effect in adjusting inter-regional industrial structures.
- The amount disbursed to regions by the central government should be inversely proportional to the region's per capita GDP level. In practice, this is not the case.

Figure 5.8. Relationship between Per Capita GDP and Accumulated Level of Per Capita Fiscal Transfer, Indonesia, 1986–94



Note: GDP are from 1993 data.

Source: Financial Statistics (BPS), Statistics Indonesia (BPS).

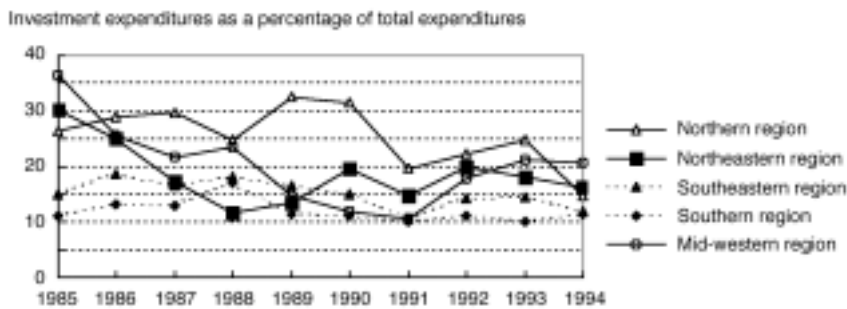
What has happened is that the regional governments have diversified their revenue sources by such means as allowing the introduction of foreign capital. As a result, the share of investment by the central government fell from 7 percent in 1991 to 3 percent in 1995. In the coastal provinces, which are the most able to attract foreign capital, there is a growing trend not to expect financial assistance from the central government. However, inland provinces, such as the autonomous region of Tibet, receive up to 70 percent of their investment from the central government. Therefore, the central government must strengthen its fiscal functions and invest a certain amount in inland regions to encourage their development.

By contrast, Brazil has a relatively fair system of fiscal transfers in terms of both quantity and quality. The 1988 Constitution expanded the scope of local autonomy and enhanced the self-financing sources of local governments. Of the federal government's total revenue, more than 20 percent is transferred to local governments. This high level of fiscal transfer places a burden on the federal government. Of the federal tax revenues earmarked for transfer to local governments, 80 percent is collected in high-income areas. Approximately 40 percent of this amount goes to low-income areas and another 40 percent goes to frontier areas.

Nevertheless, investment expenditure by state governments in low-income states is relatively less than that in high-income states (figure 5.9). With the exception of a few years, in the northeastern and northern regions, investment expenditure has declined steadily since 1985. In 1994 the level of investment expenditure of these two regions was far below levels in other regions.

The expenditure structure of low-income state governments is heavily burdened by personnel cost and debt service, which is why they have not invested as much as other regions despite the fiscal transfers from the central government. In the northeastern region, the share of personnel costs in total revenues increased from 37 percent in 1992 to 57 percent in 1995, and in the southern region it increased from 34 to 49 percent. Therefore, the governments of poor states should make greater efforts to implement administrative and fiscal reforms.

Figure 5.9. Investment Expenditure by State Governments, Brazil, 1985–94



Source: Sano (1997).

Current Regional Development Strategies

This section addresses the current regional development strategies of the three countries to examine the appropriateness of the strategies.

China

The Chinese government addressed the issue of income gaps for the first time in the Ninth Five-Year Plan, covering 1996 to 2000. The plan includes a resolution to implement policies to halt the expanding trend in regional disparities. However, governmental authority is highly decentralized in China. The central government's expenditures account for only 40 percent of total government expenditures, compared with an average of 78 percent among developing countries as a whole. China's success in addressing the income gap problem will depend on the development strategies adopted by each province.

In response to the Ninth Five-Year Plan, the provinces are hammering out their own long-term development strategies. A study team from the Japanese Overseas Economic Cooperation Fund's (OECE's) Research Institute of Development Assistance collected information from most provinces. The research revealed the following three striking points:

- Although the inland provinces are concentrating their energies on infrastructure development, they are paying little attention to creating the systems that underpin any market economy. For example, only 10 of China's 18 inland provinces and 10 of 12 coastal provinces are designing market development initiatives (table 5.4). As concerns foreign trade policy, only 8 of the inland provinces are targeting increasing foreign trade, while 10 of the coastal provinces want to expand such trade. Some 16 inland provinces are pushing infrastructure development. However, the weak economic performance—rather than the low investment in infrastructure—of the inland economies accounts for their slow development of market economy systems. The growth rate of each province is heavily influenced by the relative development of the nonstate sector. Also clear is the correlation between economic growth on the one hand and the degree of state sector reform and development of a market economy on the other. The systems supporting the emergence of a market economy are indispensable for growth.
- The provinces, including inland provinces, are promoting similar types of industries. This problem is an outcome of each province's desire to attract foreign capital as well as central government subsidies and tax breaks. For instance, 24 of the 30 provinces are targeting automobiles and machinery as base industries and about 22 are seeking to develop the electronics and electrical machinery sectors. The geographic location of the inland provinces affords poorer market access than their coastal

counterparts. It would be more effective for the inland provinces to map out development strategies that capitalized on their relative advantages, such as cheap labor or abundant natural resources. For instance, a number of provinces along the Yangtze River are preeminent in agriculture. It would make sense for them to develop food processing, fertilizer production, and other industries tied to agriculture. Similarly, those provinces that border Indochina and central Asia should focus on industries that can take advantage of trade with neighboring nations.

- The coastal provinces, buoyed by big revenues, are projecting higher growth targets. The current five-year plan calls for an annual growth rate of 8 percent, but no province is aiming for growth under 8 percent. Almost all the coastal provinces are pegging their growth targets at a minimum of 10 percent. Thus the provinces' investment plans are not correlated with the central government's policy blueprint. The provinces are forecasting combined investment of Y 16 trillion (US\$1.9 trillion), well above the state goal of Y 13 trillion. The development plans of the coastal provinces contain no concrete measures to close the regional income gap.

The analysis indicates that regional disparities, if not addressed, will continue to widen, which may lead to macroeconomic instability accompanied by huge costs for dealing with the distortions caused by unbalanced growth. It may be necessary for the central government to coordinate the development strategies of individual provinces for development to be better balanced. The provinces' plans for developing industry will certainly need this coordination. Of course, this adjustment of interests will have to be transparent and objective, based on legal standards. China's wide disparity among regions should be considered a distortion stemming from the country's high economic growth.

Indonesia

Throughout the First Long-Term Development Program (1969–93), Indonesia's regional development made significant progress through the development of infrastructure. The progress of development in individual provinces, however, is uneven, and various regional disparities have been created.

Indonesia's strategies contain the following major problems:

- Despite a stated intent to reduce regional disparities, detailed measures to realize this target are insufficient. In the Third Five-Year Development Program (1979–83), the central government for the first time announced the reduction of regional disparities as a prime target and endeavored to reduce these disparities through the subsequent five-year development program. The central government is planning in the current Sixth Five-Year Development Program and Second Long-Term Development Program to pursue regional development as an important policy issue, with the active autonomy of regional governments. However, there are no detailed measures to promote development.
- In the five-year program, decentralization is a concept used to promote regional-based development, but the program's fiscal policy emphasizes the central government. Only 13 percent of the central government's revenues are transferred to the provinces. The level of fiscal transfers is 1.6 percent of GDP in Indonesia, which is far less than that of Japan (5.8 percent), India (5.5 percent), and Brazil (4.6 percent). The small scale of fiscal transfers is caused by poor institutional capacities at local government levels, which do not have adequate expertise and experience to mobilize resources for effective development. Therefore, decentralization should be implemented alongside capacity building of local government.

Table 5.4. Reforms Under Way in Chinese Provinces

Region	Reform			Openness			Factor inputs			Advancement of industrial structure			
	Establishment of market system	Reform of state enterprises	Establishment of nonstate economy	Development strategies	Strengthening of foreign trade	Liberalization of foreign policy	Investment and loan policies	Enhancement of quality of work force	Infrastructure preparation	Environmental preservation	Primary industry	Secondary industry	Tertiary industry
<i>Coastal region</i>													
Beijing	•	•	X	X	X	X	X	•	•	X	•	•	•
Tianjin	X	•	•	•	•	•	X	•	•	•	•	•	•
Hebei	•	•	X	•	•	•	•	•	•	X	•	•	•
Liaoning	•	•	•	•	•	•	X	•	•	X	•	•	X
Shanghai	•	•	•	•	•	•	•	•	•	•	X	•	•
Jiangsu	•	•	•	•	•	•	•	•	•	•	•	•	•
Zhejiang	•	•	•	•	•	•	•	•	•	•	•	•	•
Fujian	•	•	•	•	•	•	X	•	•	•	•	•	•
Shandong	•	•	•	•	•	•	X	•	•	•	•	•	•
Guangdong	•	•	•	•	•	•	X	•	•	X	•	•	•
Guangxi	X	•	•	•	•	•	X	•	•	X	•	•	X
Hainan	•	•	X	X	X	•	X	•	•	X	•	•	•
<i>Middle region</i>													
Shanxi	X	•	•	X	X	•	•	•	•	•	•	•	•
Inner Mongolia	X	•	•	X	•	•	•	•	•	•	•	•	•
Jilin	•	•	•	•	X	•	•	•	•	•	•	•	•
Heilongjiang	X	•	•	X	•	•	X	•	•	X	•	•	X
Anhui	X	•	•	•	X	•	X	•	X	•	•	•	X
Jiangxi	•	•	X	•	X	•	X	•	•	•	•	•	•
Henan	•	•	•	•	X	•	•	X	•	•	•	•	X
Hubei	•	•	•	•	•	•	•	X	•	X	•	•	•
Hunan	•	•	•	•	•	•	•	X	•	X	•	•	•
<i>Western region</i>													
Sichuan	•	•	•	•	X	•	X	•	•	•	•	•	•
Guizhou	•	•	•	•	•	•	•	•	X	•	•	X	X
Yunnan	X	•	X	•	X	•	•	•	•	X	•	•	•
Tibet	X	•	X	•	X	•	X	•	•	X	•	•	•
Shaanxi	•	•	•	•	•	•	X	•	•	•	•	•	•
Gansu	•	•	X	•	X	•	•	•	•	•	•	•	•
Qinghai	•	•	•	X	•	•	•	•	•	•	•	•	X
Ningxia	X	X	X	X	X	•	•	•	•	X	•	•	•
Xinjian	X	•	•	X	•	•	X	•	•	•	•	•	X

• Taken into consideration.

X Not taken into consideration fully.

Source: Author.

Brazil

Under the military regime (1964–84), regional development was led by the federal government. As hyperinflation deprived the federal government of the financial maneuverability to assist regional development, the federal government delegated the authority for regional development to state and municipal governments following the establishment of the civil government in 1985. As a result, local governments have been playing an increasingly critical role in local development. However, the 1988 Constitution only established a general framework concerning the relationship between the authority of the federal government and the authority of state and municipal governments. Thus large gray areas remain in regard to the demarcation of authority between the federal and local governments. In addition, various interests have delayed the process of transferring administrative functions from the federal government to state and municipal governments.

A Research Institute of Development Assistance/OECD study team analyzed the multiyear plans from 1996 to 1999 of all the states from the viewpoint of fiscal structures and conformity with the federal plan. The study found that the revenue sources of local governments have increased, but have not yet resulted in effective regional development, and pointed to the following three issues:

- States in the northeastern region should secure investment funds for infrastructure and human resources by reducing personnel costs and debt restructuring measures. They should also foster value added industries from the long-term point of view, making the best use of such comparative advantages as their geographical proximity to the United States and to European markets, their low handling costs in ports, and their low labor costs.
- States in the northern and mid-western regions should continue with infrastructure development while also paying attention to the importance of developing the social sectors, such as education.
- To improve the fiscal structure of the state governments, the federal government should take several measures, such as establishing fiscal statistics based on common definitions to provide an accurate picture of the fiscal condition of each state government. Technical guidance for state governments is also necessary to establish a debt management system.

Conclusion

Examining regional disparities in terms of the incomes of and social development by subnational governments, this study finds the following:

- Income disparities are larger in China and Indonesia than in Brazil, and income disparities in all three countries widened in the 1990s.
- Economic growth is positively correlated with the development of infrastructure such as roads and telecommunications in all three countries. Government investment in infrastructure is essential for economic growth.
- Human resource development sometimes becomes a bottleneck to economic development. Brazil, in particular, shows a significant correlation between basic education and economic growth.
- Fiscal transfers from the central government to local governments should play an important role in correcting regional disparities. However, such a system has not worked in all three countries because of the weakness of the central government's tax collection system in China; the fiscal transfer system, which does not reflect economic disparities among provinces, in Indonesia; and a fiscal system burdened by personnel costs and heavy debt burdens among state governments in Brazil.
- Current regional development policies have the following problems. In China, the development plans of underdeveloped provinces pay little attention to creating market economy systems, which are indispensable to efficient resource mobilization; no coordination has been carried out in relation to the industrial policies of each province; and neither provincial governments nor the central government have plans to reduce disparities by reallocating investment. In Indonesia, the five-year development

program has no detailed plan for reducing disparities, the size and quality of provincial government budgets are insufficient for promoting locally-based development because of a lack of capacity, and the size of fiscal transfers from the central to local governments does not reflect its income level. In Brazil, the state governments of backward region cannot invest much in infrastructure and education because of their heavy indebtedness, and the central government does not have an accurate picture of the fiscal situation of each state because of the lack of a statistics and monitoring system.

Clearly, a market economy mechanism alone cannot solve these problems. The government sector should, therefore, play an important role in addressing the problems. The central governments should establish national frameworks to tackle widening regional disparities under market economy mechanisms, such as fiscal transfers to backward regions to develop economic and social infrastructure. They should also coordinate regional development plans to ensure balanced growth of the whole country, with a clear recognition of regional problems in fiscal structure, investment plans, and human resources.

Under decentralization, the role of local governments becomes more important. Autonomy does not mean being given a free hand by the central government. It should be followed by a delegation of responsibility to local governments to administer development plans and fiscal systems.

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6

The Impact of Globalization on China's Economy

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Globalization is not a process that has just started; it has been ongoing since the late 18th century. As described by Marx and Engels (1848, pp. 18–19) 150 years ago:

In place of the old local and national seclusion and self-sufficiency, we have intercourse in every direction, universal inter-dependence of nations. And as in material, so also in intellectual production. The intellectual creations of individual nations become common property... The bourgeoisie, by the rapid improvement of all instruments of production, by the immensely facilitated means of communication, draws all, even the most barbarian, nations into civilization... The bourgeoisie has subjected the country to the rule of the towns... It has made barbarian and semi-barbarian countries dependent on the civilized ones, nations of peasants on nations bourgeois, the East on the West.

However, just like political and cultural internationalization, the process of economic globalization has been accompanied by an opposing trend namely, the popularization of nationalism, regionalism, and polarization. This paradox is inevitable, not only because of historical, cultural, traditional, and social and psychological factors, but also because of economic reasons. Political or military coercion aside, the dynamics of economic integrity can only come from the comparative advantages of different nations, which is relative and constantly changing. For instance, a popular point of view among developing countries for some time has been that allowing the free entry of foreign commodities into domestic markets will inevitably lead to the decline of domestic industries and the collapse of the national economy. While some cases may seem to justify this point of view, in reality it is wrong when looked at from macroeconomic and long-term perspectives. If a country can import that many foreign goods, it is because that country has the ability to pay for these imports. If this were not the case, the local currency would be devalued and foreign goods would become expensive, which would in turn alter the comparative advantage of that country.

In the past, at present, and even in the future, cases might arise in which some economies are harmed in the process of international economic integration; however, such integration will not lead to a collapse of the world economy. In an open global economy, maintaining individual economic autarky is possible, but its costs will be extremely high. On the one hand, openness could lead to accelerated development and prosperity within an individual economy and help to integrate it into the world economy. On the other hand, it could also keep this economy in its original underdeveloped circumstances. Nevertheless, developing countries should stick to the policy of opening up to the outside world, because only this policy will help narrow the gap between developing economies and the world economy as a whole. Even though openness alone is far from sufficient for the modernization of a country, it is absolutely necessary. This is why China has adopted opening to the outside world as one of its basic state policies.

The Effects of Openness

The open door policy that began 20 years ago has enabled China to emerge from its past isolation and become integrated with the world economy. This policy has had a profound and far-reaching impact on China's economy in a number of respects.

First, it has greatly enhanced the reform process and played a key role in transforming the economy from a centrally planned one to a market-based one. Without having adopted an active open door policy from the very beginning of the transition from a planned economy to a market one, domestic economic reform would not have been accomplished so rapidly and so successfully. The open door policy can help to emancipate the mind of the people and harmonize opinions in a very short time. It has quickly changed people's way of thinking and allowed civil servants and enterprise managers to learn about market mechanisms. In addition, it has helped reform measures to be implemented rather than only being discussed. This has occurred simply because once the door has been opened, international market rules, foreign competition and global economic integration have inevitably forced China to follow a path of reform.

However, during the past 20 years, China's economic transition has been notably unbalanced among regions. Market mechanisms were initially introduced in the coastal regions, and then gradually extended to central and western parts of the country. For instance, Guangdong and Fujian provinces have been given preferential policy treatment since the early 1980s. Given that these coastal provinces are close to Hong Kong (China), Taiwan (China), and other economically advanced regions in Asia, foreign management mechanisms had to be adopted in these areas to enhance competition and cooperation with their foreign counterparts. Over the years, the coastal areas have usually been the first to relax price controls, give autonomy to enterprises, introduce market-based financing, allow workers to choose where they wanted to work, allow land rental, and so on. These areas have thus been playing a pilot role in China's reforms.

Second, the open door policy has led to rapid economic development, and hence accelerated the process of modernization. This policy has enabled China to use huge amounts of foreign capital to compensate for the shortage of domestic funds. Statistics indicate that 300,000 foreign direct investment (FDI) projects were approved during 1979–97. Total contracted foreign investment during this period reached US\$510 billion, and foreign funds actually used reached US\$220 billion. Foreign funding has so far accounted for 14 percent of total investment in fixed assets. Since 1994 the scale of foreign fund utilization in China has been ranked second in the world, and first among developing countries.

When the reforms started, a huge gap in technological development was observed between China and the industrial countries. As opening up has progressed and reforms have deepened, large amounts of advanced technology and equipment have been introduced through the inflow of FDI. This has, in turn, greatly advanced domestic technological development. A 1996 census of 3,200 major industrial equipment items showed that the share of imported items had reached 47.1 percent, a 28.9 percent increase over 1985.

Before the reforms, China's management skills were relatively backward. As the reforms proceeded, and through cooperation with foreign enterprises, financial institutions, and government agencies, China has become aware of advanced management skills and experiences, which have helped accelerate the reform process. Moreover, the open door policy has greatly enhanced economic and technological exchanges between China and other countries. Through such exchanges, China receives large amounts of information and informs the rest of the world about its own development situation. This has promoted the exchange of resources between domestic and international markets and helped to integrate China's development with that of the rest of the world.

Third, the open door policy has helped improve the economy's overall quality and efficiency. In the agriculture sector, the importation of fertilizers and pesticide and the introduction of new species of crops and advanced farming technologies have enabled China to achieve higher yields. Unit yields increased from 2.53 tons per hectare in 1978 to 4.48 tons per hectare in 1996, an increase of 77 percent. The unit yield of cotton increased from 450 kilograms per hectare in 1978 to 1,025 kilograms per hectare in 1997, which is more than double. The output of major agricultural products has also advanced significantly in terms

of world rankings. Grain output moved from second place in 1978 to first in 1997, cotton moved from third place to first place, rapeseed went from second to first place, and meat went from third to first place. All these achievements were unimaginable before the reforms.

China has also made great progress in industry, especially in the manufacturing sector. In 1978 China's output of steel, coal, cement, fertilizer, and televisions was ranked fifth, third, fourth, third, and eighth in the world, respectively. By 1997, output of all these items had become first in the world. At the same time, the ranking of the output of crude oil was up from eighth to fifth, power generation output and synthetic fiber were up from seventh to second, and the output of cotton cloth has continuously been ranked first.

China's technological development in the electronics, machinery, chemical, and metallurgical industries is still relatively backward compared with that of the industrial countries, but the difference has not increased despite the rapid development in these areas, and some progress has been achieved. The development of tertiary industry has also benefited from the open door policy. The proportion of value added from tertiary industry in gross domestic product (GDP) increased from 21.4 percent in 1979 to 32.1 percent in 1997, a rise of more than 10 percent. Moreover, the previous bottleneck sectors, such as transportation and telecommunications, have also made great progress. The quality and efficiency of service sectors such as wholesale and retail trade, foreign trade, finance, and tourism has also improved significantly. Intermediaries, such as accounting and auditing services and law firms have emerged across the country. Thus the potential for the development of tertiary industry is strong, and this will be a driving force for further economic development in the future.

There is no doubt that the open door policy has also brought with it some side effects and problems. Some of these problems could be quite serious, and their consequence can be observed in the economy.

First, there is obvious regional disparity. China's regions can be classified into three categories as follows:

- Those coastal regions with a relatively strong economic base and sound transportation network. Such regions have developed close economic links with the outside world and have been developing rapidly.
- Regions with a reasonably good industrial base, but which are still suffering from the effects of the traditional planning system. These regions have fewer links with the outside world and their development is progressing relatively slowly.
- Inland and remote areas, whose pace of development has accelerated greatly, but which still lag far behind the coastal regions.

In terms of economic development and income levels, regional disparities have been widening. Such differences will hinder sustained and coordinated economic development as well as the country's social stability.

Second, the promotion of free trade and the inflow of foreign capital have shocked domestic industries. Because of extensive smuggling over the years, the statistics on the volume of imports are grossly underestimated. Such shocks were first felt in the machinery and household electrical appliance subsectors, and then spread to almost all consumer goods industries. In recent years, such effects have also spread to the energy and raw materials sectors, such as crude oil and petroleum-chemical products, chemicals, pesticides and fertilizers, steel, and nonferrous metals.

The current poor performance of state-owned enterprises (SOEs) and decreasing trend of village and township enterprises are related to some extent to the inflow of foreign goods and competition from foreign-funded enterprises. In recent years, grain prices have kept dropping and farmers have not been able to enjoy higher income by increasing their grain production. This phenomenon is obviously related to the excess grain supply on the world market. The service sector, which is in the process of opening up, has already felt pressures from outside.

Third, imports of advanced equipment and technology have also shaken up the old scientific and technological research system. The traditional scientific and technological institutions were all

government owned and had been developed in an isolated environment. Thus it is difficult for these institutions to adapt to the market environment, and their efficiency is low. As the economy opens to the outside, the authorities have realized that in the short run, importing needed technologies is much more efficient than developing them domestically, and that importing equipment and products is better than importing technologies. Most of the technologies needed are available through imports, except those embargoed by some of the industrial countries. Under such circumstances, the domestic institutions have little to do. Engineering is no longer considered a prestigious profession, and university departments offering majors in related subjects are suffering from a lack of demand.

Meeting the Challenges of Economic Globalization

When China first started its reforms 20 years ago, it had few suitable experiences to emulate. The East European countries and the former Soviet Union could be taken as a reference; the "four little Asian dragons" were regarded as a model whose approach was instructive; and Japan, North America, and Western Europe were "teachers" that were too advanced to follow. Thus no ready-made economic model was available that China could easily adopt. In retrospect, one can conclude that the secret of the success of China's reforms is quite simple: seek truth from the facts, and all policies adopted must be based on the conditions prevailing in the country.

From the very beginning, the government realized that it should not confuse reform measures and the ultimate objectives of the reform. It intended to establish an open economic system, but could only realize it step by step. Changing the mentality of the people and transforming an existing economic system takes a long time. Otherwise, there would only be shocks, but no "therapy." By taking a gradual approach, China tried to maintain and maximize the positive aspects of the old system, while containing and minimizing its negative aspects. This has greatly helped the success of the open door policy. When the reform was in difficulties, the government did not lose confidence in its reform objectives. It endeavored to find solutions while sticking to the basic policy of opening to the outside world. Throughout the whole reform process, the government has firmly believed that the open door policy is in the interests of the people. This is the main reason for the success of the open door policy.

While taking bold steps in opening the commodities market, the authorities were cautious in opening the factor market. For most of the 1980s, China had a trade deficit. On the one hand, by introducing FDI, China opened its commodities market to the outside world. However, for some time the government required foreign-funded enterprises to export a certain portion of their products. However, this requirement was not strictly implemented, and the rationale behind it was questionable when both imports and exports were increasing annually by as much as 15 percent. On the other hand, in opening the factor market, especially for capital markets and money markets, the government planned to act cautiously, perhaps over cautiously according to some observers. Actually, China could have made the renminbi convertible under the current account in the early 1990s. However, this cautious attitude may have been one of the major reasons why China survived the Asian financial turmoil. In any case, the controls on foreign currencies held by citizens and on capital flows between financial institutions were actually very weak, and a net capital outflow has been apparent for some time. This net capital outflow was even more serious in the early 1990s, as can be seen from the huge errors and omissions reflected in China's international balance of payments (table 6.1). In opening the factor market, China has repeatedly declared that it will follow an active and sustainable policy. In the meantime, it will try to coordinate the speed of opening up and the promotion of a sound domestic management system.

China has long been aware of the problem of unbalanced development between regions, and has taken some measures to tackle the issue. Large policy loans have been arranged to help the development of agriculture and village and township enterprises in the inland areas. At the same time, funds have been channeled to these areas in the form of fiscal transfers, earmarked allocations, and work for food programs to help economic development in these regions. Since 1998, a huge amount in additional

government bonds has been issued to promote infrastructure development. Most such projects are located in central and western regions of the country. Some preferential treatment was also given to these areas to help them attract more foreign capital.

Table 6.1. *International Balance of Payment, 1991–97*
(US\$100 million)

<i>Year</i>	<i>Current account balance</i>	<i>Capital account balance</i>	<i>Errors and omission</i>	<i>Changes in reserves</i>
1991	119.97	32.56	-31.31	-121.22
1992	64.02	-2.50	-82.74	21.22
1993	-119.02	234.72	-98.04	-17.67
1994	76.57	326.44	-97.74	-305.27
1995	16.18	386.74	-178.10	-224.81
1996	72.43	399.67	-155.59	-316.51
1997	297.17	229.58	-169.52	-357.23

Source: State Statistical Bureau (1991–97).

Partly due to the preferential treatment, but mainly due to the intrinsic laws of market economics, the regional disparities between the provinces are being narrowed down. The central issue in regional income disparity is the difference between urban and rural incomes. For some time Shanghai and Guizhou have been the two extremes in terms of gross national product (GNP) per capita. In 1980 GNP per capita in Shanghai was 12.5 times that in Guizhou. By 1997 it was down to 10.2 times (see also the paper by Yamada in this volume). This reveals that the difference in GNP per capita is becoming smaller. If we take into consideration the differences in price changes and the fact that prices in Shanghai rise more sharply, then the actual income disparity between the two should be even smaller. However, when we compare the two provinces in terms of rural and urban incomes, the results are quite different. In 1997 the average annual income of urban residents in Shanghai was 1.9 times that in Guizhou, while the same indicator for suburban residents of Shanghai was 4 times that of farmers in Guizhou (table 6.2). The development of village and township enterprises in eastern areas has also helped narrow urban and rural income disparities, though such disparities still need to be addressed. Narrowing urban and rural disparities in the central and western regions will be a particularly difficult task.

Table 6.2. *Average Net Incomes of Farmers, Selected Regions and Years*
(RMB)

<i>Region</i>	<i>1978</i>	<i>1980</i>	<i>1985</i>	<i>1990</i>	<i>1995</i>	<i>1997</i>
Beijing	224.80	290.46	775.09	1,297.05	3,223.65	3,661.18
Shanghai	290.00	397.35	805.92	1,907.32	4,245.61	5,277.02
Guangdong	182.30	274.37	495.31	1,043.03	2,699.24	3,487.69
Inner Mongolia	100.30	181.32	360.41	607.15	1,208.38	1,780.19
Henan	101.40	160.78	329.37	526.95	1,231.97	1,733.89
Guizhou	108.00	161.46	287.83	436.14	1,086.62	1,298.54
National average	133.57	191.33	397.60	686.31	1,577.74	2,090.13

Source: State Statistical Bureau (1998).

In dealing with the weak performance of SOEs and the increase in unemployment, the government has encouraged reducing the number of employees in SOEs, stimulating the development of the nonstate sector, and launching re-employment schemes for laid off workers. At the same time, it has set up a fund to provide basic social security benefits to laid-off workers. The fund is derived from three sources: local budgets, local social security pooling, and enterprises. In the past, China's social security system, including pensions and medical care, was a pay-as-you-go system. So the newly established social security system is still partially funded, and cannot provide enough financial support to laid-off workers and those unemployed in the process of transition. In addition, government revenues are insufficient to cover all the necessary expenditures. Better-performing enterprises can spend some of their own money saved from reducing the work force to provide better social security benefits, but those that are bankrupt or that have merged with other enterprises are asked to use funds acquired from liquidation, the transfer of land use, and so on to provide social security to laid-off workers. In the absence of any sources for social security funding, the local and central government will provide the funds as a last resort. These measures have greatly helped to provide basic needs for these workers, of whom about half have already been re-employed and a sizable proportion have retired. These policies have also effectively help maintain social stability and improve the overall environment for reform and opening up.

China has been moving ahead in the past 20 years. However, the responses to the challenge of economic globalization have not been perfect, and errors and mistakes are inevitable. Luckily grave mistakes have been avoided, as have those that once made, cannot be corrected. In my opinion, we have overestimated the importance of foreign trade to the national economy. Statistics show that the level of dependence on foreign trade is as high as 40 percent, which is about twice that of Japan or the United States (table 6.3). The share of trade that involves processing imported materials has accounted for more than 50 percent of the total. Moreover, service industries in China are still far from market-price-based; national accounts have significantly underestimated their value added. Taking the over-reporting of foreign trade and the under-reporting of GDP into account, estimates indicate that actual dependence on foreign trade is only about 20 percent. Overestimating foreign trade might bias reforms and development strategy. One important phenomenon is that various policy measures and actions give priority to foreign trade and foreign-funded enterprises. This has both positive and negative effects. Domestic demand and purchasing power have usually been neglected while emphasizing foreign trade; however, for an economy as large as China's, tapping domestic demand and enhancing domestic purchasing power are more fundamental factors for sustained and healthy development of the economy. If the domestic economy is not handled properly, foreign trade will lose its momentum for further development.

Table 6.3. *Dependence on Foreign Trade and Per Capita GDP, Selected Countries and Years*

<i>Country</i>	<i>Dependence on foreign trade (percent)</i>		<i>GDP per capita, 1997 (US\$)</i>	
	<i>1980</i>	<i>1996</i>	<i>Exchange rate method</i>	<i>Purchasing power parity method</i>
Brazil	20	15	4,720	6,240
China	13	40	860	3,570
Egypt	73	46	1,180	2,940
India	17	27	390	1,650
Japan	28	17	37,850	23,400
United States	21	24	28,740	28,740

Source: World Bank (1998).

In the past 20 years, a frequently observed phenomenon is that reform of the domestic economic system usually lags behind the process of opening up. In a sense, this situation is inevitable; however, it

does not have to be so serious for so long. For example, the problem of SOE management mechanisms has long been apparent, and it is obvious that solving the historical burden of SOEs would imply costs. Therefore, relevant reform of the banking system should be launched as soon as possible. With regard to restructuring the pattern of resource allocation, progress is also slower than it should be, and relapses occasionally occur. The reform of housing and social security is also long overdue, and in turn has hindered reforms in other areas. There is still a long way to go in monetizing income redistribution, and the composition of salaries in state-owned sectors is still incomplete, and thus not comparable with that in other sectors.

These problems have hindered and distorted the development of labor markets, capital markets, and land markets. Even in the field of foreign trade reform, which has been progressing more rapidly, many problems remain to be solved. Government orders and guidance are still heavily influencing the performance and operations of foreign trade enterprises. In the past, China had relied on devaluation of the domestic currency to stimulate exports. The quality of export goods and the techniques used in business management and operations have improved only slowly. The management of state-owned foreign trade enterprises still faces many problems, and these enterprises have incurred serious debts and losses. However, due to concern about the chain reaction it may cause, allowing all the poorly managed enterprises to declare bankruptcy is difficult. Bad debts are thus still accumulating. Resolute measures have to be taken to solve these problems during the next stage of the reform program.

Looking further into the matter, some aspects of opening up could probably be improved, especially in terms of market structures and some concrete policy steps. Encouraging the investment of foreign capital in light industry at the beginning of the opening up is correct. However, the opening up of sectors such as energy and raw materials has been delayed for too long. International cooperation was introduced quite early in offshore oilfield exploration, while the opening of exploration of other subterranean deposits has long been delayed. The use of foreign capital to construct and operate airports was allowed several years ago; however, in railway transportation, some railroad branches have only just opened to foreign participation. The opening up of the service sector, which has been criticized both domestically and abroad, also does not seem to be well planned. Foreign participation in hotels and tourism was permitted quite early, and the recreation industry and retail commerce have actually been allowing free entry, while the opening of such sectors as telecommunications, finance, and foreign trade has lagged far behind. Those sectors less open to foreign investors continue to suffer from monopolies, inefficiency, overstaffing, low salaries, and other problems.

Policy Responses to the Asian Financial Crisis

The onset and evolution of the Asian financial crisis was in many ways quite different from the expectations of many Chinese economists, whose comments and forecasts vary widely. However, they generally agree on one point, that is, few believed that the financial turmoil would destroy the Chinese economy. During the course of the crisis, China became aware of the advantages and disadvantages of its economy.

China's first reaction is that it has started to put more emphasis on tapping domestic consumption and investment to compensate for the decrease in exports. The targeted growth of fixed asset investment for 1998 was initially 6 percent, then was adjusted to 10 percent, and is now 15 percent. It is estimated that total fixed asset investment this year will reach RMB 2.8 trillion. To solve the problem of pooling funds for infrastructure, the government has issued RMB 100 billion of government bonds and another RMB 100 billion in bank loans. These funds will be used to build railway and highways and for farming, forestry, water resources, environmental protection, city infrastructure, grain warehousing, and so on. While choosing active fiscal policy, the government has also adjusted its monetary policy. The guidance plan for bank loans has been relaxed to some extent, and measures have been taken to encourage banks to improve their service while paying close attention to preventing financial risks, increasing loans to

medium and small enterprises, and providing more credit and loans for housing and various forms of household consumption.

In reforming the SOEs, the government has taken measures to encourage mergers and acquisitions, regulate bankruptcy, cut employees so as to promote efficiency, and implement re-employment schemes. It has also established an inspection and auditing system for key SOEs to strengthen the supervision of the financial and operational management of large SOEs. To solve the problem of undercapitalization of state-owned commercial banks, the government issued RMB 270 billion in special bonds at the beginning of 1998. This has enabled the capital adequacy of state-owned commercial banks to meet international standards, and thus has strengthened the capacity of these banks to resist taking financial risks. Measures have also been taken to shut down some poorly managed financial institutions and those suffering from payment crises, such as the China Agricultural Trust and Investment Corporation, the Hainan Development Bank, China Venture-Tech, and the Guangdong International Trust and Investment Corporation. This has helped to remove some hidden perils and eliminate financial risks.

In November 1998 the scheme to reform the management system of the central bank was formally announced. Provincial branches have all been closed and nine new regional offices covering different economic zones have been established. This marks a historical step toward strengthening and improving the central bank's supervision of the financial sector. At the same time, the China Insurance Regulation Commission has been established and the China Securities Regulation Commission has been restructured. A framework has been established whereby financial activities are classified into different industries for operating and supervision purposes.

In 1998 the government introduced unprecedented measures to improve market order, with the emphasis on two aspects. One is foreign trade. The government has focused on close supervision in approving applications for export tax rebates and taken resolute measures to crack down on smuggling activities, which has strengthened the customs service. Meanwhile, a group of officials involved in unlawful activities has been punished. These measures have quickly benefited those industries that have suffered the most from smuggling, such as petrochemicals, motor vehicles, chemical fertilizer, and tobacco.

The other focus is on the administration and supervision of foreign exchange. In tackling the worsening problems of evasion and arbitrage of foreign exchange, obtaining foreign exchange by deception, and the black market, the government has taken measures to strengthen appropriate supervision and punishment. A computer network has been established between banks, the customs service, and those administering foreign exchange. This will help to assure the quality of data in the current account and improve the management of foreign exchange inflows and outflows under the capital account, and thus help to crack down on unlawful foreign exchange flows. Thousands of unlawful foreign exchange transactions that involve billions of U.S. dollars have been found so far.

Closely related to these problems, China also strongly believes that it is extremely harmful to allow army, party, and government organizations to be involved in business. Since 1998, the army, the armed police, and the executive organs of judicial departments have been ordered to separate themselves from enterprises affiliated to them. All SOEs or state holding companies originally affiliated with central government departments had to be uncoupled from them by the end of 1998. These enterprises are to be independently managed and entirely responsible for their own profits and losses.

Measures have been taken to further encourage opening the market and using foreign capital. Since January 1, 1998, for capital equipment imported by foreign and domestic investors, customs duty and import value added tax has been revoked. The Guidance Directory for Foreign Investment was revised. The revised directory contains 329 items, of which 270 are given tax free treatment. This fully reflects the policy inclination to ratchet up the level of opening up. More foreign financial institutions have access to China's market, and about 20 foreign banks have been allowed to do renminbi business. Generally speaking, China's opening up has achieved progress in both scale and quality.

More preferential treatment policies to encourage foreign investment in central and western parts of the country were declared in 1998, including the following:

- Foreign investors are allowed to invest in projects that have comparative advantages locally, even if these projects are not encouraged in the Guidance Directory for Foreign Investment. These industries or projects can enjoy the same treatment as those listed as industries to be encouraged in the directory.
- The conditions for market entry and for establishing enterprises in which the foreign share of registered capital is limited can be relaxed to a certain extent.
- Preferential treatment is given to encourage foreign participation in projects in agriculture, water resources, transportation, energy, raw materials, and environmental protection. Measures have also been taken to help raise counterpart funds.
- Those projects involving investment from foreign-funded enterprises located in eastern China can enjoy the same preferential treatment as that given to foreign-funded ones if the enterprise's share of the project's registered capital exceeds 25 percent.
- Large SOEs and enterprises converted from military ones are encouraged to carry out technical innovations by introducing foreign investment.
- An experiment will be approved to allow foreign participation in the wholesale and retail, foreign trade, and tourism sectors.
- More than 80 percent of loans from international financial institutions and foreign governments will be allocated to investment in the western regions.
- More autonomy has been given to local governments to assess and approve their own foreign-funded projects.

The year 1998 was one in which the government announced many reform measures. Besides those involving SOEs and state-owned banks, it has also reformed the medical insurance system. Meanwhile, preparations for investment system reform and for changing charges and ad hoc levies into formal tax collection systems are also in progress.

The government's policy measures have been effective. The national economy is developing healthily. In the first three-quarters of 1998 GDP grew by 7.2 percent, the price indicator for consumer goods dropped by 0.7 percent, and the trade surplus increased by 15 percent. Total FDI reached US\$31.3 billion, which was about the same level as the same period previous year. By the end of September 1998, foreign exchange reserves had reached US\$141.1 billion, an increase of US\$1.2 billion. The exchange rate of renminbi has remained stable. Currently growth in fixed asset investment is increasing, and economic growth is steadily picking up.

It is becoming clearer that in an economy like China's, long term growth must rely on the sustained expansion of domestic demand. The government is therefore speeding up infrastructure construction, promoting labor mobility and urbanization, stimulating household consumption, and developing the country's western regions.

Perspectives on the Process of Globalization

At first glance, the Asian crisis seems to have been the result of financial problems. However, it was actually caused by adjustment of the industrial structure and dynamic changes in demand and supply. After all, payment difficulties are caused by clogging of the economic circulation, by obstructions in the process of transfer between goods and money, or by changes in relevant conditions. When many luxury housing and office buildings stand idle; when the price of household electrical appliances is plummeting, yet plenty remain in stock; and when garments, toys, and even iron and steel and petrochemical products are overstocked, it is not surprising that enterprises cannot pay back their bank loans on time and that domestic banks cannot pay back their foreign loans. Twenty years ago, the four little Asian dragons produced high-quality consumer goods at lower prices than other countries and exported them to Europe and North America. They were praised as successful, export-oriented economies. However, almost all the Asian countries, as well as Eastern European and Latin American

countries, are now doing the same. Even if we do not consider international markets, but only domestic ones, when the economic circulation is clogged, a payments crisis will inevitably arise. For these reasons, the Asian crisis cannot be attributed to economic globalization.

Although the influence of external factors is becoming stronger, the determining factors for the operation of an economy still come from within that economy. In fact, the more advanced globalization is, the heavier an economy's dependence on itself. One major lesson that we can learn from the Asian financial crisis is that every economy has to maintain a healthy domestic economic structure, something that will enhance, rather than hinder, the process of economic globalization. Economies that were affected by the financial turmoil differ significantly from each other. Those economies with a unitary structure and without their own special advantages are usually quite fragile. Every economy, no matter how high its level of dependence on foreign trade, has to make its economy operate on a healthy basis. Just as automated modern industries cannot substitute for some traditional handicraft industries, globalization does not mean that most products have to be internationally traded. To the contrary, most products have to be produced and consumed domestically. For instance, in most economies tertiary sector services are mainly produced, sold, and consumed domestically. The average share of tertiary industry currently accounts for more than 60 percent of the world economy, and this figure is continuously increasing.

Every nation should take a responsible attitude toward the world economy. Every economic system, including those in the industrial countries, has its problems. Economies that had been flourishing are now in trouble, and those that are now booming may be embroiled in turmoil tomorrow. Experience shows that all flowers will eventually fade. During economic globalization, an economy cannot be managed in a laissez faire manner. Some guidance and regulations are needed. The international community should understand that all countries should determine how they will proceed with liberalization and globalization on their own. Forcing countries to make decisions hastily will harm both them and the world economy. Countries should be allowed and encouraged to adopt their own approaches for integrating with the international economic system.

The Asian financial crisis and market fluctuations in some industrial countries have indicated that the international financial system does have some flaws, namely:

- Because international capital is allowed to flow freely, it will, intentionally or unintentionally, cause shocks to an economy. For instance, if some international hot money is available for speculation against a small country's currency, it may cause the collapse of the currency even when the economy is sound. This is obviously absurd.
- Effective measures to avoid risk and to manage highly speculative financial derivatives have not been developed.
- The question of whether an international central bank is needed to substitute for the relatively weak International Monetary Fund system is worth further study. This is an important issue. It is not only relevant to the recovery of the Asian economies, but also to the healthy development of the world economy.

The financial crisis had a serious impact on the Asian economies, but it will not cause lasting harm. The Southeast Asian countries still possess the basic foundations for an economic take-off. While some exceptions exist, the industrial bases of Japan and the Republic of Korea are still solid and their domestic and regional market potential is still strong. The East Asian miracle is not a beautiful bubble, as some people have described it, but a real story in the real world. The crisis reminded the Asian countries to accelerate their industrial structural adjustment and may have given them an opportunity to strengthen their economic links and cooperation. However, it is doubtful that Asia will develop an economic system similar to that of Europe or North America, because it is not sure what role Japan, the most powerful economy in the region, will play.

China has benefited greatly from the opening up process. There is no reason for China to change its open door policy, and doing so is now impossible. Its basic approach toward international economic

integration remains unchanged. The problems of food shortages have been solved, and the days of steel and coal shortages have gone forever. The problem China is facing today is the underdevelopment of the service sector. Investment, growth, employment, industrial upgrading, and improvement of people's daily quality of life are all closely related to the development of the service sector. By accelerating urbanization and the transition to market economy and by popularizing information technology while pushing forward industrialization, China may be able to set a record in maintaining high growth for the longest period.

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Globalization and Urbanization in the Republic of Korea

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The Asian economic crisis vividly illustrated the vulnerability of a country or a region to the forces of global capital. Many firms, and even governments, have been forced to restructure their organizations. Firm closures and restructuring have resulted in massive unemployment in Asian cities. Urban infrastructure building is in jeopardy because of the shortage of funds resulting from the financial crisis. This was perhaps the first time that ordinary citizens of Asia had felt the impact of globalization to such an extent. However, this does not mean that globalization has suddenly come to Asia. The Republic of Korea and other Asian countries have been globalizing for the past two or three decades in the sense that they have been integrating their economies with the world economy. Indeed, increased trade and investment was the force behind Korea's rapid economic growth in the 1970s and 1980s. Rapid economic growth in turn drove a rapid urbanization process, which has, on the whole, been a positive impact of globalization. Korea has liberalized its trade regime and adopted policies receptive toward foreign direct investment (FDI). However, globalization has taken a different track in recent years, involving a greatly broadened scope and velocity of capital (the speed with which it can be transferred from one country to another), especially finance capital.

While globalization can be defined in such economic terms as increasing trade and investment, it has other dimensions, for example, the globalization of production and consumption. The rise of transnational corporations has been phenomenal in the last decade or so. They have been creating and integrating global systems of production, distribution, finance, and consumption. Their rise has been also accompanied by the spread of dominant cultures and institutions. Consumption patterns in remote villages tend to converge with global patterns. Business practices and institutions across the world now follow global standards, at least on the surface. In sum, globalization is a process marked by historical transformations leading to new configurations in economic organization; in the relationships between the state, civil society, and capital; and in the industrial landscape.

In Korea's (and perhaps also in developing Asia's) economic transformation, globalization has two aspects: externalization (internationalization) of the Korean economy, where Korea has been successful, and internalization of global challenges and pressures within the Korean economy, where Korea has been less successful. In other words, Korea's economy and social institutions have not been flexible and open enough to accommodate global changes. This latter aspect was the principal cause of Korea's economic crisis. During Korea's economic development and social transformation, both aspects of globalization took place in sequence. The externalization of the economy in terms of increasing trade dependence and external orientation occurred during the earlier stages of development, until the 1980s, whereas the internalization process, which includes import liberalization, market opening, and the adoption of global standards, has been taking place at a much slower pace during later stages of development.

The urbanization consequences of globalization have two facets, negative and positive. The former includes the acceleration of urbanization and megacity growth, which have been creating so many problems that no government has been able to deal with them successfully. Another is the breakdown of the urban economic base, which was dominated by the labor-intensive export sector and nontraded service industries, while a new economic base has not yet emerged. However, there are also positive

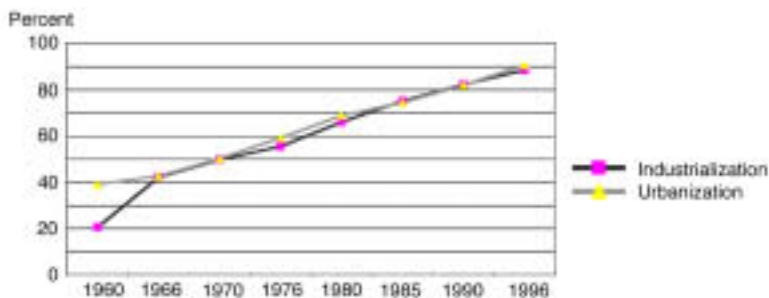
impacts of urbanization. They include the speeding up of the restructuring of inefficient industrial and administrative systems that have blunted the competitive edge of countries and cities. A crisis mentality after the International Monetary Fund bailout in late 1997 has made it easier to begin reforming stubborn labor-business relations, bureaucratic red tape, and the insolvent banking system in Korea.

Urbanization can be seen as corresponding to changes and new configurations wrought by both aspects of globalization. In other words, urbanization and globalization have become interdependent. As the globalization process deepens, this interdependency grows and becomes more complex, moving from simple trade interdependence to a complicated interdependence of global production, distribution, consumption, and finance. The confluence of globalization and urbanization is more pronounced in East Asia, where urbanization has been taking place in a compressed time span. Based on Korea's and other Asian countries' experience, globalization has created three prominent features of urbanization, even though the cause and effect relationship between globalization and urbanization cannot be readily established. These features are the dominance of large cities in the national urban hierarchy, spatial polarization and the formation of mega-urban regions, and the internationalization of cities and urban restructuring. This chapter looks at these features in the context of global-local interplay.

Korea's Urbanization Path

Korea is a country whose speed of urbanization may be unprecedented, as indicated by a sharp increase of the level of urbanization from 39 to 91 percent in less than four decades (figure 7.1). Korea's rapid urbanization was made possible mainly because of a drastic change in its economic structure from an agrarian economy to an industrial economy: 80 percent of the labor force was employed in the agriculture sector in 1960, but by 1996 this figure has fallen to 12 percent. In 1960, per capita gross national product was less than US\$100, with the agriculture sector accounting for 45 percent of gross domestic product. That same year, the total value of exports accounted for only 1.5 percent of gross domestic product. The country's leaders perceived that the only available development path was to promote exports using Korea's comparative advantage in cheap and relatively well-educated labor. The growth of labor-intensive manufacturing was phenomenal during the 1960s and 1970s. The abundant supply of rural labor supported Korea's rapid structural transformation and relative neglect of agricultural development, in contrast with Taiwan, China's accelerated rural to urban migration. Industrialization and urbanization often reinforce each other.

Figure 7.1. *Urbanization and Industrialization, 1960–96*



Note: Industrialization is the combined proportion of manufacturing and service industries in total national employment.

Source: Author.

Labor transfer from one sector to another inevitably involves changes in residence. Rural to urban migration or mobility is in general premised upon wage differentials and income opportunities (Lewis 1954; Todaro 1969). Higher wages in urban areas than in rural areas are explained by the productivity differential between sectors. The productivity differential hypothesis, which states that labor moves from the low-productivity agriculture sector to the high-productivity manufacturing sector, applies well to the case of Korea. The rapid growth of employment in manufacturing during Korea's labor-intensive growth phase of the 1960s and the early 1970s triggered massive rural to urban migration, primarily to large urban centers. Most rural migrants settled in Seoul and the southeastern coastal cities, where more jobs were created by the concentration of the labor-intensive manufacturing sector.

Dominance of Large Cities

The export-oriented growth strategy had placed a premium on large cities and port cities, resulting in their rapid growth. The large cities of Seoul, Pusan, and Taegu were magnets for rural migrant labor. Seoul's population more than tripled between 1960 and 1980, while the population of Pusan and Taegu more than doubled. In 1960, two cities of more than 1 million inhabitants each, Seoul and Pusan, accounted for about 39 percent of the total urban population. The magnitude of rural to urban migration was enormous. During the 25 years from 1961 to 1985, 19 million people moved from rural to urban areas. In the 1960s, Seoul alone absorbed 60 percent of the total net rural to urban migration (Hong 1997).

During this labor-intensive phase of economic growth, globalization in terms of capital mobility and trade liberalization did not have a significant and direct impact on the pace of urbanization. Rather, the process was essentially driven by internal forces of industrialization linked with exports. In other words, the industrialization process was conditioned upon the requirements of the world market. In this sense, the earlier phase of Korea's urbanization was linked to globalization.

Korea's capital-intensive growth phase during the late 1970s and the early 1980s can be seen as a period that was partially driven by an import substitution strategy. Heavy and chemical industries were regarded as the new pillar of the economy in addition to the labor-intensive industries such as apparel, textiles, and footwear. Naturally, the drive for heavy and chemical industries gave locational preference to such port cities as Incheon, Masan, Changwon, Ulsan, and Pohang, which to some extent mitigated the trend of population concentration in cities of a million or more inhabitants.¹ However, the continued growth of labor-intensive manufacturing and the rise of service employment in large cities during the 1970s and 1980s contributed to the dominance of large cities in Korea's urbanization process. In 1980, for example, six cities of more than 1 million people accounted for 53 percent of Korea's urban population. Table 7.1 shows the distribution of cities in terms of size. The relative decline of smaller urban centers (less than 100,000 people) was a notable feature of Korea's urbanization process, even though their absolute numbers and population total did not decrease until the 1990s.

¹ Heavy and chemical industries, such as petrochemicals and steel, have to rely on imported raw materials of iron ore and oil, and therefore port locations are preferred over inland locations because of the savings in transport costs.

Table 7.1. *Distribution of Cities by Size, Selected Years*

	1960			1970			1980			1990			1996		
	Number of cities	Population (thousands)	Percent of urban population	Number of cities	Population (thousands)	Percent of urban population	Number of cities	Population (thousands)	Percent of urban population	Number of cities	Population (thousands)	Percent of urban population	Number of cities	Population (thousands)	Percent of urban population
5 million +	0	0	0.0	1	5,536	35.0	1	8,367	31.3	1	10,628	29.5	1	10,470	24.6
1–5 million	2	3,609	39.1	2	2,963	18.7	3	5,852	21.7	5	10,051	27.9	5	11,374	26.7
0.5–1 million	1	676	7.3	2	1,149	7.3	2	1,379	5.1	5	3,054	8.5	10	6,899	16.2
0.1–0.5 million	6	1,291	14.0	13	2,209	14.0	29	5,514	20.5	29	6,369	17.7	53	11,028	25.9
Less than 0.1 million	101	3,653	39.6	106	3,952	25.0	211	5,805	21.6	213	5,899	16.4	133	2,874	6.7
Total urban population	110	9,229	100.0	124	15,809	100.0	246	26,917	100.0	253	36,001	100.0	202	42,645	100.0
Urbanization rate (percent)		36.9			50.3			70.6			82.9			91.8	
Total national population		24,989			31,435			38,124			43,390			46,430	

Note: The number of cities has been reduced because of rural-urban integration implemented in 1995. The urbanization rate is the proportion of the population living in cities and towns.

Source: Ministry of Administration and Local Government (1971, 1981, 1991, 1997).

Why is Korea's urban system skewed toward large cities? Conventional urban theory suggests advantages of large cities in terms of agglomeration economies (economies of scale and scope, a large pool of skilled labor, better infrastructure, and so on) (Mills and Hamilton 1984). In addition, large cities are often gateways to the world through which new information and technology first arrive and are then disseminated. In other words, cities' global connections are an important merit (Friedmann 1995; Sassen 1991). Although Seoul's population began to fall in absolute terms in the early 1990s, its dominant position in the economy is not challenged. Localization economies or urbanization economies are an important factor in explaining the dominance of large cities (Moomaw 1988).¹ However, we should add another factor that is unique to some Asian countries with a long tradition of a centralized political system, including Korea and Thailand. The centralization of power in the capital city and the social reward system emphasizing higher education are additional reasons for the primacy of Seoul in Korea.

Spatial Polarization and the Formation of Megacities

The megacity region, as well as the so-called extended metropolitan region (Ginsberg, Koppel, and McGee 1991), which is emerging in Pacific Asia, is a result of the interdependency between globalization and urbanization. The expansion of Seoul into the surrounding areas accelerated during the 1980s and the early 1990s. It was this spatial polarization of population and industries in one or a few large city regions (table 7.2), rather than skewed urban size distribution, that aroused policymakers' concern in Korea and in high-performance economies in Pacific Asia. Korea's policy of population dispersal to relieve population concentration in Seoul and then in the capital region began in the early 1970s.

Table 7.2. *Distribution of Cities by Region, Selected Years*

Region	1960		1970		1980		1996	
	Number of cities	Urban population (thousands)	Number of cities	Urban population (thousands)	Number of cities	Urban population (thousands)	Number of cities	Urban population (thousands)
Cheju	3	108	4	196	8	403	9	486
Chonbuk	10	547	10	688	19	1,065	15	1,703
Chungbuk	7	287	8	389	13	662	13	1,095
Kangwon	12	488	14	758	29	1,165	26	1,275
Kwangju-Chonnam	19	957	20	1,299	36	1,969	34	2,706
Pusan-Kyongnam	16	1,826	19	2,870	28	5,007	23	7,479
Seoul Metropolitan region (capital)	12	3,160	14	6,853	41	11,904	35	20,387
Taegu-Kyongbuk	17	1,242	18	1,829	46	3,253	26	4,823
Taejon-Chungnam	14	614	17	927	26	1,489	21	2,692
Total	110	9,229	124	15,809	246	26,917	202	42,646

Source: Ministry of Administration and Local Government (1971, 1981, 1997).

¹ Localization economies arise from the agglomeration of firms in the same industry in a city. Major benefits of agglomeration include better access to research and development facilities and a skilled labor pool. Urban concentration of firms across an industry, by contrast, provides extra benefits to firms through easy access to a larger market, pools of managerial and special talents, and advanced services. This is called urbanization economies.

The Seoul Metropolitan Region, which includes the provinces of Seoul, Incheon, and Gyeonggi, had an urban population of about 3.2 million in 1960, which had increased to 11.9 million by 1980, or 44.2 percent of the total national population. In 1996 the capital region, with a population of more than 20 million, was home to almost one out of two urban Koreans. In other words, 20.4 million people live in an area of 11,675 square kilometers. The capital region is also home to numerous cities. In 1996 there were 35 cities with a combined population of 19 million, accounting for 48 percent of Korea's total urban population.

Such a massive agglomeration in the capital region is comparable to Tokyo and other emerging megacity regions of Asia, namely, Hong Kong-Guangzhou, Jakarta, and Shanghai. The essential process behind the formation of megacities is growth spillover. As the size of the central city grows, spatial expansion occurs and functional differentiation deepens. In other words, the growth spillover of Seoul has spread to adjacent areas, while creating a network of cities centering around Seoul. This trend of extended urbanization was enhanced during the 1980s and 1990s by increased car ownership and rising incomes. However, housing shortages and the saturation of urban land in Seoul helped disperse the population within the capital region, but away from Seoul.

Many low value added activities with relatively large land requirements have moved out of Seoul. Routine manufacturing functions relocated to smaller cities and people moved out to satellite towns where they could obtain better housing at a lower price, while still maintaining close links with Seoul. However, with increased globalization, the centralization of headquarters functions, advanced services, and international activities in Seoul intensified during the 1980s and 1990s.

Internationalization of Cities and Urban Restructuring

A widely recognized feature of contemporary globalization is the centralization of global command functions in a few urban centers (Friedmann 1986; Scott 1996). The growth of transnational corporations with their concomitant global networks of production and distribution requires a complementary urban system to effect global management. Competition among Asian cities to host global functions and become world cities has been increasing in recent years. Korea's large cities are no exception. Even if not aspiring to become a world city, every city is striving to obtain a share of global investment. As investment becomes footloose and transportation costs have declined, a city's comparative advantage has shifted from its natural resource base and past industrial history to a new focus on created assets, such as highly skilled and professional workers, advanced transportation and communication infrastructure, and cultural amenities. This tendency was intensified with the decentralization of the political system. In 1995, for the first time in more than three decades, Korea introduced use of the popular vote to elect city mayors and council members. Urban boosterism and coalitions of politicians and citizens launched an ambitious drive for globalization. All major cities want to host certain kinds of international events, establish international organizations, and build intercity networks that extend beyond Korea's national borders. In sum, cities offer themselves to segments of global capital using investment in the built environment as way to both capture and sustain the presence and benefits of investment. Korea being selected to host the World Cup in 2002 has led to a virtual war among Korean cities. International cultural events, such as movie and animation festivals, have become the favorite agenda items in local politicians' and citizens' globalization drive.

Increased competition among cities is accompanied by physical, economic, and social restructuring. The industrial structure of major Korean cities has changed from one centered on manufacturing to a service-centered one (Kim, Kwon, and Lee 1997). Seoul is the forerunner of this structural transformation. During 1981-95, the share of manufacturing employment in Seoul's total employment declined from 30.4 to 18.9 percent, whereas the share for the service sector, especially in finance, insurance, and producer services, has increased significantly, from 61.4 to 80.9 percent. This is similar to Tokyo's industrial restructuring during the 1970s. The difference, however, lies in the still high proportion of employment in the wholesale and retail trade sector (Fujita 1991). However, with the overall decline of the manufacturing sector, the industrial mix within the sector has changed substantially. In 1975, labor-intensive industries

such as textiles and apparel and the assembly of electrical and electronic goods were the main ones in Seoul's economy. Fifteen years later, the importance of textiles had declined, while the apparel industry had gained significance. This industrial restructuring occurred with spatial decentralization. The suburban areas of Seoul saw significant industrial growth in assembly-type manufacturing, including electrical and electronics industries. On the whole, the trend reveals Seoul's industrial specialization in fashion-oriented apparel, printing, the assembly of electrical and electronic products, and machinery, which has been common to all the large, advanced cities in Korea (Park 1995).

Pusan and Taegu, Korea's second and third largest cities, have followed Seoul's pattern. Like Detroit and Pittsburgh in the 1970s, Pusan and Taegu are having difficulties in industrial restructuring. Both cities' main industries are labor intensive and they face competition from firms in China and Southeast Asian countries with access to low-wage labor. Nike, which once had its major shoe production base in Pusan, has relocated its production facilities to China, Indonesia, and Thailand where production costs are cheaper (Lim 1995). The flight of transnational capital from one city to another can have substantial effects on the urban economy. To prevent capital flight or to attract capital, cities in Korea and in Asia as a whole are refurbishing their infrastructure, and even trying to improve their hostile labor-management relations.

Large city regions equipped with modern infrastructure, professional workers capable of speaking two or three languages, advanced business services, and cultural amenities are definitely the winners of intercity competition, further enhancing the dominant position of large cities in domestic and international urban networks. Indeed, megacity regions in Asia, including the Seoul megacity region, are the powerhouses of the Asian economies and disproportionately attract global functions and capital. To succeed in the intercity competition, many countries plan to embark on large, new projects such as building international airports, convention centers, and high-tech parks (Douglass 1998). Financing these projects often strains the government treasury, and the recent economic crisis delayed many of these projects or put them on hold.

Naturally, these regions are where FDI is usually concentrated. In Korea's case, Seoul takes the lion's share of incoming FDI. However, Korea is different from other developing economies in that it did not depend to any large extent on FDI for its economic growth (table 7.3). FDI during the 1970s and 1980s was primarily in the manufacturing sector, although the share of FDI in the service sector increased in the 1990s. In other words, transnational corporations no longer view Korea as a cheap production site for transnational companies. Foreign investors are more interested in Korea's potential as a market. The service sector, especially nontraded service industries such as restaurants, beauty parlors, and neighborhood general stores, which had been thought of as a safe niche for domestic income generation and employment, has seen encroachment by multinational chains since the early 1990s. Local restaurants now have to compete with KFC, Coco's, and McDonalds. The arrival of Walmart has resulted in a virtual panic among domestic shopping outlets.

While incoming FDI did not play a significant role in the national economy, Korean firms' outgoing investment has been increasing since the late 1980s. Korean multinational companies began to make overseas investment, mostly in China and Southeast Asia, and mainly to cut production costs. Wage hikes and labor disputes in the late 1980s were the primary reasons for the surge in overseas investment. Naturally, the focus of both inward and outward FDI has been large cities. With the trend toward the service economy, large cities are subject to earlier economic restructuring than smaller cities because of their global connections. Just before Korea's financial crisis in 1997, there was great concern about de-industrialization, or even the industrial hollowing out of large cities in Korea, as happened in Hong Kong (China) and Singapore. It is this dimension of globalization that will cause urban change in Korea in the coming years.

Policy Responses

The three prominent features of urbanization in Korea and elsewhere in Asia have been partly the result of globalization. Initial conditions and domestic political and economic factors also help shape each

country's urbanization path and urban system. Korea has had and still has numerous policies that affect the urban process. These policies more or less correspond with the aforementioned three features, namely, spatial polarization, dominance of large cities, and urban restructuring; however, policies implemented during the last two or three decades address some of problems arising from these features. The policies are designed to achieve the goals of balanced regional development, optimal urban growth, and efficient urban service provision.

Table 7.3. *FDI into Korea and Overseas Investment by Korea, 1962–97*

Year	FDI		Overseas investment	
	Number of contracts	Amount (thousands)	Number of contracts	Amount (thousands)
1962–80	1,440	1,713	400	251
1981	44	153	64	109
1982	56	189	54	121
1983	75	269	67	83
1984	104	422	49	67
1985	127	532	43	219
1986	203	355	73	364
1987	362	1,063	109	367
1988	343	1,284	250	475
1989	336	1,090	368	943
1990	296	803	515	1,611
1991	286	1,396	527	1,511
1992	233	895	631	1,206
1993	273	1,044	1,049	1,876
1994	414	1,317	1,946	3,581
1995	556	1,941	1,561	4,949
1996	596	3,203	1,795	6,220
1997	638	6,971	1,579	5,822
Total	6,382	24,640	11,079	29,774

Note: The number of contracts refers to new contracts, while the amount is sum of both new and expansion investment.

Source: Ministry of Finance and Economy, Investment Promotion Bureau data.

Policies to combat the polarization tendency of urban growth have targeted the decentralization of population and industry away from the capital region. An attempt to develop centers that would attract people away from Seoul in the late 1960s and the early 1970s was a failure. The attractiveness of the capital region was so enormous that repeated policy attempts to decentralize population and industrial activities away from the capital region have failed. However, the central government has not given up. The capital region's growth restriction policies may be the most elaborate in Asia. The establishment of manufacturing plants is strictly controlled in the congested areas of the capital region and other activities that would increase the population are discouraged by such means as tax penalties and the outright withholding of development permits.

The central government introduced the First Capital Region Management Plan (1984–96) to combat the concentration of population and industrial activities in the Seoul Metropolitan Region. The plan defined the jurisdictions of the Seoul Special City, the City of Incheon, and the Province of Kyonggi as the capital region, and subjected it to the Capital Region Management Law, which overrides all other laws related to development activities in the region. The major tools of the plan were laws and decrees

regulating development activities. The region was divided into five zones with varying degrees of development control.² In addition to this broad zoning designation, two important policy instruments were adopted: congestion charges and an aggregate development ceiling. Congestion charges are levied on those development activities that are likely to bring about population concentration in the congestion relief zone. Offices, department stores, and public facilities above a certain size are subject to congestion charges, usually 10 percent of total construction costs.

The aggregate ceiling system is designed to control the growth of industrial activities. With an aggregate ceiling of factory construction set by the Capital Region Management Review Committee at the beginning of the year, a portion of this total development ceiling is allocated to different localities, and then local governments screen applications and allow factory construction.

These policies have been criticized on the grounds that they are ineffective, while creating unnecessarily high costs of urban development. Critics also cite the construction of unregistered factories without permits. Across the capital region, small-scale factories that could not afford high land costs and emission charges have mushroomed. For a variety of reasons, such as employment generation, these factories had to be given legal recognition in return for promises of future improvement (Hwang 1996, pp. 31–41). More seriously, these restrictions may have resulted in a shortage of land for factory construction, thereby raising industrial land prices. While the policy as a whole did not succeed in decentralizing population and industrial activities away from the capital region, in its absence, the situation would probably have been even worse.

Even though the effects of those policies were dubious, the policy goals were reluctantly tolerated during Korea's high-growth phase. Indeed, employment growth of more than 5 percent during the heyday of Korea's high-speed growth had helped somewhat to alleviate the concentration of population in Seoul and cities of more than a million people. Industrial estates developed across the country during the 1970s and the 1980s had generated manufacturing employment and absorbed a significant number of migrants.

Industrial location policy, another major aspect of government intervention in urbanization, has contributed somewhat to the decentralization of industrial activities away from the capital region. In addition to the development of industrial estates, Korea's rural industrialization policy has contributed to checking rural outmigration and raising rural incomes.

To reverse the tendency of population to concentrate in large cities, in 1971 the government adopted a strong physical control policy. It implemented a greenbelt policy to control urban sprawl around large cities in the belief that uncontrolled growth undermined urban efficiency and increased the burden of providing urban infrastructure. Seoul was the first target of the greenbelt policy, and other major cities were also subject to this policy. Despite the government's good intentions, the greenbelt policy generated complaints from residents in designated greenbelt areas and drew criticism from liberal economists. The latter argued that the greenbelt policy simply resulted in a leapfrog pattern of urban development, while not decentralizing population away from large cities.³ This pattern is believed to increase infrastructure and commuting costs. By contrast, urban planners and environmentalists argue that a greenbelt is beneficial in terms of urban environmental quality, and that without it, the urban environment would probably have worsened significantly. The greenbelt policy is currently being challenged, and the current administration is in favor of relaxing it. This position is strongly welcomed by greenbelt residents as well as by hard core economists, who consider the policy as one of the reasons for Korea's decreasing international competitiveness (Lee 1998).

Globalization pressure has also caused a shift in policy for the capital region that is reflected in the Second Capital Region Management Plan (1997–2011). Administrative measures restricting certain development activities have been changed to indirect measures, such as congestion fees and penalties, to

² The five zones are the dispersal encouragement zone, the limited redevelopment zone, the development reservation zone, the growth promotion zone, and the natural conservation zone. Later in the second plan, these five zones were consolidated into three zones: congestion relief, natural conservation, and growth management.

accommodate the growing demand for space for services and information and research functions. High-tech industries are now allowed to locate freely in the capital region, but factories considered undesirable for the region, for instance, polluting industries and simple assembly factories, continue to be discouraged (KRIHS 1997). However, the major focus of the second plan was reorganizing the spatial structure of the capital region. The plan was to transform the single-core structure centered on Seoul into a multicore structure, for which a regionwide transportation system based on rapid transit and buses was designed. Even though population concentration in the capital region is still discouraged, the main concern has shifted to an orderly redistribution of population and economic activities within the capital region.

This policy shift has aroused concerns among other regions, which interpreted the policy changes as a setback in two respects: balanced regional development and environmental quality. City and provincial governments outside the capital region believe that relaxing development controls and investing more in infrastructure in the capital region will exacerbate existing development differentials between the capital region and the rest of the country. They argue that the central government should continue its restrictive policies so that other parts of the country can catch up with the capital region and eventually compete with other cities and regions in the world. Thus they considered the policy changes in the second plan to be a step backward from the sustainable development perspective. They also noted that enhancing economic efficiency via the logic of agglomeration economies in the capital region would damage its long-run competitiveness because environmental quality was an essential component of the region's overall competitiveness.

None of the arguments for or against the policy to reduce urban concentration in the capital region were based on a rigorous cost-benefit analysis. Policymakers often assume that investment returns are higher in the capital region than in other parts of the country, but social costs such as environmental degradation and traffic congestion are often ignored in the calculation of costs and benefits. Moreover, attempts to measure the economic effects of investment allocation by region are too crude to be reliable (Sohn 1993).

Urban restructuring is essentially the task of local governments. However, the central government has been providing support for the industrial restructuring of cities and for major infrastructure construction projects, such as subways. Entrepreneurs and policymakers considered higher wages, capital costs, and land prices to be the main reasons for Korea's weakening position in the world market. Currency appreciation, which began in 1985, also contributed to the decline in competitiveness of Korean industries. Industrial restructuring, which was essentially forced by the globalization of production, began in earnest in the late 1980s. A few large cities in particular, such as Pusan and Taegu, were in a tight spot because of their specialization in traditional labor-intensive industries such as textiles and footwear. Recognizing the local impact of industrial decline, the central government has attempted to render support by providing industry rationalization funds and general policy support for small and medium enterprises. However, the timing of the policy was too late and policy support was insufficient (Kim 1995).

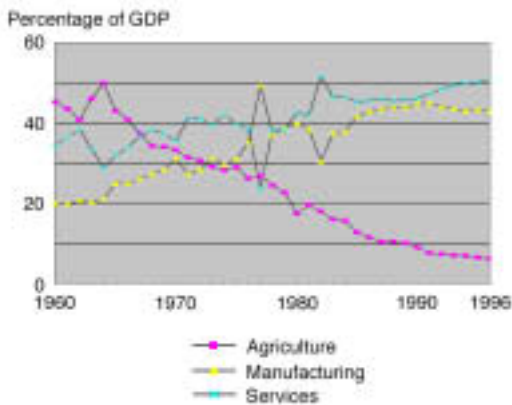
Another dimension of urban restructuring was directly addressing the issue of enhancing the international functions of large cities, in particular, Seoul. Hosting the 1988 Olympic Games was an epochal event that raised the consciousness of policymakers and citizens about globalization. Together with the obvious trend of de-industrialization in Seoul's economy, policymakers and city planners were concerned with a transition toward a service economy with global functions. Many ideas and schemes were proposed to make Seoul a global city, including building a new international airport in Incheon, thereby making it an air transport hub in northeast Asia. Other large cities followed suit. For example, Pusan wants to become the center for maritime transport and logistics in northeast Asia, while Taegu wishes to become a fashion center like Milan. All these efforts to adjust to external changes are essentially the responses of cities in the global era. Their success, however, depends on external factors beyond the control of individual cities.

In sum, Korea's policymakers were forced to compromise on their original stance of strictly controlling the growth of the capital region and other large cities so as to compete with other megacity regions through enhanced international competitiveness. Thus the domestic logic of balanced regional development has given way to endorsement of the leading role of megacity regions in national development.

Current Issues and Prospects

The changed world brought about by globalization calls for new responses from the government. Korea can no longer experience annual job growth rate of 5 percent or more. As figure 7.2 indicates, the manufacturing sector, which was once the major source of employment, has been declining in both absolute and relative terms. Even though the service sector is still growing, policymakers will have little room to maneuver. First, this is because general service employment is proportional to population size. Second, advanced services such as accounting, design, law firms, and research and development tend to locate disproportionately in large, international cities, where global connections are already established. The transition of the Korean economy toward the service economy, a process that began in the late 1980s, casts doubt on whether the Korean government has the capacity to intervene in the urbanization process. As Korea's urbanization is more closely intertwined with globalization than in the past, it seems more difficult for the government to exercise its power in the process of urbanization and urban transformation. Recent calls for a new model for urban development reflect these significant changes underlying urban growth and urbanization in Korea and elsewhere in Asia. Five interrelated issues are particularly important for Korea, whose urbanization has already reached its upper limits, namely: metropolitan governance, economic competitiveness, sustainable development, urban infrastructure financing, and transnational urban coalitions.

Figure 7.2. Structure of Production, 1960–96



Source: Author.

Metropolitan Governance

One of the most pronounced features of contemporary urbanization in Asia is the extensive growth of core metropolitan regions well beyond their administrative boundaries and into distant hinterlands (Douglass 1998). As the expansion of the Seoul Metropolitan Region suggests, planning and managing this giant region is becoming more and more difficult. With a broad democratization trend that started in the late 1980s and the beginnings of local autonomy in 1995, demand for citizen participation and local discretion in policy decisions is increasing. Local governments, spurred by global competition, are agitating for the devolution of power from the central to local levels.

With a strong tradition of a centralized political system, Korea has been slow in creating a new form of governance, in particular, metropolitan governance. The central government wants to retain its

decisionmaking powers based on the justification that local administrations do not yet have the ability to manage their cities and to resolve conflicts between jurisdictions. While intergovernmental cooperation mechanisms are not yet fully developed, many important issues, such as clean water supply, waste management, transportation, and air pollution abatement, await solutions. A consultative committee of upper-level local governments in the capital region is, however, making some progress in resolving conflicts in the management of regionwide urban problems. Thus the search to find a more inclusive, responsible, transparent, and collaborative form of metropolitan governance has begun.

Economic Competitiveness

Declining international competitiveness has weakened the argument for growth restrictions in the capital region. Instead, pressure is mounting from local governments affected by growth restriction policies and the private sector to get rid of these policies or to significantly relax land use regulations. One important rationale of the proponents of deregulation is that the capital region is the only one that can successfully compete with other world city regions. The evidence often cited is foreign investors' preference (Lee 1998). Indeed, Seoul is the most preferred city for foreign companies. Out of 917 foreign companies in Korea in 1997, 866 were located in Seoul and another 19 were in the capital region.

Concerns about the international competitiveness of cities are intermingled with the larger trends toward deregulation, privatization, and democratization. However, notions about measures to enhance urban competitiveness vary a great deal. Liberal economists call for dismantling the government's regulatory system in the firm belief that the invisible hand of the market will take care of everything. By contrast, planners and environmentalists, who worry about social equity and environmental sustainability, are cautious about a radical withdrawal of public intervention in urban management and planning.

The current debate about hosting more FDI in Korea is focused on whether the central government should remove its restrictions on the type of FDI within the capital region. Local governments strongly argue for the removal of restrictions for the benefit of the national economy. Some, however, are skeptical that deregulation is not a panacea for economic recovery. Recent reforms almost completely opened Korea's real estate market to foreign investors. Even with land and construction costs much lower than in 1997 (because of the currency depreciation and the bursting of the real estate bubble), the Korean real estate market did not attract many foreign buyers. This seems to indicate that the deregulation of land use restrictions is not a sufficient condition for attracting foreign investment.

Sustainable Urban Development

As metropolitan areas grow, the urban environment deteriorates, especially when the speed of urban growth exceeds cities' capacity to provide adequate housing, clean water, and land suitable for building. This has been the case for large Korean cities. With the increase in incomes, citizens' demand for a clean environment has risen to a level at which local governments now have to pay more attention to the environmental aspects of urban development. However, sustainable urban development is not possible through government efforts alone. For example, more than 2 million cars drive in and out of Seoul daily, and the resultant air pollution is detrimental to people's health for some months of the year. Even though both the central and local governments have been working toward orienting large cities around mass transportation systems, inducing people to switch from private vehicles to mass transportation is not easy in a modern capitalist society. This is why a collaborative form of governance with active participation by citizens, nongovernmental organizations, and communities is required for the effective management of metropolitan areas.

Korea does have some successful examples of urban policies. Its waste disposal policy, which requires mandatory sorting and packing of garbage, has reduced the amount of garbage disposal and increased the collection of recyclable resources. An experiment whereby vehicles entering central Seoul are charged a toll has reduced traffic congestion downtown, although the advantages and disadvantages

are still in debate. Finally, the greenbelt policy, even though it imposes on individual property rights, has been hailed by the mass media and environmentalists as the best example of past top-down urban policy. The future of the greenbelt, however, is currently uncertain.

During the economic crisis in Asia, a short-run contradiction became apparent between economic competitiveness and social justice and environmental sustainability, as is the case in the cities of industrial countries. However, in the long run, a socially and environmentally sustainable city is not incompatible with a productive city as the economy transforms into one based on knowledge. The issue remains, however, how to meet the urgent and immediate need for economic recovery without jeopardizing the long-run interests of urban residents.

Urban Infrastructure Financing

Demands for better housing, clean water, and comfortable transportation have been rising in the cities of Korea and the rest of Asia from the points of view of both quality of life and urban efficiency. Given limited government budgets, the public sector alone cannot provide all the necessary urban services. Many large cities are building or expanding subways, which are a major burden on local government finances. A few cities have tried to issue bonds in foreign markets, but bringing in foreign funds for urban infrastructure financing is not easy.

Even before the recent crisis, the rapid increase in demand for urban infrastructure was posing problems for the public sector. Privatization and public-private partnerships have been proposed as a solution. The Korean government enacted a law in 1994 to encourage private investment in infrastructure, especially in roads, ports, rail, and airports. This was based on its recognition of the importance of transportation costs in national competitiveness. The result, however, was not successful because of the lack of rational and objective criteria for selecting target projects, because of the absence of guarantees of profitability or mechanisms to spread risks, and most of all because private initiatives and management were not fully allowed. Various policy measures have now been formulated at the central and local levels of government to increase private participation and solicit foreign investment in urban infrastructure.

Transnational Urban Coalitions

Many urban coalitions across national borders are taking place in northeast Asia, with the aim of enhancing joint international competitiveness by complementing each other. Although these coalitions for cross-border urban development are far from a reality, they are beginning, as evidenced by the Tumen River Area Development Program, which is promoting the development of Rajin-Sonbong in the Democratic People's Republic of Korea, Hunchun in China, and Khasan in the Russian Far East. The Beijing-Seoul-Tokyo (BESETO) Agreement promoting the formation of an urban corridor linking Beijing with Seoul and Tokyo is another example (Choe 1996). Mayors and governors are also actively seeking intercity cooperation in the East Sea (Japan Sea) rim and the Yellow Sea rim. They are collectively exploring the possibility of linking maritime and inland transportation, creating free trade zones for FDI, and promoting tourism development.

Conclusions

This chapter has examined the interdependent relationship between globalization and urbanization in relation to Korea's experience. Although initial conditions and domestic political and economic factors contribute to the course of urbanization in a country, globalization seems to produce more or less similar patterns of urbanization in Asian countries.

Three notable features of urbanization are spatial polarization and the formation of mega-urban regions, the dominance of large cities in the national urban hierarchy, and the internationalization of

cities and urban restructuring. While Korea's experience indicates that these features are the products of global-local interplay, policy responses to urban problems and urbanization issues vary from country to country because of domestic political and institutional differences. Korea's urbanization policy has, on the whole, been interventionist. With respect to spatial polarization, policymakers have designed and implemented numerous measures to reduce the concentration of population and industry in the capital region. The effectiveness of these measures has not been proven however, and therefore policymakers do not view the policies as successful.

As Korea's urbanization becomes more intertwined with globalization, new challenges arise for governments at various levels. With the rise of civil society and local autonomy, urban governance has become an issue in Korea and in other Asian countries. Enhancing the international competitiveness of cities is another urgent task for Korea, especially after the 1997 financial crisis. However, the potential contradiction between economic competitiveness and sustainable development poses a challenge for policymakers in the coming years. A balance between economic concerns and social and environmental concerns will have to be found through a more democratic process involving citizens and nongovernmental organizations, which suggests the need for a collaborative form of urban governance. Such a collaborative form of governance is also required for the formation of transnational urban networks, which is taking place around the Korean peninsula.

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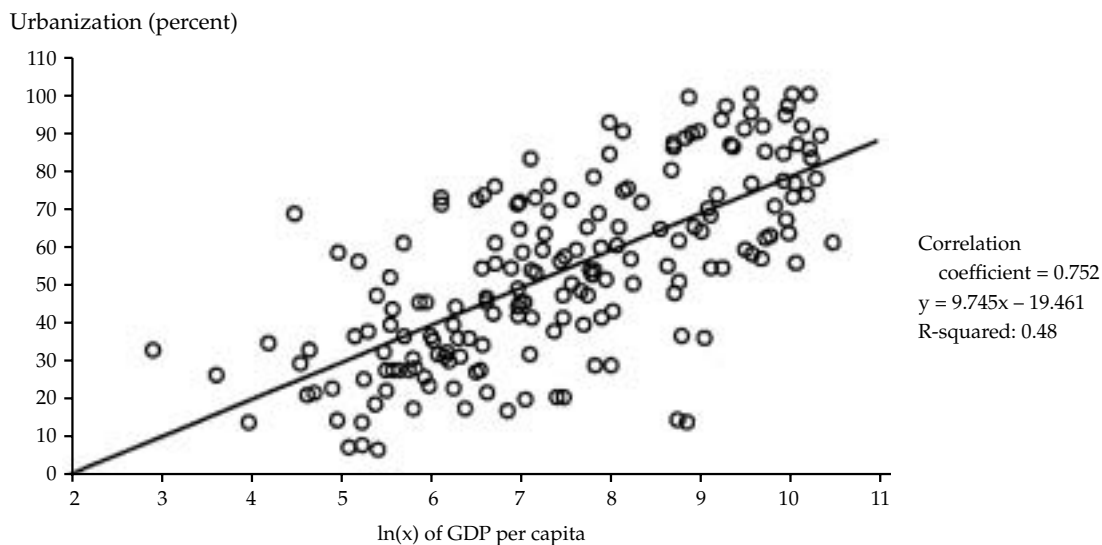
8

Cities and Governments

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It is natural for economists to focus in part on urbanization, because urbanization is one of the most ubiquitous, and therefore important, features of development. Figure 8.1 shows the dramatic correlation between per capita gross domestic product (GDP) and urbanization. Indeed, given the tendency to mismeasure income, urbanization may be a better measure of economic development than income. We do not fully understand why increasing income and increasing concentrations of people in urban areas go hand in hand so often. Theoretically, one could imagine increasing wealth to be accompanied by a demand for more land and decentralization of population, which has proven to be the case in some industrial countries. However, the connection between wealth and urbanization remains pervasive.

Figure 8.1. *Urbanization and Income, All Countries*



Source: Authors.

In previous work, we have tried to explain the role that cities play in the economy. In particular, we have emphasized the intellectual exchanges that cities facilitate, because the generation and recombination of ideas in cities may be the wellspring of technological progress. Glaeser and others (1992) provide evidence that suggests that this progress is strongest in diverse cities. Dense urban areas also facilitate workers learning from one another. As Marshall (1890) wrote, in cities skilled workers learn from one another and “the mysteries of the trade become no mystery but are, as it were, in the air.” Economists have increasingly come to the realization that ideas and human capital play an important role

in generating growth. Because cities appear to increase the flow of ideas and to help in the formation of human capital, they may indeed be extremely important to economic growth.

Cities' importance for economic growth indicates that understanding the positive and negative effects of governments on cities is particularly important because government policy affects cities in many ways. Consequently, if healthy cities are important for development, then getting urban policy right is critical.

However, arguing that cities play a crucial role in development does not mean that all development will take place in cities. One of the most striking changes taking place in urban areas over the past 50 years is the exodus of manufacturing from many cities. In 1950, seven out of eight of the United States' largest cities were over-represented in manufacturing. By 1990, six out of eight of the largest American cities were under-represented in manufacturing. Similarly, industry has begun to move outside developing economies such as Jakarta. The exact moment when industry began to flee from cities is hard to pinpoint. By the 1920s, the decline of manufacturing cities had already begun in many places in the United States. Even developing nations may already begin to see manufacturing move away from urban areas.

This exodus should not be interpreted as a general decline of cities. These shifts, when they are not the result of explicit government intervention through industrial parks, are often the result of high land prices in cities, which just means that other economic actors desire urban land more than manufacturing does. In the United States, information-intensive industries and services are replacing manufacturing in cities, and we should expect to see similar patterns of growth in developing countries.

While the movement of industry away from cities may create significant social disturbances in the short term, in general, spatially oriented government policies can, and perhaps should, do little to correct these trends. In general, U.S. policies oriented toward stemming the decline of industrial cities have had limited success. The trend is too big for governments to fight, and the efficiency gains from proper spatial allocation of industry are too great to ignore.

Furthermore, policies focused on spatial allocation will often exacerbate social problems. For example, when spatial policies keep former industrial workers in cities, they cause the development of a permanent underclass whose economic existence becomes dependent on government jobs. Stripping away the subsidies that distort locational incentives and trusting that labor will follow the changing spatial patterns of employment is a healthier option. However, we do not mean to suggest that temporary support for those who have been hurt in business cycle downturns is not warranted. We are simply suggesting that such support should not be tied to location and should not create spatial distortions.

What Does Sound Urban Policy Entail?

Urban policy includes both national and local policies. National policies include explicit urban policies, for example, national urban planning, urban housing programs, and so forth. However, most national policies that influence cities are perceived as being nonurban in character. For example, transport policies can have a large influence on the demand for cities. Similarly, trade policies—which are usually designed without any explicit spatial goals—can also end up having large spatial effects. Some spatial effects of these policies are inadvertent, but we believe that many policies are designed to favor particularly powerful spatial areas. For instance, policies that direct rents to particular areas will cause population to flow to the favored areas for as long as population flows are allowed.

These policies can be either procity or anticity depending on how the political system has been designed. In some industrial countries, the political system has given too much political representation to empty rural areas. As a result, these areas are able to attract national government rents, such as U.S. agricultural subsidies, which in turn attract people. In most countries, especially those without well-functioning stable democracies, large cities, particularly capital cities, are able to exert a large influence over the government. Spatial proximity leads to influence, thereby causing rents flow to the capital city, which leads to massive population flows of people following the rents.

Ideally, national policy will correctly evaluate all the externalities associated with different urban forms and act to correct these externalities. However, even in the absence of political economy concerns, this is difficult because of the absence of sound methods of measuring these externalities. Moreover, in practice governments are more likely to use spatial subsidies to favor politically powerful regions than to subsidize regions into which population flows would generate positive externalities.

In the absence of compelling congestion or pollution externalities, the best long-term governmental goal is probably spatial neutrality—the absence of transfers across spatial areas—as a benchmark rule of good governance. Spatial neutrality can be enforced through a variety of legal and constitutional means, which would guarantee that government would find it difficult to violate spatial neutrality.

One method of enforcing spatial neutrality is the decentralization of authority. When local areas such as cities and regions have autonomous control over their own policies, massive redistribution between areas becomes more difficult. Ideally, independent regions will have enough authority both to protect themselves from distortionary federal government actions and to spur healthy competition among localities for residents. Political economic theory argues that greater emphasis on local authority has many advantages: individuals have more political choice, local governments are forced to compete for citizens, and the possibility of local innovation increases. Decentralization appears to be the best way of achieving good urban government.

However, one warning is associated with the general case for local government authority. Local governments do not work well when they are allowed to redistribute wealth among their citizens. As Stigler (Leube and Moore 1986) argued more than 40 years ago, redistribution is clearly a national function. The problem is illustrated by cities in the United States where coalitions of poor and possibly nonpoor altruistic citizens occasionally capture local governments by voting for high levels of redistribution, which in turn causes a massive exodus of the wealthy. The net result is that the city becomes a pocket of poverty with little possibility of redistribution.

The problem with local redistribution is that the voters who receive the benefits are not paying the costs. Thus, the conditions needed for decentralized democracy to function well are not met and situations like the one concerning local government capture described before occur, leading to massive spatial distortions. Local governments work best when they are restricted to activities where those voters who receive the benefits also pay for the costs. Indeed, eliminating leadership whose appeal is based on redistribution and replacing it with leadership whose appeal is based on sound provision of basic urban services has been a prominent trend in urban governance since the 1970s. Where national rules that eliminate the tendency to elect redistribution-oriented local leaders can be implemented, cities will be in better shape.

Nine Empirical Issues

The following is a discussion of nine empirical issues from the urban literature, which will be followed by a lengthier discussion of the various policy issues involved in both national and local urban policy. The facts for the first three issues come from international cross-country evidence. Our fourth and fifth topics contain evidence both from cross-country evidence and from cross-city evidence in the United States. The final four empirical areas cite evidence from the United States only. This focus on the United States stems mainly from a desire to focus exclusively on local government policies. Because the United States has a great deal of variation in local government actions and looking within the United States by itself holds other factors constant, we believe that many of these findings will also hold up for other countries.

How to Think about Cities

Before going into these nine topics, let us first attempt to provide some definitions and an initial intellectual framework. Cities are defined by the absence of space between economic actors. As such, natural economic areas can rarely be called metropolitan areas. Individuals simply have interactions with

other individuals, both near and far. In some sense, political units, or cities, do mean something, because they at least represent a political jurisdiction. In the same sense, countries reflect a political reality; however, the term *region* really has no clear economic meaning.

Despite these highly idiosyncratic statements, much can still be said for metropolitan-area or regional analysis. Distinctions between metropolitan areas and regional areas can make sense for population density reasons. When a large cluster of people in a particular space can be clearly separated from other clusters because low-density areas surround them, then it may make sense to refer to this cluster as a metropolitan area. Other attributes that may be useful for defining a cluster of people as a metropolitan area include shared behavior, such as commuting to a single downtown area or a common set of trading relationships. Similarly, regions are defined either by being high-density areas surrounded by low-density areas—the Pacific coast area in Canada could be defined in this way—or by the existence of common characteristics among their residents, for instance, Catalonia is defined by a shared language and distinct history. Often these regional areas make sense, but they can be just as artificial in practice as states and nations.

If we define cities by the absence of physical space, then we can think about urban functions as resulting from the benefit of lowering transport costs. In other words, cities and dense regions exist to lower transport costs for goods, people, and ideas. This view of the purpose of cities has been most strongly popularized by Krugman (1991a,b) in whose models the costs of urbanization, incurred by the distance from agricultural output, are balanced against the benefits of urbanization, which result from manufacturers' ability to trade freely with one another. As discussed earlier, manufacturing has fled large cities for nonurban areas in many countries; a trend that could be interpreted as the result of the declining importance of eliminating transport costs for goods. Dumais, Ellison, and Glaeser (forthcoming) suggest that saving transport costs for inputs and outputs is only marginally important for industrial location in late 20th century America.

Alternatively, cities may exist to eliminate the costs of moving people. Marshall (1890) argues that a primary advantage of cities lies in the ability of urban workers who are laid off by one firm to work elsewhere. Dumais, Ellison, and Glaeser (forthcoming) provide evidence suggesting that the most important factor for explaining why industries generally locate with one another is the use of the same occupational mix of workers. The advantages of eliminating space between people also appear to matter in non-work-related activities; social existence tends to become easier when there are more people in the area to mix with. The importance of this factor does not appear to be diminishing.

Finally, another possible reason for cities' existence is the rapid movement of ideas over short spaces. As a consequence of this rapid movement, cities themselves become repositories of localized knowledge, which can take the form of trade secrets or basic production skills. A growing body of knowledge supports this important, but less well documented, function of cities.

Development, Urbanization, and Growth

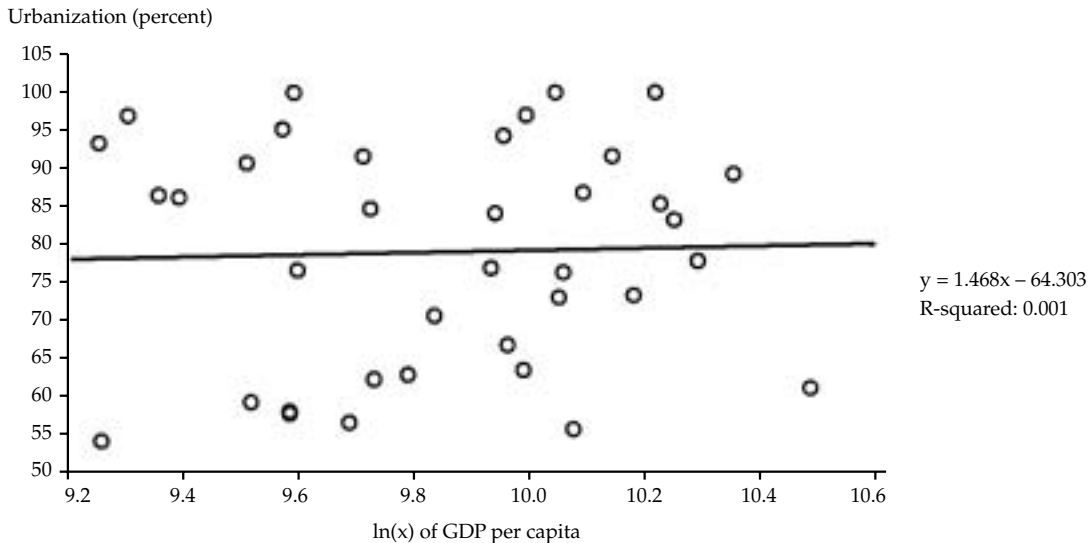
As discussed previously, a clear connection exists between urbanization and the level of development. Countries with a high GDP per capita are more urbanized than countries with a low GDP per capita. This connection is apparent in figure 8.1. This relationship also tends to hold true in the time series of individual countries. As countries industrialize, they urbanize. However, once their wealth reaches a certain peak, urbanization stops. Figure 8.2 illustrates that for countries with GDP per capita over US\$10,000, the connection between industrialization and urbanization fails to hold.

The best basis for explaining the relationship between industrialization and urbanization is that development generally means a move away from agriculture into industry. Agriculture requires much more land than industry, and as a result, agriculture does not permit settlements as dense as industry permits. Because the common path of development involves replacing more land-intensive activity with less land-intensive activity, it is not surprising that masses of individuals tend to become denser as countries develop.

This relationship immediately suggests that different development policies will have different effects on urban form. Except for the unusual case where the income effects of agricultural policies are

outweighed by the price effects of these policies, policies that emphasize agriculture will generally lead to less rural-urban migration. Lower levels of rural-urban migration may result in fewer of the problems and benefits of cities. Policies that emphasize the raw materials of the country, which usually involve land-intensive industries, will also generally lead to less urbanization. However, economies that rely heavily on raw materials may become focused on rent seeking, which could distort the urbanization process and lead to the formation of megacities.

Figure 8.2. *Urbanization and Income, Wealthy Countries Only*



Source: Authors.

The net effect of policies that encourage urbanization depends on whether we see urbanization as a blessing or a curse. Figure 8.3 illustrates that the level of urbanization in 1960 is positively correlated with the growth in GDP per capita between 1960 and 1985. Although this relationship is not conclusive because it accounts for a large set of other country controls, such as schooling, it does suggest that higher levels of urbanization could have benefits (for example, production of ideas or more efficient division of labor) that are returned with higher growth rates.

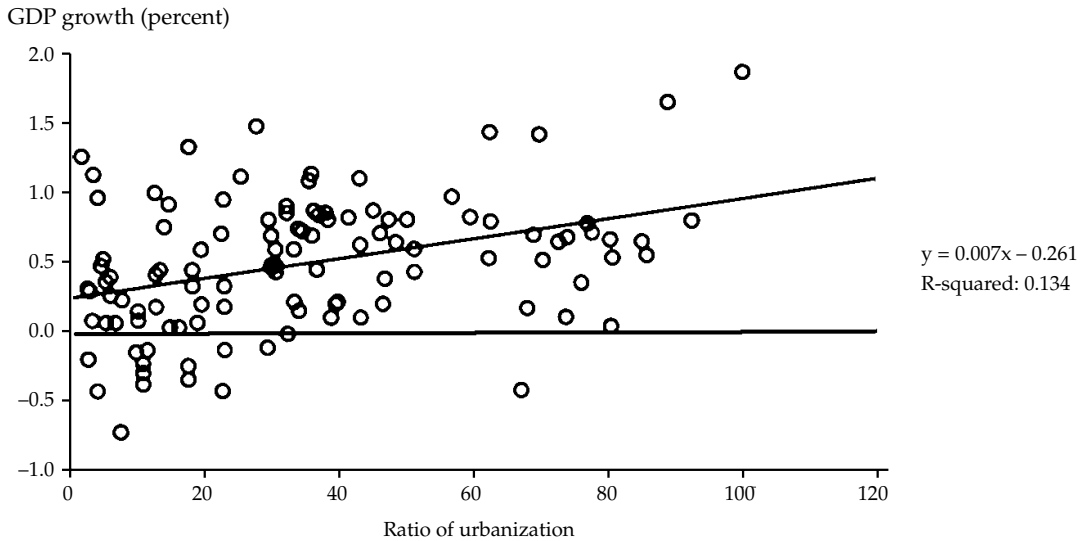
Primacy and Politics

A second significant relationship occurs between primacy—the dominance of a single city over rural areas—and political factors. Hoselitz (Nash 1977) was an early pioneer of the concept of the parasitic city, by which he meant a city that existed because of rent seeking from the hinterland instead of existing for more socially productive reasons. For example, the leaders of cities that are political or ecclesiastical capitals have often transferred wealth to the capital. This transfer may occur because the leadership wishes to enrich itself off the wealth of the hinterland and spend that wealth where it lives. Examples of this phenomenon range from the pharaohs of ancient Egypt to Papa and Baby Doc Duvalier in modern-day Haiti.

Another reason for the transfer of wealth is political pressure created by residents of the capital city. This political pressure can take the form of protests or riots by the disadvantaged. Political pressure appears to grow weaker with distance. Riots in the distant hinterland do not threaten the government;

riots in the square outside the government seat do. Political pressure may also take the form of lobbying by wealthy industrialists seeking protection for their markets. Political leaders respond to both forms of political pressure by transferring wealth to the capital. This transfer may take the form of public education and housing, or it may take the form of trade barriers.

Figure 8.3. *Growth in Per Capita GDP 1960–85 and Initial Urbanization*



Source: Authors.

As the government transfers wealth to the capital city, or other seats of power, population follows this transfer. Some regimes are strong enough to simply bar the movement of population (for example, the former Soviet Union and modern China). However, weaker regimes cannot regulate the flow of population, and people move where the government is disbursing funds or where the government is artificially increasing the marginal product of labor in protected industries.

We can see the phenomenon of government transfers of wealth in the connection between political instability and primacy and in the connection between dictatorship and primacy. Instability leads to primacy because unstable regimes have a stronger incentive to try to bribe residents of the central city into supporting them. Dictatorship leads to primacy because dictators allocate wealth to themselves and much of that wealth gets spent in capital cities. As figure 8.4 illustrates, stable democracies are much less likely to have their population concentrated in their largest cities because their political regimes protect the residents of their hinterlands from appropriation.

The evidence suggests that the primary causal order is that political factors cause primacy and not the reverse. Ades and Glaeser (1995) illustrate that these connections are not the result of reverse causality where large central cities lead to instability or dictatorship. Henderson (1986) shows the role of federalism, which leads to political protection of the hinterland, in limiting primacy.

Cities and Trade

Krugman and Livas-Elizando (1996) argue that high levels of protection lead to primacy. One explanation of this connection is political. Protection is a means by which governments transfer wealth to politically powerful firms in the hinterland. The Krugman and Livas-Elizando model suggests that in open

economies the gains from agglomeration are reduced. Following Krugman (1991a), they argue that megacities occur in part to reduce transportation costs. However, when goods are supplied from abroad, little is gained from locating activities in a single city because foreign suppliers can ship just as easily to several dispersed locations.

Figure 8.4. *Dictatorship, Stability, and Primacy*

<p><i>Stable Democracies</i></p> <p>Share of urbanized population in largest city=0.23 Number of observations=24</p>	<p><i>Stable Dictatorships</i></p> <p>Share of urbanized population in largest city=0.30 Number of observations=16</p>
<p><i>Unstable Democracies</i></p> <p>Share of urbanized population in largest city=0.35 Number of observations=6</p>	<p><i>Unstable Dictatorships</i></p> <p>Share of urbanized population in largest city=0.37 Number of observations=39</p>

Source: Ades and Glaeser (1995).

Alternatively, when an economy is closed, the role of foreign suppliers is reduced. The benefits of agglomeration get stronger as more domestic producers move together to save on shipping costs. Krugman and Livas-Elizando argue that Mexico City's size dates from the period when Mexico was a closed economy (Krugman and Livas-Elizando 1996). Hanson (1995) illustrated that the opening of the Mexican economy coincided with a decrease in the capital's share of Mexico's industry. Ades and Glaeser (1995) showed that a general global pattern of closed economies with larger central cities exists.

Trade also plays a role in creating large cities and agglomeration economies. As Rappaport and Sachs (1998) showed, many U.S. cities owe their location to natural ports, and, in many cases, trade is associated with increasing size of particular port cities.

Cities and Human Capital

Modern growth theory (Lucas 1988, Romer 1986) emphasizes the critical role of intellectual spillovers in fomenting economic development. This theory argues that the aggregate level of knowledge in the economy is the critical ingredient underlying growth, and that a high knowledge level increases the productivity of everyone in the economy. Naturally, this view has led to a revised assessment of the role of cities. Lucas (1988) in particular suggests that it is in cities where knowledge spillovers operate most strongly. He supports Jacobs' (1969) view that the primary economic role of cities is the generation of new ideas and that these new ideas are the linchpin of economic growth.

This new growth theory, and the idea that cities were centers of intellectual spillovers, has incited a wide variety of urban research beginning with Jaffe, Trajtenberg, and Henderson (1993); Glaeser and others (1992); and Henderson, Kuncuro, and Turner (1995). Jaffe, Trajtenberg, and Henderson (1993) present the best evidence that ideas flow more slowly over greater distances. They based their findings on examinations of patent citations, which show the path of ideas. Patent citations are spatially concentrated. This is shown by the fact that patents are more likely to cite older patents that were awarded in geographical proximity. As patents age, they are more likely to be cited in more distant places, which suggests that ideas move slowly over distance. Because the whole idea of the intellectual city rests on the

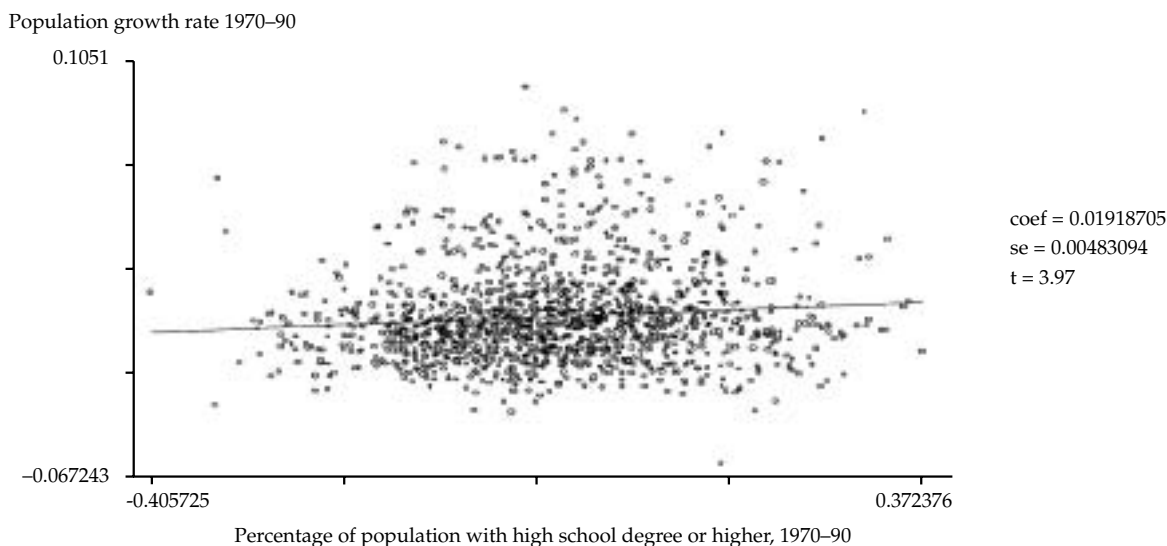
idea that there are geographic limits to the flow of ideas, this evidence is a vital underpinning for all research in this area.

Glaeser and others (1992) present evidence from cities in the United States showing that intellectual spillovers appear to be strongest when cities are centers of diverse industries. Henderson, Kuncuro, and Turner (1995) argue that some degree of concentration is important for industries that are just starting out in particular areas. Both papers share a common focus on industrial growth in cities as the result of intellectual spillovers in those urban areas.

In the growth literature, papers such as Romer's (1986) that emphasizes the stock of disembodied ideas and Lucas' (1988) that emphasizes the stock of human capital in the economy appear to be in disagreement. Papers such as Henderson, Kuncuro, and Turner's (1995) or Glaeser and others' (1992) tend to focus on the role of disembodied ideas. Glaeser, Scheinkman, and Shleifer (1995) looked directly at the stock of human capital in cities and found a strong connection between the level of human capital in the city and the city's later growth.

Figure 8.5 shows this connection for U.S. cities between 1970 and 1990. A strong connection exists between the percentage of adults older than 25 in the city's population and the growth of that city over the next 20-year period. Glaeser, Scheinkman, and Shleifer (1995) showed that this connection has become stronger with time, that is, it existed, but was less powerful in the period between 1950 and 1970. Simon and Nardinelli (1996) show that knowing the average level of human capital in a city is useful for explaining the growth of cities between 1880 and 1990. One interpretation of this connection is that higher levels of human capital in a city lead to faster technological growth. An alternative interpretation is that the average level of human capital is an urban productive amenity that has become more important over time as the returns to skill have increased.

Figure 8.5. *Population Growth versus Education, 1970–90*



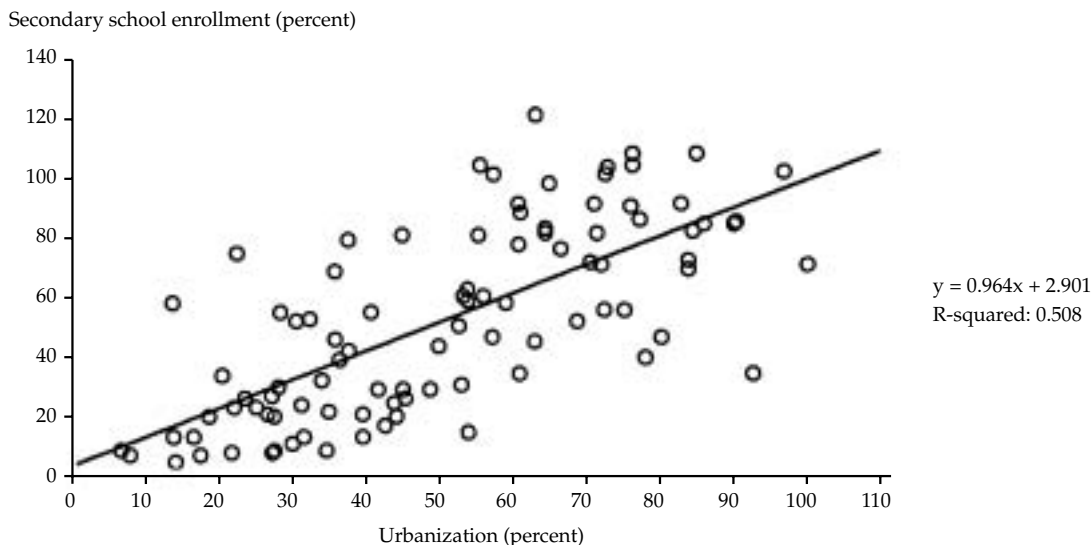
Note: This figure has a universe of 1970 metropolitan areas with a population greater than 10,000.

Source: Authors.

A second important fact concerning human capital and cities is that wages are higher in cities where the average level of human capital is higher. Figure 8.6 shows that throughout the world, higher levels of urbanization are associated with more schooling. This is true even when controlling for GDP per capita.

Rauch (1993) documented that higher levels of urban human capital are associated with higher levels of urban wages (holding individuals' own levels of human capital constant). He also showed that these higher levels of human capital are associated with higher housing costs. Rauch (1993) interpreted these results as evidence of the role of human capital spillovers in cities.

Figure 8.6. *Urbanization and Secondary School Enrollment*



Note: This figure has a universe of 1970 metropolitan areas with a population greater than 10,000.

Source: Authors.

Glaeser and Mare (1994) examined the significant wage premium that workers in cities receive relative to workers outside of cities. They found that individuals newly migrated into cities do not immediately experience wage increases. They experience new wage gains slowly over time. In addition, migrants from cities do not experience wage reductions. One interpretation of these facts is that a primary benefit of cities is that workers learn from one another and thus accumulate human capital faster. This accumulation of human capital then stays with workers when they leave. Glaeser (1998) models this phenomenon and suggests that it can also help explain why younger people with more formal education choose to live in cities.

The Curse of Concentrated Poverty

The previous section discussed the bright side of human capital spillovers; workers in high human capital cities learn from their neighbors and become more skilled. However, the same argument that suggests that cities can be centers of human capital also suggests that low human capital areas can create negative spillovers for their inhabitants. Indeed, the neighborhood effects literature has focused primarily on the possible harm done to youths growing up in disadvantaged neighborhoods.

Case and Katz (1991) examined a survey of youths in the Boston area and documented local spillovers in a wide variety of behavior. Other research also suggests that neighbors can influence each other in negative ways. Glaeser, Sacerdote, and Scheinkman (1996) use an alternative methodology to similarly capture the extent to which social interactions are important in determining criminal behavior. Cutler and Glaeser (1997) showed that ghettos appear to have highly detrimental effects on African-

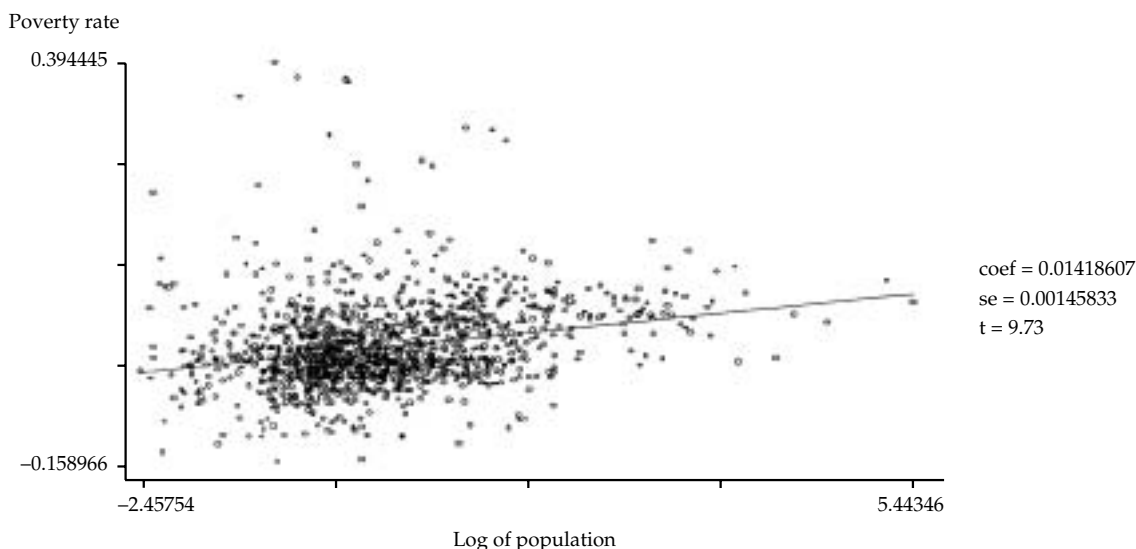
American youths. In total, a great deal of evidence suggests that concentrations of poverty lead to negative schooling and labor outcomes, high crime rates, and high rates of female-headed households.

This type of evidence is important because it suggests that government policies that lead to high concentrations of poverty can produce particularly adverse effects on the children who grow up in such concentrated poverty. If there were no spillovers, government housing policies that concentrate the poor in spatially concentrated high-rise buildings might not matter. However, because such spillovers exist and are important, the government's role in concentrating poverty may be particularly salient and deleterious.

Cities, Poverty, and Redistribution

A final important fact about cities concerns the concentration of poverty, particularly in U.S. cities. Poverty is less concentrated outside of the United States (see Brueckner, Thisse, and Zenou 1999). However, as figure 8.7 shows, a striking correlation exists between city size and the portion of inhabitants who live in poverty in U.S. cities. In the United States, this relationship appears to have grown stronger over time.

Figure 8.7. *Poverty Rate versus Population, 1970*



Source: Authors.

This relationship is primarily seen in comparisons between big cities and smaller towns in the United States. Nonurban areas still have substantial pockets of poverty. This is especially true in the developing world, where rural poverty is often severe. The Harris-Todaro model argued that unemployment rates are higher in urban areas, but they are offset by higher wages in urban areas. However, it appears that these differences in unemployment rates are not a general feature of urban areas and that the actual relevance of the Harris-Todaro model is quite suspect in many ways. This model has always lacked explanations for why unemployment exists to begin with and why unemployment would be higher in cities.

Rural and urban poverty differ in two primary ways. First, the roots of urban poverty often lie in inappropriate government redistribution policies that provide benefits to the poor in urban areas. Later, we will argue that one possible explanation for higher unemployment rates in cities is the greater

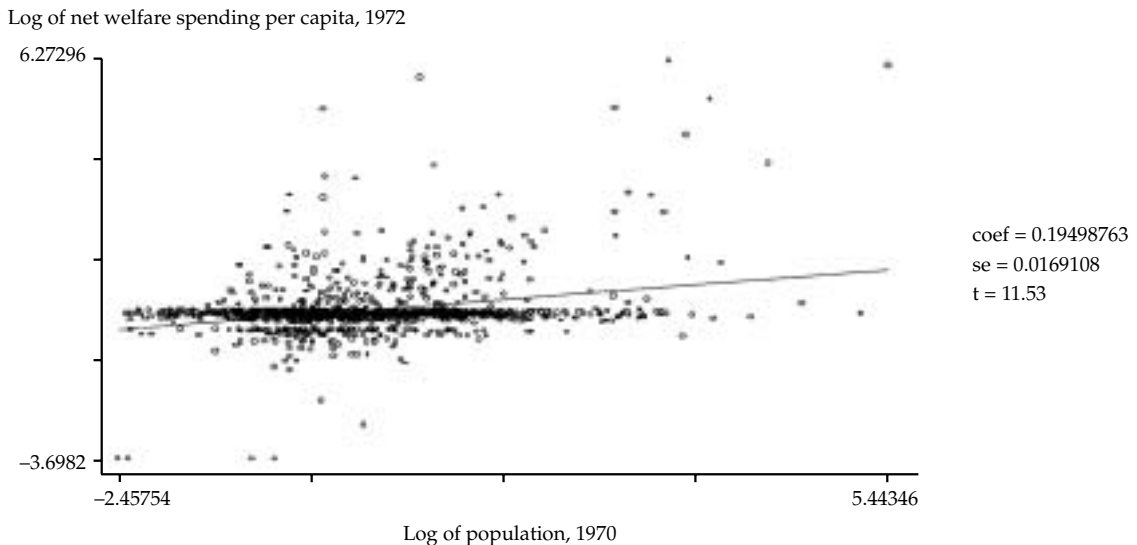
incidence of government policies that reward unemployment. Second, rural and urban poverty differ in that urban poverty is often associated with social breakdowns and a proximity between rich and poor that is not present in rural areas. Social breakdowns occur in cities for many reasons (Glaeser 1998). The main reasons for the increased social breakdowns in cities are the increased anonymity of individuals and the ease with which individuals who violate social norms can escape the community. In addition, the proximity between rich and poor increase the returns to crime and other rent-seeking activities (Glaeser and Sacerdote 1999).

The poor are likely to experience poverty in cities and rural areas as equivalently bad. However, urban poverty may create externalities and be associated with social pathologies such as crime and single parent families that are not present in more stable and less anonymous rural areas.

The traditional explanation for concentrations of the poor in urban areas was that rich people who have a greater demand for land choose to live where land is cheap. However, Wheaton (1977) and Glaeser, Kahn, and Rappaport (forthcoming) both document that this effect is not sufficient to explain the concentration of the rich in smaller towns and the observed concentration of the poor in cities. Alternative explanations stress the role of public transportation in cities, which means that the poor do not need to buy cars. However, these two explanations do little to explain why more of a connection exists between poverty and city size in the United States than elsewhere.

One possible explanation for the concentration of poverty in U.S. cities is the greater availability of redistribution there. Figure 8.8 shows the connection between per capita welfare spending by cities and the overall size of the city, which is not just the result of the higher concentration of poverty in cities. Figure 8.9 shows that the same relationship continues to hold even after controlling for the share of the city's population that is poor. This connection between redistribution and city size is another fact about large cities that helps us to understand why the poor live in cities.

Figure 8.8. *Welfare Spending versus Population*

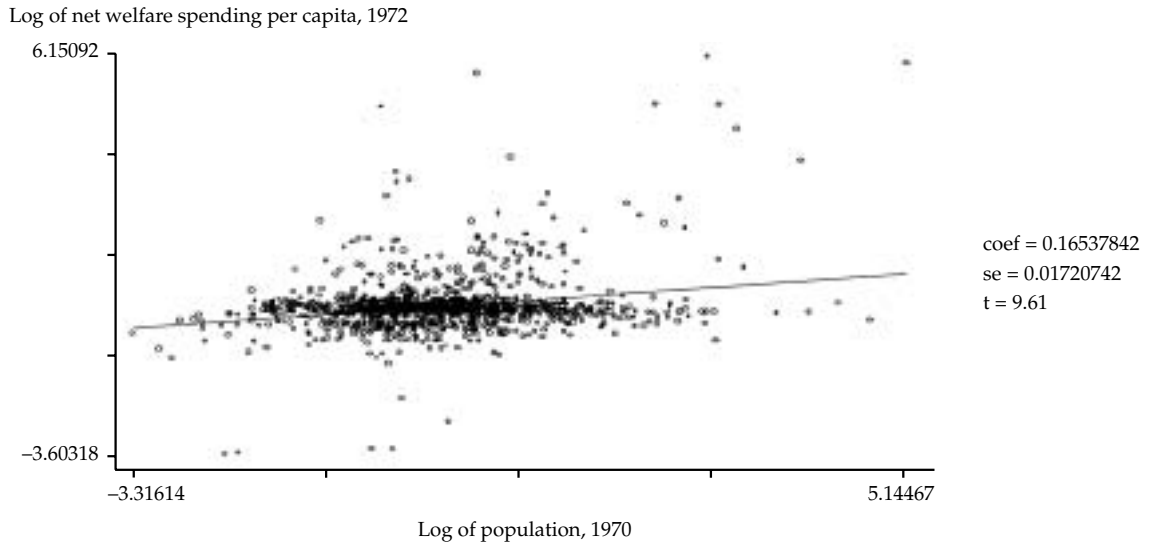


Source: Authors.

Note that the largest fraction of redistribution comes from nonlocal sources, which leads us to ask why state and federal governments allocate more resources to the poor in large cities. Note also that the choices local governments make about the focus of local public services, such as police and education, may be more

significant than actual welfare spending. For example, to the extent that urban policing emphasizes civil rights over property rights, it may serve to attract the poor and repel the rich (as the rich with more property presumably care more about property rights relative to civil rights). Thus, we believe that actual welfare spending is a small portion of the full connection between city size and the level of redistribution.

Figure 8.9. *Welfare Spending versus Population, Controlling for Poverty Rate*



Source: Authors.

This role of redistribution provides us with a second difference between urban and rural poverty. Rural poverty stems ultimately from the low returns to traditional agriculture. Urban poverty comes from government policies that make cities relatively more attractive to the poor. Government policy may be more effective in fighting urban poverty because to a large extent government policy is the source of urban poverty.

Local Redistribution and Growth

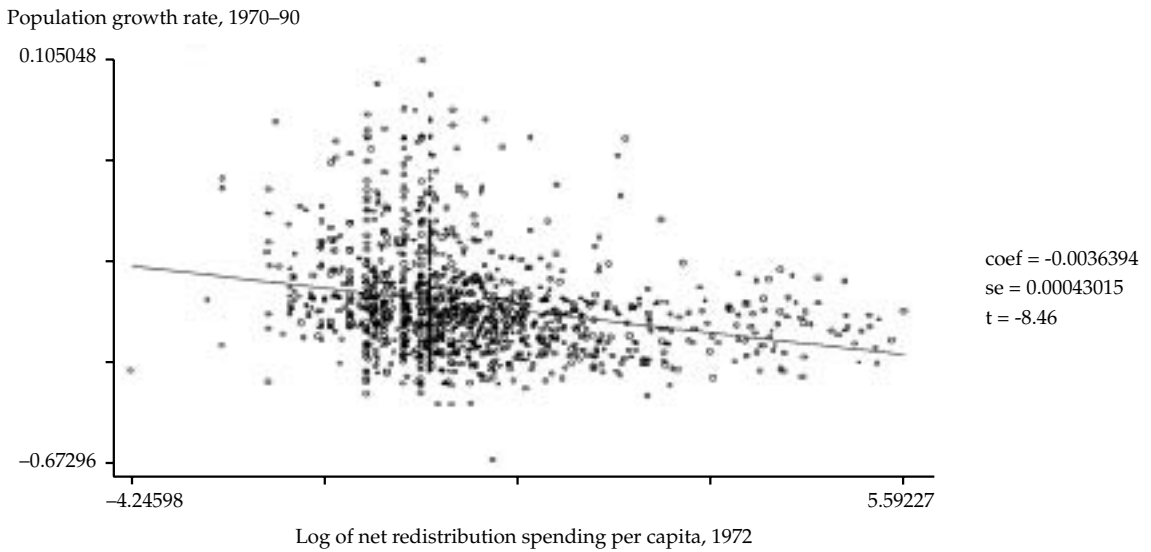
Evidence suggests that local governments that focus on redistribution rather than basic services create unpopular cities. Figure 8.10 shows the connection between the share of city spending on redistribution in 1970 and growth in population between 1970 and 1990. Figure 8.11 shows the same connection when we have controlled for a variety of other urban attributes that may predict growth. These results are given in table 8.1, which also shows the negative relationship between redistribution and local growth.

Figure 8.12 shows that in cities with more redistribution property values are lower. Property values are a primary means of assessing the quality of local government (Gyourko and Tracy 1991). When individuals appreciate the quality of local government, they are willing to pay more to live in those areas. When individuals are unhappy with government, they leave. This urban flight can be seen in outflows of population and declining property values.

A variety of case studies also suggest that local governments that engage in redistribution suffer major outflows. The exodus of wealthy individuals from Coleman Young's Detroit and Marion Barry's Washington, D.C., supports the idea that redistributive city governments can have major effects on their cities. Mayors such as Ed Rendell of Philadelphia, Richard M. Daley of Chicago, or Rudy Giuliani of New

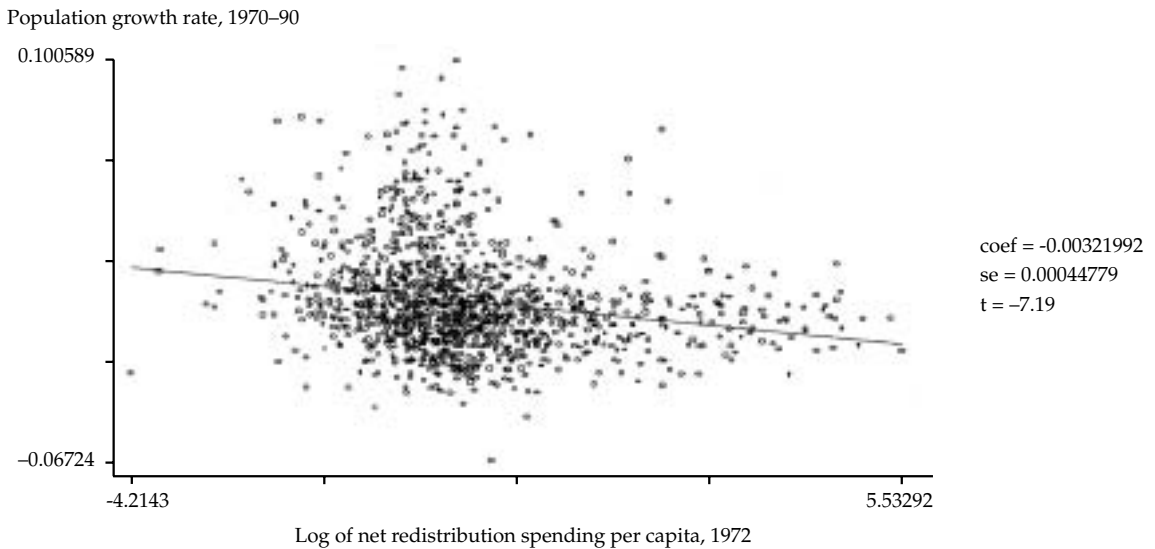
York have emphasized redistribution less and focused instead on the quality of these cities' services. As a result, they have received plaudits and appear in some cases to have stemmed the flight from their cities.

Figure 8.10. *Population Growth versus Redistribution Spending*



Source: Authors.

Figure 8.11. *Population Growth versus Redistribution Spending, Controlling for Education and Poverty*



Source: Authors.

A simple view of the world is that in the absence of redistribution, the rich and the poor would live together. The poor would receive no direct redistribution, but would instead receive positive spillovers from

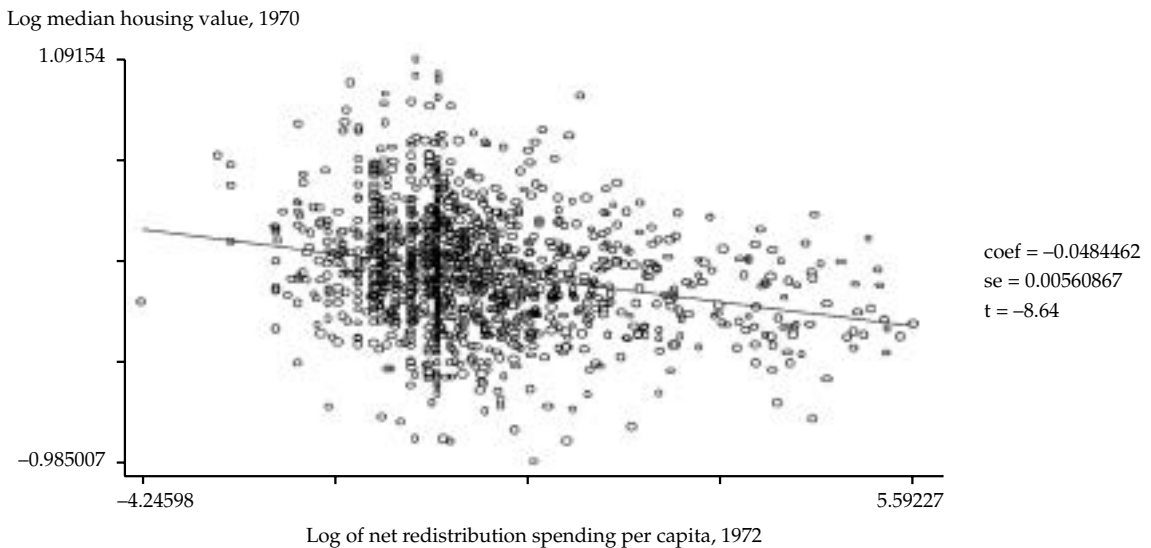
living in a mixed environment. If governments were to attempt redistribution, the rich would flee. Eventually, enough of the rich would leave to significantly reduce the level of redistribution that actually reaches the poor, and the poor would also be deprived of the positive spillovers from the rich. Thus, local redistribution may actually hurt the poor because it exacerbates segregation, and it clearly hurts the rich and the cities.

Table 8.1. *City Growth and Government Redistribution Policy*
(All regressions include state fixed effects)

<i>Right-hand side variables</i>	<i>Population growth (annual rate, 1970–90)</i>	<i>Income growth (annual rate 1970–90)</i>	<i>Median housing price growth 1970–90)</i>
Percentage of persons graduated from high school (1970)	0.0723 (0.0113)	0.0301 (0.0040)	-0.0112 (0.0052)
Percentage of persons with a bachelor's degree or higher (1970)	-0.0950 (0.0137)	-0.0010 (0.0048)	0.0402 (0.0063)
Percentage of persons below the poverty level (1970)	0.0282 (0.0146)	0.0064 (0.0051)	-0.0071 (0.0067)
Log of net redistribution spending (per capita, 1972)	-0.0032 (0.0004)	-0.0007 (0.0002)	-0.0012 (0.0002)
N	1,346	1,346	1,346
R ²	0.3312	0.2819	0.7545
Adjusted R ²	0.3054	0.2542	0.7450
Sum of squared residuals	0.6114	0.0754	0.1285
Number of independent variables	50	50	50

Source: Authors.

Figure 8.12. *Property Values versus Redistribution Spending*

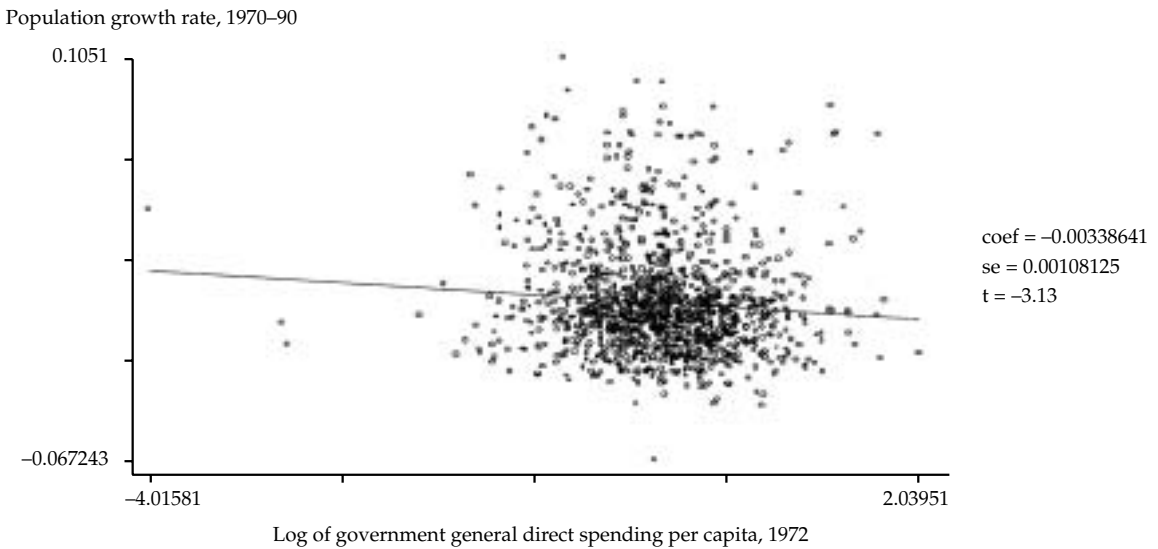


Source: Authors.

Overall Government Size and Growth

The effects of overall government size are less clear. However, it appears that since the 1970s larger local governments have tended to hurt both property values and local growth. Figure 8.13 shows the connection between population growth and overall local government size. Figure 8.14 shows that a drop in property values coincides with the increase in the overall size of government. Glaeser, Scheinkman, and Shleifer (1995) showed that this connection did not occur before the late 1960s, perhaps because local governments were less redistributational in nature prior to the late 1960s.

Figure 8.13. Population Growth versus Overall Government Size



Source: Authors.

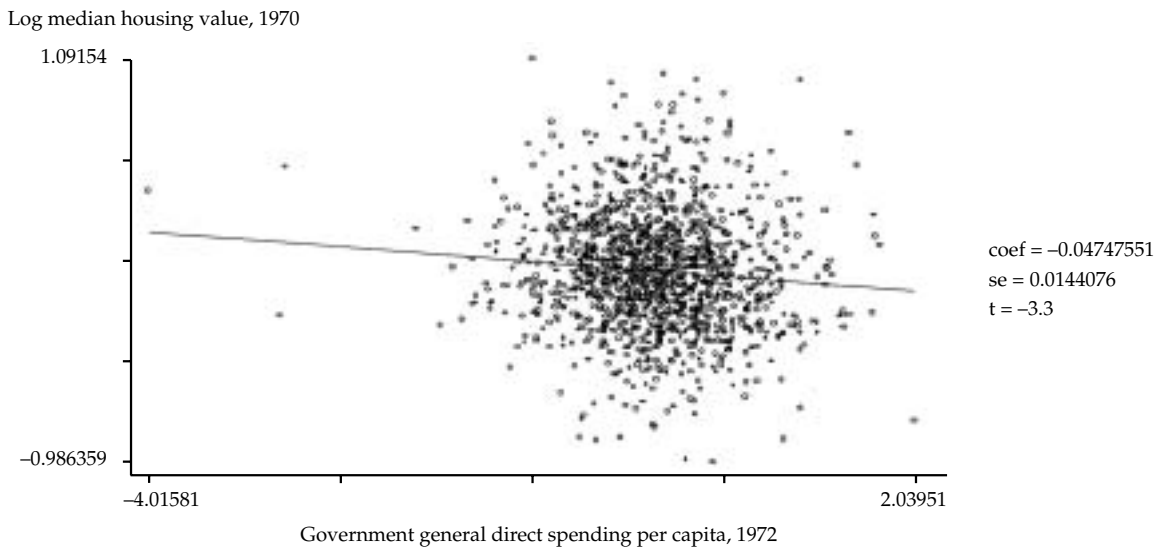
Vigdor (1998) showed the results of tax reform propositions in California and Massachusetts, which is better evidence for the connection between overall government size and property values and local growth. These tax reforms placed limits on the ability of localities to raise income through property taxes, and in many cases led to a somewhat exogenous decline in the size of local government. Those areas where local government declined the most in size had the greatest increases in property value and employment.

One explanation for these phenomena is that local government leaders tend to prefer to run bigger government organizations, and they do so against the interests of their voters. When these governments reduce their size, their localities become more attractive. Thus, one lesson from the U.S. data is that smaller local governments tend to make stronger cities.

Schools and Growth

The ninth and final fact about local government is the connection between schools and population growth. In the United States, school districts rather than cities do a significant amount of spending on schools. Thus, empirical studies show that spending on education makes more sense at the county level than at the city level. To examine the connection between schools and population growth, we have aggregated all spending up to the county level, and this spending includes spending by cities and spending by all school districts.

Figure 8.14. *Property Values versus Overall Government Size*



Source: Authors.

The basic facts are straightforward. Higher levels of school spending have been strongly associated with growth in county population and income over the past 20 years. In addition, higher levels of spending on education also appear to be linked to higher property values. Successful areas spend more on schooling.

The likely reason for this link is that schools produce human capital, and human capital appears to be the primary ingredient for urban success. Good schools obviously produce well-educated adults, but they also attract adults who care about better schooling for their children. Because the correlation between spending on schooling and adult education is high, we must surmise that well-educated adults generally want to spend more on their children's education. Thus, schooling has two effects: attraction of educated adults and development of educated children. Through the connection between human capital and urban growth, spending on education increases the popularity of urban areas.

Lessons for Central Government

Sound urban policy depends on the actions of both central and local governments. We begin this section with an overview of the appropriate actions that central governments should take. The bulk of these points come from economic theory rather than controlled policy experiments. However, a wide variety of historical examples generally exist to support these ideas.

Governments Should Minimize Spatial Distortions

Modern urban economic theory allows the possibility of a large number of externalities and market failures. Agglomeration economies certainly exist in this world, and in principle they justify government intervention. In many compelling articles, Henderson has argued that interventionist local developers are needed to internalize the various externalities at the local level (see, for example, Henderson 1997; Flatters, Henderson, and Mieszkowski 1974). However, most of these externalities are far too subtle and unpredictable for a central bureaucracy to control. In most cases, national governments should really not be in the business of urban planning.

However, this does not mean that policymakers can simply go home. As discussed previously, governments often distort the location decisions of firms and individuals. They may make it difficult or impossible for firms to do business unless those firms locate in the capital city, where they have access to central government. In addition, governments may redistribute wealth to the poor in central cities only. The net result is that governments create spatial distortions that may skew the entire urban system.

Let us define spatial neutrality: spatially neutral policies require that (a) the government correct for any pre-existing, location-related externalities; (b) the government not explicitly or implicitly redistribute across regions; and (c) the government not favor particular regions with either prices or quantities of government services. This means that governmental correction of congestion- or pollution-related externalities has a role in large or dense cities. In principle, if gains to agglomeration exist, then the government may also engage in positive subsidization of a particular region. It is safest to focus on real, measurable externalities and directly tax the externality-causing actions, rather than tax the region itself.

A second part of spatial neutrality argues against subsidizing particular regions. Basically, no region should receive government resources beyond those it pays for. A useful benchmark is comparing the levels of inflows and outflows of government resources, which should be roughly equal. However, if a region has a particular abundance of the poor these levels may not be equal. In that case, the government may allocate more money to citizens of that region, but spatial neutrality demands that the allocation be tied to the person not to the area. In other words, if transfers are tied to people, then there is no spatial distortion because the people will get the same transfer no matter where they go. If transfers are tied to places, then a substantial distortion will occur and keep the poor in high poverty areas. This point provides a strong argument against the creation of a special urban safety net. Nothing is wrong with national safety nets, but they should not encourage the poor to live in particular areas.

Finally, the government should not make services available in only one area, and it should not subsidize areas with special pricing. This does not mean that outcomes of government services need to be equal. In fact, if location-specific attributes make it difficult to provide government services in a particular region, then these difficulties should be allowed to dissuade migrants from coming to that area. This is true both for exogenous area-specific characteristics and for characteristics related to the competence of government. If a local government is incompetent, it is better that the population leave than the government try to bribe the population to stay.

Although spatial neutrality dictates spreading equally valuable public bundles throughout space, these bundles do not need to be identical. Ideally, locales will respond to different local conditions by providing different types of services. For example, even though redistribution is a national responsibility and the overall level of redistribution should be set at the national level, localities can still play a role in determining the redistribution's exact form.

The first goal of government should be to eliminate spatial distortions. The full implications of this are worked out in Glaeser and Meyer (forthcoming), but the basic ideas can be put forward here. If governments spend on redistribution, then spending per individual should be roughly equal everywhere to ensure spatial neutrality. If this means that the government can buy more in low-cost areas, then this is an advantage of low-cost areas that potential migrants should incorporate into their spatial decisions.

More generally, spatial neutrality means that central government taxes should be tied to people, not places, and central government services should also be relatively equally available. Of course, privatization eliminates the need to worry about most of these things. However, if the government continues to provide basic services, then these services should not be subsidized in some regions and not in others. More importantly, political decisions should not determine whether those services should be available only in some places. If costs preclude availability of services, and no one is willing to pay these costs, then of course a lack of these services is the correct, spatially neutral policy.

Sometimes governments may wish to violate spatial neutrality. In particular, governments often want to populate lightly populated areas that border other countries to shore up governmental positions in border disputes. It is not the place of an economist to argue with such policies (as their purpose is only

political, not economic), but if these policies exist they should at least be clearly acknowledged, and the costs should be evaluated.

Spatial Neutrality Requires Good Institutions

Spatial neutrality does not occur naturally. Certain areas and certain cities will be intrinsically endowed with more political clout than others. This political clout comes from proximity to the capital, or historical factors, or the stronger political organizations of large cities. Government wealth is naturally targeted toward politically powerful areas, and this flow of wealth will end up attracting more people and creating spatial distortions. Good political institutions are the only means of preventing the occurrence of spatial distortions.

Privatization and decentralization are two actions governments can take to stop spatial distortions. True privatization will remove government subsidies from all areas, thus blocking distortions. Decentralization, where each area is forced to live within its own budget, will also diminish the possibility for these distortions. However, there are cases, such as national defense and redistribution policy, where privatization and decentralization make little sense.

In principle, pre-existing distortions or a lack of free market traditions may mean that decentralized, minimalist government will not be efficient. Indeed, most of the evidence we have given refers to U.S. experience, and discussions of developing countries have been more cursory. However, the experience in many countries other than the United States suggests an even greater need for government restraint. While it is usually true that both developing countries and the industrial world have substantial distortions that in principle make government-led corrective mechanisms reasonable, in practice, urban and central governments generally seem to cause more problems than they solve. Calls for massive government intervention almost always tend to underestimate the possibilities for government corruption and incompetence.

For these reasons, national political systems should be set up in such a way that distortions are prevented. For example, the U.S. system of government specifically awards political power to low-density areas. Although this method creates strange distortions where too much central government wealth favors agricultural producers in these areas, it also stems the natural tendency of large cities to garner a disproportionate share of national handouts. More generally, policies that encourage political power in areas that are distant from the capital and that are hard to organize politically will generally result in fewer spatial distortions.

The Advantages and Disadvantages of Decentralization

Decentralization of political authority is one of the great debates of our age, and it matters in this context because of its clear importance for urban policy. The advantages of decentralization are straightforward. As a result of decentralization, individuals can choose their preferred level of public service out of a greater variety of public service levels. Decentralization leads to competition among districts, which drives government to be more disciplined. Decentralization can lead to better connection between voters and leaders, because decentralizing authorities leads to more experimental policy initiatives, which provide information for everyone to follow. Decentralization mitigates the possibility for cross-jurisdictional subsidies that lead to spatial distortions.

Decentralization also has costs. In some government activities, such as defense, decentralization does not make sense. For some activities, government expertise is developed by doing, and in this case, decentralization leads to a lack of knowledge. Although this force is real, we think it is usually overemphasized. When local governments are given authority, they can usually hire experts who can provide sufficiently good advice. Another possible cost of decentralization can occur when jurisdictions take actions that spill over into other jurisdictions, and these spillovers are not incorporated into the

decisionmaking of a localized area. For example, a particular area may cut its welfare levels down to zero, hoping to drive the poor to another area, thus creating a negative externality. This is one example of the reasons why localities should not be given responsibility for redistribution.

In general, decentralization should proceed in most areas where there are not clear returns to scale (the only example that is not debatable is defense) and in areas of redistribution. Redistribution is an exception because certainly externalities exist across districts, including the idea that altruism does not end in your district and the fact that policies that induce the poor to move will have spillovers elsewhere. Furthermore, in redistribution activities, voters who receive the services do not actually pay for them. As a result, the poor have an incentive to move to more generous areas, which is a pure distortion. However, the incentive of general voters to move to areas with better police protection will be tempered by the fact that their taxes are needed to pay for that protection.

The question arises, what is the optimal level of decentralization? No one argues that block-level administration is correct in many cases. However, local provision is more appropriate for many services. In addition, nothing (other than saving on transaction costs) stops many services from being provided at a local level and some services at a nationwide level.

As this discussion should make clear, federalism is not a panacea, but some degree of decentralization is generally beneficial. Ideally, healthy competition will take place between different jurisdictions in a federal system, but the national government will still play a role. The national government may need to monitor some cross-jurisdictional externalities, and it may also need to focus on some countrywide public goods.

Trade and Globalization Affect Cities

As we discussed earlier, a strong interplay exists between trade policies and cities. In general, globalization should increase the importance of cities that are centers of trade and human capital. However, globalization may reduce the importance of megacities, because trade with the outside world may limit the agglomeration economies that lead to megacities, as Krugman and Livas-Elizondo (1996) suggest. Alternatively, trade with the outside world may support the growth of cities that specialize in global contact.

International evidence (Ades and Glaeser 1995) supports the idea that open economies tend to have more small cities rather than one megacity. However, this effect will be limited if trade is highly politicized and international firms need to deal with the political powers in megacities to operate. In the absence of these distortions, trade is not likely to support the megacity, and indeed trade can be expected to expand the smaller, more diverse cities that are rich in human capital.

No specific policy approach exists to bring about the integration that is needed to create better urban outcomes. However, micromanagement of capital flows is surely a mistake. The most important policy step a government can take is to ensure that international trade does not need to surmount a large amount of regulation and corruption. Simple, transparent rules that are easily obeyed anywhere in the country are the best method of ensuring a healthy interaction between trade and urban systems.

Spillovers across Cities

While it is generally true that governments should allow cities to progress on their own, in many cases some central government intervention is needed. Transportation networks often need central guidance to ensure compatibility. Indeed, domestic transportation is also a major factor in reducing the amount of agglomeration in megacities. Although much domestic transportation can be privatized, if it is not, it does not make sense for 10,000 separate municipalities to build a national highway system.

A second area where spillovers across districts may occur is in crime prevention. Certainly, a common rule of law is immensely helpful for controlling crime. It would be a nightmare for each city to

have separate laws, as they are very much a public good that provides better returns at the country level. Local policing often involves spillovers, because crime prevention in one area may induce criminals to act elsewhere. The U.S. evidence suggests only low levels of migration among criminals, but this is not supported internationally. For example, in Brazil criminals appear to be much more mobile than they are in the United States.

The presence of spillovers across areas supports a role for government intervention, while spillovers within areas can be handled locally. Thus, pollution-related spillovers that are the result of negative externalities associated with city growth do not need the intervention of the federal government and can be handled by local government.

Lessons for Local Government Behavior from Economic Theory

While the previous advice was aimed at central governments, the next set of lessons is aimed at local officials. In an ideal world, entrepreneurial localities would compete for residents by offering attractive sets of local policies and taxes. The competition among U.S. localities serves as a reasonable approximation of such a world. However, local policies that have proven attractive in the United States may not be appropriate for developing countries. Nonetheless, certain lessons have proven universal.

Local Redistribution Is Disastrous

Rarely should localities be held responsible for alleviating local poverty. In the United States, almost every case of postwar, large-scale urban disaster reveals the presence of a local government that focused more on redistribution to the poor than on providing basic services. New York's fiscal crisis was set off by the redistribution efforts led by John Lindsay. Detroit has suffered from the attempts of Coleman Young to take care of his poor residents. Washington, D.C. has been a center of decent treatment of its poorer residents for more than a century. Many of its troubles are the harvest of that decency. Most striking is East St. Louis, which neighbors larger St. Louis but has more generous welfare payments because it is in Illinois (rather than Missouri).

In cities that have attempted to turn around, basic services have replaced redistribution. Ed Koch and Rudy Giuliani in New York shifted the city's functions away from redistribution toward basic services. Richard M. Daley in Chicago and Ed Rendell in Philadelphia also reduced these cities' redistributive functions. Note that we are not advocating any particular stance on the level of redistribution in the country as a whole. We are simply claiming that local redistribution will have disastrous consequences. While the U.S. examples focus on redistribution from rich to poor, in principle, any sort of redistribution at the city level creates distortions and social losses, because redistribution repels the rich and creates concentrations of poverty. Cross-jurisdictional externalities are associated with the migration of rich and poor, and intrajurisdictional externalities are associated with the poor clumping together in a particular place. The basic rules for efficiency of localities are violated because the people who vote or migrate do not actually pay for what they receive.

The best way to end this type of situation is for the national government to make policies that limit the ability of local governments to redistribute to particular subgroups. Thus, subgroups could sue their localities if those localities spend less on them than they pay in taxes. If localities are allowed to redistribute, then migration will eventually punish those cities that do redistribute, but this will occur at a grave social cost. These cities' infrastructure will be wasted, and the poor that remain will be isolated and neglected.

So far, because of centralization, few countries outside the United States have directly observed the costs of local redistribution. In some cases, effective barriers against mobility protect strong mayors, such as Yuri Luzhkov in Moscow. In other cases, such as in Brazil, where local redistribution has occurred at the state rather than the city level, the costs are much less extreme than those observed in U.S. examples. However, well-meaning cities that attempt to solve local poverty may end up attracting the poor and

exacerbating the rings of shantytowns, such as those surrounding Rio. The intentions of leaders in these cities are laudable. However, we suggest that local redistribution will not actually make anyone better off in the long term.

Indeed, developing policies with respect to shantytowns is enormously difficult. Shantytowns exist in part because of the greater productivity of industrial or urban labor relative to agricultural labor. They also exist because of the failure to protect property rights in urban areas and often because of a greater availability of government-provided services in those areas. Inappropriate government responses include not attempting to eliminate the shantytowns and not attempting to eliminate poverty in the shantytowns beyond national antipoverty policies. Eliminating the major distortions involved in shantytowns, such as more government services in cities, free land, and distortions stemming from added congestion in urban areas, is the appropriate government response. If these distortions are eliminated, then there is no reason not to applaud the continuing urbanization of the rural poor as they seek out a better life near the cities. The focus should be on eliminating distortions associated with the shantytowns and pricing any externalities the shantytowns create. If it is established, for example, that each new resident in a shantytown imposes a negative externality on the city as a whole, then some active policy is appropriate. Either new shantytown residents should be taxed, perhaps by reducing the amount of government services available there, or residents of the rural area should be subsidized, perhaps by increasing the availability of government services.

Human Capital Is One Key to Local Growth

Mayors who want to strengthen their cities will profit from encouraging and creating human capital. We now understand that cities are informational entities and the spillovers of knowledge across people are the forces that make cities healthy. Accordingly, cities will do best to court high human capital individuals and allow them to flourish. In the long term, this sort of policy is more effective than bribing specific firms to keep them in localities.

Attracting human capital can take several forms. First, cities can create strong school systems. Schools both attract and produce skilled individuals. Theoretically, a privatized voucher system seems to be among the most effective means of encouraging good schools. However, we do not preclude the possibility of local government providing high-quality urban schools.

Second, human capital is attracted by legal conditions that allow it to flourish. This means developing a local legal environment that allows entrepreneurship and growth. Limiting local regulations and providing solid protection of property rights are good ideas. A local government that is open to new businesses will also attract human capital, and will thus be able to develop a healthy city.

Third and finally, cities are centers of consumption and production. Many people, particularly those with high human capital, are attracted to cities that are centers of services and consumption. Again, creating a legal environment that is conducive to high-quality living environments is important. Furthermore, public amenities such as parks and clear air determine the quality of life in a city (Kahn 1999). City governments should focus on providing such amenities to keep levels of human capital high.

Combining these points helps to illustrate why cities such as Delhi, which had a considerable advantage in the level of its local human capital, have failed to live up to the promise implied by their skill bases. Even the best human capital in the world will not lead to urban growth unless the city has a political and legal infrastructure that will support such growth. Schooling is not enough. The opportunity for the schooled to take advantage of their skills is also necessary.

A second key problem involving skill compositions facing many cities in developing countries is that the supply of less skilled workers is just too vast to offset with any changes in local policy toward the more skilled. Thus, when a vast agricultural hinterland where labor is less productive than in the urban sector is associated with a city, then that city often becomes crowded with less skilled workers. This is not

necessarily bad from a social perspective. Presumably, migration makes many agricultural workers better off. However, the cities will themselves have major problems, at least temporarily.

One method of offsetting this problem is to allow for the ready formation of new cities. In one model of urbanization, farmers only move into existing metropolises. This is particularly true when those metropolises are receiving handouts from the central government. In an alternative, better model, new cities form to take in some of the growing urban population. When countries allow for the ready formation of new cities, then the problems of overcrowding in existing cities will certainly decline.

Protection of Property Rights Is a Second Key to Local Growth

Berry and Levitt (1996) confirm that people leave cities where crime levels are high. A host of anecdotal evidence also supports the importance of the protection of property rights as a major source of urban (and national) growth. Certainly, property rights are a good way to appeal to high human capital individuals. Berry and Levitt (1996) confirm this by showing that it is the rich, in particular, who leave high crime cities.

While national legal systems make more sense than local systems, the results of decentralized police networks have varied. Brazil employs a mixed system of military patrol police and state-level investigatory police. That country has extremely high crime rates, and most evidence suggests that police corruption and lack of focus on eliminating crime have played major roles in creating this problem. However, Japan also has a national system, but it has been quite effective, in part because of a sensible system of rotating police. This limits the ability of any police officers to form the networks needed for corruption. All in all, we believe that little theoretical justification exists for national police in most areas of law enforcement and that local policing tends to make more sense. The cost, however, of local policing is that it tends to create a greater potential for corruption.

In general, the evidence on law enforcement suggests some linkage between economic inequality and crime and a stronger linkage between deterrence and crime. Social problems, such as single parent families, are also closely linked to crime. Incarceration tends to reduce crime because of both incapacitation and deterrence. One explanation for the extraordinarily high crime rates in Brazil is the low level of incarceration in that country; however, no silver bullet for proper design of police systems exists. Using the latest information technology is clearly optimal, but this also increases fears of a police state.

U.S. attempts at community policing, which means developing closer connections between the police and the areas that they patrol, has had mixed results. It leads to less antagonism between the poor and the police, which is clearly a benefit. However, tight connection between the police and the community can also lead to more corruption. In the absence of any clear best practice, it is probably best to simply give localities control and let them compete for residents, knowing that a primary function of localities is to provide strong protection of property rights.

Note that the privatization of police is often quite difficult. The problem is that enforcing contracts is hard when one group has guns and the other group does not. However, as long as a basic core of public police exists to enforce contracts, having private policing that supports the public police is quite feasible.

Provision of Basic Local Services

Local governments also do well to provide basic public services efficiently. An old statement of urban economics that is still true today is that the first responsibility of local government is to provide clean water. Clean water, clean air, and good sewage systems are areas that local governments must focus on.

In many cases, basic public services can easily be privatized. For example, the general track record of private provision of trash collection has been quite positive. However, when private providers have a strong incentive to reduce quality to increase profits, then the state must continue to provide these

services itself (Hart, Shleifer, and Vishny 1997). For example, in the case of clean water, we may worry that a private provider will cut corners to shave costs, thereby endangering the entire city.

Overall, whether through private or public providers, good local governments focus on providing high-quality local services. The central government can provide help in this area by making good information about the quality of local services easily available. This information helps people and firms to make informed locational decisions and helps to keep incentives for local governments strong.

Zoning, Urban Planning, and Land Use Restrictions

Certain types of urban planning play a role in strengthening cities. For example, efficient transportation networks require large-scale planning to ensure that traffic is able to move swiftly. However, the basic uses of urban planning have often been vastly expanded in a harmful manner.

Land use restrictions are a classic example of this type of urban planning. These restrictions have a real function in internalizing certain types of externalities. For example, building an industrial plant next to a residential district may cause large-scale externalities that would affect those residents. In most cases, however, quantity restrictions, such as land use restrictions, are less efficient than taxes aimed at getting the firms to internalize behavior. In the case of an industrial plant, taxes could create a situation where the plant is able to reduce its pollution in such a way that it creates few spillovers. In that case, the plant could still locate near the residential district that provides its workers. If zoning alone were used, the plant would not consider changing its technology to eliminate the externality.

In addition, city governments often use zoning regulations to limit migration. Limits for this reason can be efficient if the negative externalities created by marginal migration are sufficiently high. However, this type of limit is more often the result of a political equilibrium where the desires of some residents, such as the landowners who would benefit from selling the land, are sacrificed to the desires of other residents. As such, land use restrictions can often be thought of as a type of undesirable redistribution.

The Role of Local Political Institutions

Which political institutions tend to yield the best outcomes? Many institutions appear to be fairly irrelevant. For example, Glaeser, Scheinkman, and Shleifer (1995) show that the difference between cities that have classic political systems and cities that are run by city managers appears to be small. Rauch (1995) shows that civil service reform has had little effect on urban growth.

However, in general it is worth stressing that good urban government tends to maximize the value of the city's property. The reason for this is that property values reflect how much people desire the community, which in turn is a function of the quality of local government. This is an old point in urban economics (Brueckner 1977) that has only recently been used as a practical guide for urban governance. Glaeser (1996) argues that property taxes tend to give local governments a real stake in keeping property values high because they will have more money to control. As such, using property taxes may be an efficient means to generate good local policies. Alternatively, the pay of local officials could be based on the value of local property.

Certainly Henderson's work on developers is an extreme example of the case of good government maximizing the value of a city's property. The Henderson view, that developers internalize the externalities of cities, holds true because developers own all of the property. Taken to an extreme, this view may be seen as support for private cities run by corporations that own all of the land. This may be an exciting possible path for urban government to take. However, many difficulties are involved in having public services such as safety and health provided solely by private means.

Conclusion

The world's population increasingly lives in cities, and the quality of life for many of the world's people depends on how those cities are run. Good city governments that focus on human capital, public safety, and basic services will lead to better lives. However, when city governments become overly involved in redistribution activities, cities can become centers of poverty and crime. Reforms should focus on ensuring high levels of competition among cities in the areas of public safety, human capital, and basic services and should eliminate the ability of cities to compete using levels of redistribution.

National governments also play an important role in urban development. They must abstain from creating spatial distortions and ensure that the benefits of international trade extend beyond the capital city. To ensure this, they must allow low levels of regulation that make it possible to operate in any city in the country. Finally, they must permit decentralization to encourage healthy competition among cities.

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9

Urban Governance and Politics in a Global Context: The Growing Importance of Localities

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One of the intriguing paradoxes of the multifaceted phenomenon called globalization is the marked tendency in many countries (in both the North and the South) toward increased public concern with institutions and issues of a local nature. By local we refer to jurisdictions at the level of municipality, district, local community, or lower still. To capture the binary nature of this emerging tendency, some writers have popularized a Japanese business term of the 1980s, glocalization (Borja and Castells 1997; Luke 1995; Parnwell and Wongsuphasawat 1997; Robertson 1995).¹ Others (many of them environmentalists) have reminded us of the popular slogan "think globally, act locally" (Gilbert and others 1996, pp. 17–18); while still others have systematically examined the extensive evidence of local and community initiatives in response to international forces (Douglass and Friedmann 1998; Eade 1997; Gould, Schnaiberg, and Weinberg 1996; Pile and Keith 1997; Taylor 1995). Whatever the approach taken, however, local politics and governance has proved to be a central preoccupation of both scholars and developmental activists at the beginning of the 21st century. In light of the increasing importance of local initiatives and municipal institutions, this focus on local politics and governance can be traced through three major trajectories: civil society, local democratization, and the new localism. While these trajectories are related, and each in turn relates the local to the global, they all offer different perspectives on the complex restructuring of institutions taking place in both northern and southern countries.

Components of the Local: Urban Civil Society

Because the focus on local aspects of politics and development is relatively new, and because local politics and development take on so many different expressions in diverse parts of the world, generalizations are fraught with uncertainty. However, one major aspect of this tendency is a weakening of state institutions—especially at the national level—at the same time as civil society flourishes. Although the national state is still central to economic, social, and even cultural life, its powers and functions have changed in complex ways. Castells attributes much of the weakening of the national state (in terms of power rather than influence) to global processes beyond the control of the state. He explains that "the nation-state is increasingly powerless in controlling monetary policy, deciding its budget, organizing

¹ Different authors define the term glocalization differently. Robertson, a sociologist, observes that "the concept of globalization has involved the simultaneity and the interpenetration of what are conventionally called the global and the local, or—in more abstract vein—the universal and the particular" (Robertson 1995, p. 30). Borja and Castells offer a more institutional definition. They explain that "United Nations conferences, and especially the Agenda 21 for the implementation of their agreements, assign a major role to local government, and particularly to policies which can be implemented in urban spheres. This is what has come to be known as glocalization, that is, links between the global and the local. This notion is today applied both to the economy (the city as a good economic medium for optimization of synergies) and to culture (local identities and their dialectic relationship with media based universalism of information). Here, glocalization means placing emphasis on the urban setting and the management-coordination-promotion role of local governments in the implementation of policies which take account of and adopt stances with respect to global terms of reference. In short, globalization plus proximity" (Borja and Castells 1997, pp. 212, 214).

production and trade, collecting its corporate taxes, and fulfilling its commitments to provide social benefits. In sum, it has lost most of its economic power, albeit it still has some regulatory capacity and relative control over its subjects" (Castells 1997, p.254). The degree to which the national state has lost power as a result of political choice or forces outside its control is a matter of debate (Hirst and Thompson 1996; McQuaig 1998).

Associated with these current institutional trends are attitudinal changes among the public in most Western countries. These attitudes include lower levels of respect and deference for national political leaders and institutions (Nevitte 1996; Nye, Zelikow, and King 1997) and a declining willingness in many countries to pay taxes and to support a broad range of national political functions. While support for national institutions has declined, local institutions show more resilience. In the United States, for example, polls routinely show that people have more trust in their local than in federal government institutions. In 1997, a poll reported in *The Washington Post* showed a public confidence rate of only 22 percent in federal institutions, as opposed to a 38-percent confidence rate in local-level institutions (Nye, Zelikow, and King 1997). A 1998 Gallup poll that asked Americans parallel questions concerning their confidence in the federal government to handle "domestic" (that is, national) problems and in their local government to handle "local" problems showed a similar disparity. Thus, 61 percent of the national sample reported that they had either "a great deal" or a "fair amount" of trust in the federal government, while 77 percent of the same sample reported "a great deal" or a "fair amount" of trust or confidence in their local government (Gallup 2000, pp. 49–51).

At the same time, social surveys show a new interest in civil society and nontraditional political activities (Inglehart 1997a) and a new relationship between civil society and government. In current usage, the term civil society refers to "those social organizations, associations and institutions that exist beyond the sphere of direct supervision and control by the state" (Friedmann 1998, p.21). Thus, civil society may include broad-based organizations such as charities and chambers of commerce, rate-payers' associations, environmental groups, religious organizations, and community groups and families. The more organized examples of these kinds of groups and organizations have increasingly taken the initiative in local affairs in many countries. A brief history of urban social movements in Latin America illustrates the growing importance of civil society.

Urban Civil Society in Latin America

During the 1960s and 1970s, the larger cities in many developing countries were the focus of increasingly intense conflicts between the public authorities and large numbers of the urban poor who could not afford the cost of shelter in planned areas with good roads, piped water, sewerage, electricity, and other infrastructural services. Partly as a result of these people's inability to afford the cost of planned areas, so-called squatter or popular settlements (variously named in different countries) developed on unserviced urban land. This land was usually marginal in terms of the quality of the site and the distance from major centers of employment and often compromised in terms of the legality of the land tenure rights of the new occupants. The social science literature of the time extensively investigated both the reasons for the growth of these settlements and the appalling living conditions many of them represented. These studies demonstrated that the massive increase in people living in the popular settlements was not a result of a challenge to the system of authority, but a result of marginal groups attempting to gain a foothold in the urban economy, which could serve as a first step toward integration into the labor market and integration into the institutions of the larger society. Following this logic, a number of policy innovations—such as sites and services schemes and later squatter upgrading programs—were developed to respond to the need of the urban poor to gain entry, at minimal cost, to the formal urban economy. These innovations, promoted by such multilateral agencies as the World Bank and a number of bilateral donor agencies, were the focus of urban policy innovation throughout the developing world during the 1970s and early 1980s.

The attempts by the urban poor to gain access to urban land and services were conceptualized—at least in Latin America—as an important component of what were called urban social movements. The idea of a social movement reflects broad-based, often multiclass, coordinated activity at the local level; at the same time, even though demands are made on the state, political parties and other specialized institutions are not the primary vehicles through which pressure is brought to bear. As the case of Lima from the turn of the century until the early 1970s demonstrates, the formation and establishment of informal, unplanned settlements in the city took place on public land, land under disputed title, and private land. Of some 136 settlements for which information was available, 41 were formed with explicit authorization from the government, 50 were formed through an organized land invasion by groups of squatters, and 41 were formed through gradual occupation (Collier 1976, chapter 3). Although the government resisted informal settlements over the years, those evicted from one area would eventually find space in another area, sometimes with the support of the government. By 1972, "a common way of getting a lot was to participate in an invasion and then get moved to a government-sponsored settlement. Invasions...continue to be a major means through which families acquire land in settlements" (Collier 1976, p.115). In the case of Peru during this period, different governments and political leaders were obliged to support the irregular (and even illegal) occupation of land in the capital city. This support was both a strategy to win political support from large groups of the population and a result of pressure from private landowners who could not otherwise develop their land.

The story of the Pamplona invasion may best illustrate the organization of the squatters in response to political opportunities. In 1971, a group of 80 to 100 families planned this event to coincide with meetings in Lima between the government of Peru and the Inter-American Development Bank. While a contingent of troops arrived to disperse the squatters—whose ranks had grown to some 9,000 families by the fifth day of the occupation—public opinion was such that they were eventually offered sites in another location named Villa el Salvador. By 1986, about 168,000 people lived in Villa el Salvador, most with electricity and over half with domestic water and sewerage. "Despite originally being a desert site, the area now has many trees and gardens, the main roads are paved and bus services link it to central Lima, some 20 kilometers away. Most of these improvements were made by the inhabitants and their organizations, not by government" (Hardoy and Satterthwaite 1989, p. 85).

The importance of demands for urban land and services as a central element in the local politics of low-income groups is clearly demonstrated by Mexican research conducted during the 1970s. In a major survey of six low-income communities on the periphery of Mexico City, residents indicated that problems relating to increased income, employment, and education for their children were their primary personal concerns. At the neighborhood level, security of tenure was identified as the overwhelming need in the two communities that had not yet been regularized by the government. In the four communities where the government had already granted individual land tenure rights, basic urban services and improvements (such as piped water, sewage systems, and paved streets) were identified as the primary needs. In none of the six communities was improvement of the quality of housing as such a high priority (Cornelius 1975, chapter 7). Similar findings have been obtained in surveys in many other parts of the developing world. Because most countries' national and local government agencies were either unable or unwilling to supply basic urban services to these burgeoning popular settlements—at least not at the pace and quality that the people were demanding—various patterns of community organization and self-help activities developed almost everywhere. In Mexico City, for example, a well-known study of a small, peripheral shantytown that sprawled over the slopes of a ravine looked at the reciprocal social and kinship ties that supported the settlers even though their economic positions in the larger system were marginal. Aside from a dense network of extended family ties, the community of 176 households had four football teams, a medical center (originally financed and organized by middle-class women from the adjacent neighborhood), and a number of temporary associations for specific purposes, often formed by small groups of neighbors (Lomnitz 1974). One important book on Nairobi, which focuses on the emergence of low-income settlements, describes the Kenyan capital as a self-help city (Hake 1977).

The Emergence of Nongovernmental Organizations

In the context of political systems (often under the control of military groups) that did not offer much opportunity for the poor to influence their governments directly, the self-help activities of low-income communities became even more important when they were joined in collective action with nongovernmental organizations (NGOs). During the 1960s and 1970s, NGOs occupied the narrow political space between local communities and formal institutions in the domain of social services and the promotion of local development. When many northern countries and foundations did not want to give assistance to authoritarian governments or government-dominated political parties, they were prepared to support local NGOs, which often worked with community groups. In Santiago, Chile, for example, a survey found that in the 1980s, 20 percent of the marginal urban population participated in popular organizations, 33 percent of which were involved with health problems. In the health area, some 673 self-help health organizations were operating at the community level alone, including 201 soup kitchens, 20 community kitchens, 223 cooperative buying organizations, 67 family garden organizations, 25 community bakeries, and 137 health groups. These organizations had 12,956 active members. Most of the members, as well as the leaders and managers of these organizations, have been women (Salinas and Solimano 1995). At the NGO level, thousands of organizations existed in Chile during the authoritarian period, many of them relying on external financing for their operations (Loveman 1995).

In some countries, NGOs helped to maintain political pluralism; in others, they kept authoritarianism at bay. As Hirschman (1984) suggests, such developments reflect a worldwide trend where all citizens demand basic economic (and therefore political) rights. In Brazil beginning in the late 1970s, for example,

Civil society breathed the air of the political 'opening', which heralded a return to democratic rule after 20 years of authoritarianism. Mobilization took root in the factories, but soon spread beyond the labour movement and political parties. In both poor neighbourhoods...and middle-class areas, the population organized to demand the right to basic services—water supply, sewerage, school facilities, health facilities, roads—and protested against ecological dangers, development plans which ignored residents' interests, housing evictions and a host of other causes (Valladares and Coelho 1995, p. 88).

The emergence of urban social movements in Mexico and Peru, involving particularly the mobilization and organization of low-income communities, predated the Brazilian awakening. However, the 1985 earthquake in Mexico City and a growing concern over urban environmental risk—especially as a result of high levels of air pollution in the capital—led to a diverse range of protests and popular activity in the area of human settlements. As Latin America urbanized, the link between protests and organizational activity to secure land and improved urban services and demands for the reduction and control of air and water pollution in the cities became more pronounced. Both popular organizational activity and demands for pollution control, in any case, were central to the democratization process in Latin America. Rodriguez, Espinoza, and Herzer clarify the importance of urban social movements as an alternative to democracy in systems that fail to offer full political choice. They note that "social movements were crucial to democratic recovery; they served as a means of developing social identity and of organizing political mobilization against dictatorships in Peru, Uruguay, Argentina and Chile" (Rodriguez, Espinoza, and Herzer 1995, p. 237).

Eventually, with the return of democracy in much of South America in the 1980s, the activity of social movements was considerably reduced. If we include the activities of NGOs and grassroots support organizations in the social movement category, three main reasons exist for this declining trend. First, many activists were absorbed into new political party and local state structures, where their initiatives could meet with more immediate responses, and their immediate professional and career needs could be better absorbed. Second, the reformed state structures offered the possibility of concrete action on a range of functions and responsibilities that was not previously accessible to the general population. Third, international organizations and foundations—which had given strong support to NGOs during the

authoritarian period—began to shift their funding to the democratic governments. Where these conditions did not exist, however, NGOs continued to play an active role. In his account of Lima, Dietz (1999, p. 254) observes that, even in the late 1980s (under a succession of civilian governments), “the urban lower classes had long since given up much hope that the state and its policies could or would truly work on their behalf.” As a result, at the end of the decade, the urban poor community, NGOs, and overseas aid agencies were supporting an estimated 1,800 communal soup kitchens and some 3,500 Vaso de Leche neighborhood committees delivering 1 million glasses of milk a day (Dietz 1999). This level of local self-help and outside support may have subsequently risen, in the early years of the Fujimori presidency after 1990.

In the 1980s international agencies, with the help of a number of Latin American and African states, began to establish social funds in many countries. These agencies, whose mandate was to relieve poverty and marginality, were, in effect, a large-scale, organized response to many of the social concerns that NGOs had previously embraced. They supplemented—sometimes effectively, sometimes ineffectively—the social policies increasingly being developed by governments to deal with the problems of health, education, and social assistance at the local level (Schteingart 1999). By the mid-1980s, rather than acting on their own, NGOs began to target the newly elected municipal and local governments as they sought to “deliver services, mobilize interests, encourage self-reliance, and act as advocates for improving citizens' life conditions and opportunities” (Reilly 1995, p. 2). Cooperation between NGOs and municipalities was a major theme during the 1990s.

Civil Society and Urbanization in Africa

The development of civil society at the local level has gone through three major phases since the advent of political independence in the 1960s in most of Africa. During the first phase, in the period just following independence, organizations such as trade unions, ethnic and regional associations, women's groups, and farmers' and business associations were active in defining the roles of their membership and defending their interests in relation to the emerging state structures. These civil society groups had been active during the nationalist movements against colonial rule, although in most countries their activities were much more concentrated in the large urban areas than in the more dispersed smaller towns and rural areas.

As these state structures became powerful during the late 1960s and 1970s and military or one-party regimes became the norm at the national level, political space for the expression of local demands was limited, and central controls restricted the autonomy of municipal and local government. During this second phase, the voices of civil society all over Africa were muted. Political initiatives came from the center, and a discourse of development planning—supported by international assistance—concentrated on large-scale formal projects, extensive state and parastatal employment, and widespread regulation of the economy.

In the third phase, from the 1980s through the early 1990s, this system began to break down economically, as formal employment through government and import substitution-led industrialization reached its limits. With the informal sector growing in importance, conflict between the rural (and increasingly urban) poor and the state became more common. According to International Labour Office estimates, if some 60 percent of the African urban population was operating in the informal sector by the late 1970s (ILO 1985), this figure was much higher in the 1980s and 1990s. A leading sociologist from the Côte d'Ivoire estimated that between 1976 and 1985, the number of people working on the street in a variety of informal activities had risen from 25,000 to 53,850 in Abidjan alone. During the same period, the central government complement in Abidjan rose from 31,840 to 56,940. “Given the negligible difference between the two,” he argues, “one could conclude that the street offers as much employment and provides a living to as many people as the public service!” (Touré 1985, p. 18). One of the trends of the 1980s and 1990s has been the supplementation of formal sector jobs with informal activities on the part of a large proportion of public sector employees. In the cities, urban services, such as transport,

water supply, and garbage disposal, began to deteriorate, to the point that the growing numbers of low-income citizens were buying water from water vendors; paying more for private, but more accessible, mass transport; and increasingly obtaining unserviced land and housing through the small-scale, unregulated private market (Stren 1988). The growth of informal sector employment on the one hand and the decline in urban services on the other created new pathways for the development of civil society activities at the local level, at least in many of Africa's largest cities.

In the context of globalization and growing localism, two trends are particularly noteworthy. The first is the increasing linkage between the informal sector and spatial relations in African cities. While some informal urban activities—such as minibuses and other low-cost means of public transport—are citywide, most other activities are closely tied to the use of relatively small and often marginal pieces of land. Informal markets for food and used clothing, street lunch kiosks, pavement sellers of curios and tourist souvenirs, street barbers and shoe-shiners, neighborhood informal garages and mechanics are examples of activities that require sites for their operations that are both close to potential customers and not too distant from the workers' place of residence. When informal traders or food sellers are forced to leave their usual location, they often suffer a major loss in trade because of disruption of their customer base.² The economic marginality of these occupations makes their locational insecurity greater than would be the case if informal sector operators enjoyed formal premises in a legally protected environment. A classic study of informal beer-brewing by women in a Nairobi shantytown notes the advantages of this activity for women who needed to operate out of, or close to, their homes and their small children. When this activity was outlawed by the government and rendered commercially unviable, less educated women still sought informal activities, such as food preparation, domestic service, teaching, nursing, and sex work, which could either be done in the home, or somewhere relatively nearby. Although women were involved in a limited range of entrepreneurial activities, men employed in the informal sector in this neighborhood undertook a much wider range of activities both locally, and elsewhere in the city (Nelson 1997). Women tended to seek employment "which fit in with child-care responsibilities, sometimes choosing less lucrative work which permit[ted] them to integrate their day-to-day domestic work with their income-generating activity, something noted in many labour markets of the world" (Afshar 1985 cited in Nelson, 1997, p.166).

While both men and women participate in informal activities, women are even more locationally focused than men. Because of the tremendous explosion in the informal sector of the poorest cities, the urban economy has become more and more an expression of the needs of low-income women. In Africa, women's associations, such as savings clubs or parent-teacher associations, have sprung up as methods of pursuing collectively women's economic and social needs, in the context of the failure of national and local governments to provide many services in the areas of education, health, and welfare (Tripp 1994 In South Africa, where the civics movement in the black townships—involving rent and service charge boycotts against illegitimate local authorities—was an important part of the anti-apartheid struggle, women played important roles, although they were absent from leadership positions. South African women were also actively involved in resisting squatter removals and in squatter upgrading struggles (Gwagwa 1991).

The second major trend is one of adaptation of the state to new urban realities. Many studies of Africa now focus on the dynamic changes taking place within civil society and the informal sector, stressing an incipient accommodation that the urban poor and both municipal and national authorities are in the process of reaching (Dauda 1998; Potts 1997;Tripp 1997). In this accommodation, formal civil society

² Jellinek's (1997) superb account of the rise and fall in the fortunes of a Jakarta food-stall operator illustrates this point extremely well. Sumira, the senior wife of a casual laborer, lived with her husband and his extended family in her own house. Her business, and through the benefits she could extend, her relatives and friends, prospered until she was forced to move from a good location in the central business district. The move from a privileged location, in addition to other difficulties and competition from off-street restaurants, led to her eventually abandoning her food cart and setting herself up in another location as an itinerant food seller. A combination of factors, including police harassment, low income, and the demands of her extended family eventually caused her to abandon this activity.

groups play an ambivalent role. For example, many African governments are deeply suspicious of local NGOs, because of their alleged foreign support and influence and because of their connections to alternative political formations (Gariyo 1996). As a partial result of this, the NGOs' relations with the state are somewhat problematic. In South Africa, where NGOs and service organizations, or professional associations that supported anti-apartheid community-based organizations, were so important before the 1994 democratic elections, international donors reduced their support for NGOs and other civil society groups once legitimate local governments had been elected locally. Professionals and activists, in turn, began to migrate from civil society organizations to government and the business sector (Marais 1998, chapter 7). In the case of South Africa, these challenges to the NGO sector are occurring in a country whose government is positively disposed towards NGOs. However, changes are taking place more generally in cities—including reduced levels of rural-urban migration in many Sub-Saharan countries; a greater role for community-based and self-help activities in the areas of popular housing, health, and education; institutionalization of informal agricultural production in the cities without significant obstruction from municipal authorities; and a wider spread of small-scale commercial activities in both central city streets and local markets—that reflect the fact that local authorities are beginning to come to terms with the reality of a large, low-income population. This means that the way in which African cities function on an everyday basis is more representative of the culture and social structure of the majority of their populations than was the case in the past.

Violence and Civil Unrest

In many cities, rising levels of urban violence and insecurity emerged as an inescapable issue in the 1990s (Ayres 1998). For some writers, civil society organizations offer a buffer against conflict and urban violence. In a study of local perceptions, causes, and effects of urban violence in poor communities in Jamaica, Moser and Holland note that there were on average three murders per day in 1996 and early 1997. Violent crimes "tend to be geographically concentrated in poor urban communities, with more than half of them occurring in Kingston and St. Andrew, and almost three-quarters of murders and more than 80 percent of shootings taking place in Kingston, St. Andrew, or Spanish Town in 1994" (Moser and Holland 1997, p.1). Based on discussions and focus groups involving local people, the study shows that violence restricts people's movements outside their communities, restricts their access to existing jobs, reduces the incentive for businesses to invest, keeps children from regularly attending school, and prevents communities from investing in housing and community infrastructure. Not only labor training, but social capital—which incorporates levels of trust and local associational life—must be supported and strengthened, the authors argue.³ A complementary premise underlies the argument of Charles Reilly, who, as do other social scientists, holds that membership in NGOs and social movements "afford[s] their members opportunities to express their views and to participate in decisions, while their leadership learns something of responsiveness and accountability. This experience of 'secondary' citizenship in the associations of civil society multiplies opportunities for negotiation, competition, contained conflict, and the search for consensus" (Reilly 1995, p.2).

However, the growth of civil society in the face of localized economic stress can result in political unrest under certain circumstances. Despite broad economic advances and general democratization, many examples of civil unrest have taken place in Latin America: "[f]or example, the 'el caracazo' social explosion which occurred in Caracas in February of 1989; the assaults on supermarkets and stores in Buenos Aires in May/June of 1989; the burning of the political homes of public functionaries in Santiago de Estero in December of 1993; and the taking to the streets by pobladores in Curanilahue, as a protest for

³ According to the authors, social capital can be built up if local projects work with established community-level institutions, such as integrated community spaces, including sports facilities, teen centers, and training facilities. Other kinds of social capital investments the authors proposed included support for conflict resolution programs, drug abuse counselling, family life education and parenting courses, and career guidance and job placement services (Moser and Holland 1997).

the closing of carbon mines in Chile in 1994" (Rodriguez and Winchester 1995, p. 18). Because many of these outbursts were related to social and economic dislocation, they have been systematically analyzed by Walton and Seddon (1994) as part of two processes: local responses to austerity and emerging democratization. Out of 146 austerity protests that occurred between 1976 and 1992 (reaching a peak in 1983–85), 62 percent were recorded in Latin America and the Caribbean, 13 percent in Eastern Europe, 10 percent in Africa, 8 percent in North Africa and the Middle East, and 6 percent in Asia. In Latin America and the Caribbean and Eastern Europe, a demonstrable connection existed between the organization of civil society in the process of opposition to the local state and eventual democratization. Walton and Seddon made the plausible argument that to some extent democratization flowed from protest activities because local groups themselves, including labor unions, neighborhood associations, religious groups, women's organizations, and the like, increasingly made the connection between accepting austerity and popular sovereignty. "If everyone is expected to sacrifice in the interests of economic reform, then everyone should have a voice in deciding how sacrifice is meted out and what reforms are adopted" they suggest (Walton and Seddon 1994, p. 337). Their examples show that most of the protests—although they may have appeared anomic and spontaneous at times—involved groups that had previous experience at the local and community level.

Environmentalism and Local Civil Society in the North

In the northern countries, the development of an environmental movement that had strong roots in local communities played a similar role in expanding the notion of local governance. In North America, the beginnings of serious concern over the effects on people's health of nuclear fallout from atomic testing led scientists to the investigation of the potential dangers of new pesticides. Carson (1962) dramatized the impact of new chemicals on both forests and wildlife, emphasizing the deterioration in quality of life that would ensue in local communities. The pollution of the Great Lakes and a number of major oil spills (beginning with the Torrey Canyon disaster off the English coast in 1967, followed by the blow-out of an oil-rig off Santa Barbara, California in 1969) helped to create and maintain a high level of public apprehension over environmental risk. These concerns were nourished—both in Europe and North America—by the increasing prominence among the public of what Inglehart has called postmaterialist values. In the affluent societies of the postwar period, in which basic human needs such as employment security, housing, and material possessions were satisfied to a relatively high degree, a shift to nonmaterial needs such as self-expression, esteem, and aesthetic satisfaction became much more prominent. Surveys in nine major European countries showed, for a large group of respondents, a strong clustering of five nonmaterialist goals: "more say on the job," "a less impersonal society," "more say in government," "ideas count," and "freedom of speech." In seven of the nine countries, the goal of "more beautiful cities" was also strongly associated with the first five items. However, materialist goals such as "strong defense forces," "fighting rising prices," "achieving a stable economy," "fighting against crime," "economic growth," and "maintaining order" were strongly clustered for another group of respondents (Inglehart 1990, pp. 137–39). In most countries, postmaterialists tended to be younger, more educated, and affluent and to live in more urban and industrial regions of their countries.

Postmaterialist values have proved to be a strong support for environmentalism. Thus, in 1985, among materialists in an opinion survey of the countries in the European Community, 37 percent "strongly approved" of the ecology movement, while among postmaterialists the approval level was 53 percent (Inglehart 1990, p.267). While 0.5 percent of the materialists claimed to be members of an environmental group, 3.3 percent of the postmaterialists—or nearly seven times as many—did so. These value and behavioral changes have also had a direct political impact, as Inglehart (1997b, pp. 242–43) notes:

The Materialist/Postmaterialist dimension has become the basis of a major new axis of political polarization in Western Europe, leading to the rise of the Green Party in West Germany, and to a realignment of party systems in a number of other countries. During the

1980s, environmentalist parties emerged in West Germany, the Netherlands, Belgium, Austria, and Switzerland. In the 1990s they made breakthroughs in Sweden and France and are beginning to show significant levels of support in Great Britain. In every case, support for these parties comes from a disproportionately Postmaterialist constituency...Pure Postmaterialists are five to 12 times as likely to vote for environmentalist parties as are pure Materialists. Environmentalist parties are not yet strong enough to govern independently and may never be so; but they have successfully advocated environmental protection policies in each of these countries and have forced the established parties to adopt stronger environmental protection policies in order to compete for their voters.

Survey work outside North America and Western Europe in the 1980s and early 1990s showed that the materialist-postmaterialist dimension is not restricted to industrial countries. The patterns hold, although they are less polarized, because fewer people have lived with higher levels of affluence, education, and security over time, in countries such as Brazil, India, Mexico, Nigeria, and South Africa (Abramson and Inglehart 1995).

Overall, support for environmental groups increased considerably during the 1970s and 1980s in all parts of the world, however, the trend is better documented in North America. In Canada, for example, the government listed 344 "citizens' environmental organizations" in 1973 (Macdonald 1991, pp. 98–99). By the late 1980s this number had risen to about 1,800, with a membership exceeding 1 million people, or about 4 percent of the total population of the country (Government of Canada 1990). In the United States, a poll conducted by Resources for the Future found that 7 percent of the whole population considered themselves "environmentally active," while another 55 percent said they were sympathetic to the aims of the environmental movement (Sale 1993, p. 44). In 1990, a Gallup poll found that 76 percent of U.S. citizens "called themselves environmentalists, and half contributed to environmental organizations" (Sale 1993, p. 80). By 1991, the larger national environmental organizations estimated membership was no less than 14 million individuals, or about one in every seven adults in the country.

Although membership and contribution figures in the large environmental organizations were falling by the mid-1990s (largely, observers suggested, because of the parlous state of the economy, which reduced the marginal propensity for donations), the environmental movement had already had a major impact on local activism. This was particularly evident in the area of solid waste management—whether the concern was toxic industrial wastes or the siting of a refuse dumpsite at the neighborhood level. This grassroots activism, which was often focused on the municipalities responsible for land use and effluent control regulations affecting the communities where people lived and raised their children, was much more heavily influenced by the participation of women than were the large national organizations. One of the most lasting legacies of the environmental movement—at least in industrial countries—is the greater involvement of a wide range of local groups in the local governance process.

Civil Society, Municipal Government, and the Environment: The Case of Thailand

Involvement of community and other environmental organizations in local governance does not always coincide with a higher level of municipal performance, however, which is true even in strictly environmental fields. A comparative study of two medium-sized cities in Thailand (Chiang Mai and Hat Yai, with populations of 173,000 and 157,000 in 1995) looks at municipal politics and performance in the important area of solid waste disposal. Chiang Mai is still struggling to find a solution for its solid waste problem, which has engaged people in the city and politicians for many years. Hat Yai, however, has consistently won national cleanliness and orderliness contests run by the national municipal league of Thailand and the Ministry of the Interior (Kokpol 1998). Chiang Mai's failure to solve its urban environmental problems adequately, is not, however, related to a lack of community involvement in the issue. Compared with Hat Yai, civil society groups in Chiang Mai have organized significantly more activities, such as Walk for a Better Environment, the Recycle Paper for Trees project, and other activities.

Indeed, survey findings show the overall proportion of the population involved in associational activities in Chiang Mai is much higher with 29.6 percent, than in Hat Yai, where 15.9 percent of the population participate. "Such observations suggest," argues a Thai researcher, "that active civil society (in this area at least) appears to be related to worsening waste management problems and the incapacity of the municipality to deal with the problem" (Kokpol 1998, p. 317). Moreover, the waste management issue was at the forefront of the 1995 municipal election campaign in Chiang Mai, where high electoral turnout removed the previous administration from office. Civic groups, such as business associations, the Village Boy Scouts, and the Thai Territory Defense volunteer group play an important role in municipal politics in Chiang Mai, and successful local politicians have used these groups to mobilize voters (Kokpol 1998). In general, this case shows that success in municipal performance—as measured by a high visibility issue—is related more to such factors as local political leadership, the availability of adequate resources to manage the problem, and the maintenance of good relations with the central government, than it is to the level of mobilization of local civic groups. Civic mobilization takes place in response to problems, rather than as a solution to them.

Components of the Local: Democratization

Just as the activism of local groups and communities is to some extent a response to forces and influences that originate outside national boundaries, so are the local institutional changes that have begun to widen the process of democratization at the municipal level. The increased importance of democratic forms at the local level is related to a worldwide wave of democratization from the late 1970s through the 1990s. A democracy in the 21st century may be understood as a system in which the "most powerful collective decision makers are selected through fair, honest, and periodic elections in which candidates freely compete for votes and in which virtually all the adult population is eligible to vote" (Huntington 1991, p.7). As such, democracy implies the concurrent existence of freedoms to speak, publish, assemble, and organize and of the active functioning of more than one major political party to give voters a choice of alternative leadership groups. Beginning in 1974 in Portugal, and eventually spreading outward, a wave of democratization engulfed more than 30 countries in both industrial and developing areas. During this period, regimes changed from authoritarian structures to democratic systems in 11 one-party systems, 7 regimes based on personal rulers, 16 regimes that had been under military control, and 1 regime (South Africa) that had been dominated by a racial oligarchy (Huntington 1991). For states with a population greater than 1 million, the years 1973–90 saw an increase in what could be classified as democratic states from 30 to 59, and a decrease in nondemocratic states from 92 to 71 (Huntington 1991). While a few states slipped from democratic to nondemocratic rule during this period, the overall democratic trend was particularly marked during the 1970s and early 1980s in Latin America, where democratic transitions took place in such major countries as Argentina, Bolivia, Brazil, Chile, Ecuador, and Peru, and in the late 1980s and early 1990s in the former Soviet Union and Eastern Europe. This trend continued during the 1990s, to the point where Freedom House estimated that by 1999, 88 of the world's 191 sovereign states could be considered as "free," "meaning that they maintain a high degree of political and economic freedom and respect basic civil liberties" (Karatyncky 1999, p. 1). In addition, 117 states could be considered valid electoral democracies, "based on a stringent standard requiring that all elected national authority must be the product of free and fair electoral processes" (Karatyncky 1999, p. 3).

Although authoritarian governments at the national level can coexist with relatively democratic institutions at the local level,⁴ as has been the case in a few countries, democracy at the national level usually

⁴ For example, during most of the period, starting in 1996, that Nigeria has been under military rule, local government elections have taken place. Ecuador, which was under military rule in 1972–78, maintained elected local governments during this time. Finally, Brazil, which was ruled by a military regime in 1964–85, maintained the formalities of municipal autonomy and retained municipal elections "with the exception of 201 municipalities that

leads to a meaningful form of democratic government at the local level.⁵ The reasoning behind the apparent paradox of the first statement is that authoritarian governments are often prepared to support democratic institutions at the local level—when they have little power—to legitimize their rule. However, when politics (for whatever reasons) becomes open and democratic at the national level, the culture of democracy is inconsistent with authoritarianism at the local level, because people tend to demand more access to political institutions. In Eastern Europe and Latin America in particular, elected municipal councils have proliferated over the political landscape, bringing new forms and styles of governance to a large segment of the population. According to one estimate, democratically chosen executive and legislative officials are now found in more than 13,000 units of subnational government in Latin America (Campbell 1996). In all Latin American countries except Costa Rica the mayor was elected by the mid-1990s (Nickson 1995). This expansion of local democratic government, as the examples of Brazil, India, and South Africa demonstrate, has been substantially reinforced by innovative constitutional reforms.

South Africa

In South Africa, where formal municipal democracy existed previously for a restricted population, municipal democracy is now a functioning process for the whole population (Swilling 1997). The whole process of institutional change in South Africa began in the 1970s with the powerful movement to eradicate apartheid in which organized workers, students, youth, women, and urban residents were mobilized against both national and local state structures. This movement led to local negotiating forums in the 1990s that brought organized civil society into direct contact with government representatives. This remarkable "bottom-up transformation of local government according to non-racial and democratic principles" (Swilling 1997, pp. 226–27) has been influential in new thinking about urban governance throughout the continent. Aside from the active involvement of civil society groups, which led to the current institutional framework, local government in South Africa stands out in another respect; local government in South Africa is elaborately described, and even protected, by the country's constitution.

The new South African Constitution, which was formally adopted in 1996, devotes a whole chapter to local government (Government of South Africa 1996, chapter 7, which contains 14 separate articles). Among other things, this chapter (p. 65) states that the objectives of local government (including municipal government) are "(a) to provide democratic and accountable government for local communities; (b) to ensure the provision of services to communities in a sustainable manner; (c) to promote social and economic development; (d) to promote a safe and healthy environment; and (e) to encourage the involvement of communities and community organisations in the matters of local government" (Section 152). In managing its administration and planning processes, the constitution requires municipalities "to give priority to the basic needs of the community and to promote the social and economic development of the community" (Section 153, p. 65). The system is still in a process of transition, to be finalized in a structural form following the 1999 elections. However, in 1998, there were 843 municipalities in the country, with over 11,000 democratically elected councilors (Government of South Africa 1998). The majority of these councilors represented communities that had little or no say in government during the apartheid period.

were either state capitals, national security zones, or mineral-producing areas, where executive heads were appointed by the military. Nevertheless effective autonomy was greatly reduced" (Nickson 1995, p. 119).

⁵ Two exceptions are worth noting. Ghana, where national multiparty elections have recently taken place (1995) according to a democratic format, established district assemblies in 1988 in both rural and urban areas. Two-thirds of the members of these assemblies are elected by their constituencies; the other third and the district chief executive who heads the assembly are appointed by the central government. In Costa Rica, where a national multiparty system has been established for some time, municipal councillors are elected, but mayors are not. The executive head of the municipality is a manager appointed by the municipal council.

India

Constitutional reform has also played an important part in municipal revitalization in India. Although India is a federal, democratic state of long standing, for many years state governments exercised their discretionary powers over local, largely municipal, authorities in the form of supercession. By the early 1990s, close to half of all municipal governments in India were under supercession by their state governments. In this situation, the state directly appointed all chief executives and the state governments managed the municipal governments' finances. According to many, "State governments in India [had] used their powers of suspending or dissolving the municipal bodies too liberally, based mostly on political considerations but occasionally sometimes on technical-administrative grounds" (Mathur 1996, p. 117). After many years of discussion, a 1992 amendment to the Constitution (the Constitution [Seventy-fourth] Amendment Act, 1992 on Municipalities, Government of India 1992) reorganized municipal fiscal relations and at the same time significantly weakened the controls over representative municipal councils that higher levels of government had exercised. (A parallel amendment dealt with rural councils, or *panchayats*.) Among the innovative elements of this important constitutional amendment are the requirement for state governments to reconstitute representative municipal councils within six months of their dissolution; the attribution to municipal governments of such tasks as poverty alleviation and planning for economic and social development; the setting up of finance commissions at the state level with the object of improving the financial position of the municipalities; and the requirement that one-third of all the seats in local bodies, including the positions of chairperson, be reserved for women. By the end of the decade, a prominent authority estimated that about 100,000 newly elected officials—many of them women—had entered the political system (Sivaramakrishnan 2000).

Brazil

A third example of constitutional reform with the effect of strengthening democratic local government is Brazil, whose 1988 Constitution strengthened municipal autonomy, validated the participation of community groups in municipal decisionmaking, and extended important social and economic policy functions to municipal authorities. Under the new constitution, municipalities were given the opportunity to establish "organic" laws, which means that they may structure their own operations and set up what are called municipal boards. These boards, in turn, have the formal function of mediating between the local government and organized civil society. A study of the organic laws of the 50 largest Brazilian cities documented that all but three of these cities had created such municipal boards. Thus, the study noted 20 urban development boards, 22 transportation boards, 6 housing boards, 2 sanitation boards, and 35 environmental boards (Ribeiro 1995). The most important functions of these boards were health and education, which were defined in the new Constitution as municipal powers, with 45 and 40, respectively, having been created in the 50 cities studied (Ribeiro 1995). Aside from promoting municipal boards, 18 of the 50 cities instituted the participatory budget. Neighborhood and higher-level committees regularly discuss this budget and determine the allocation of a proportion of a city's capital allocation. Among public management reforms over the last two decades, argues one Brazilian scholar, "participatory budgets constitute what is perhaps the single most advanced experiment in the democratization of local governments" (Boschi 1998, p. 11).

A survey conducted in 1994 of 832 delegates to nine regional forums in Belo Horizonte (a city with slightly more than 2 million people in the southeast, industrial region of Brazil) showed that 45 percent were women and most had low levels of schooling, which made the group representative of the overall population. Nearly 60 percent had resided for no fewer than 10 years in their current neighborhoods and 70 percent regularly participated in voluntary organizations of one kind or another (Boschi 1998). Because the local populations were brought into a more direct relationship with administrators, the participatory budgetary system reinforced the establishment of the 9 regional (decentralized) administrations in Belo Horizonte. Other cases of participatory budgeting, for example, the case of Porto Alegre, where the city was

divided into 16 regions for community participation (Coelho 1996; Pozzobon 1998), have been studied extensively (Martins 1998; Singer 1996). Overall, the results of these studies are positive with respect to participatory budgeting. Porto Alegre increased its total tax receipts by 34 percent in 1992–95 (Pozzobon 1998), while Santos increased its total tax receipts by 41 percent over the same period (Martins 1998).⁶ The mayor of Porto Alegre claimed in an interview in 1999 that the city had “practically tripled” municipal revenues in the 10 years since participatory budgeting had been formally introduced (Pont forthcoming).

Local Democracy and Municipal Performance

While the systematic comparative study of these newly endowed municipal institutions is in its infancy, a few examples will help to illustrate the range of policy initiatives and new forms of community involvement that are playing themselves out in the local democratic process. In Mexico and Colombia, for example, certain constitutional and legal reforms passed since the 1980s have guaranteed both more autonomy for municipal governments and more respect for democratic practices. At the same time, in both countries the influence of traditional parties over urban politics has become weaker. A comparison of four cities (Barranquilla in Colombia and Cordoba, Nezahualcoyotl, and Tijuana in Mexico) in which nontraditional parties have been in power in recent years shows that, on balance, the delivery of services has improved for the population at large. This is the case, even though local participatory practices have only marginally improved (Duhau and Schteingart 1998). Other studies of municipal democracy in Latin America have been somewhat more positive. A study of 16 Colombian *municipios*' provision of three services, water, education, and roads, focused on the period after 1988 when mayors were formally elected. The study found that local people trusted local authorities more than the national government, that most of the municipal governments had upgraded the professional quality of their administration, and that many entrepreneurial mayors had been able to carry out important local reforms in the administration of local services (Fiszbein 1997). Another evaluation of municipal government in Colombia makes two major points about performance since decentralization and democratic reforms in 1988. First, municipal governments are being slowly restructured more effectively to deliver services and second, citizens and local organizations are participating more actively in the discussion of local political and financial issues. In general, says Santana Rodriguez (1995, p. 172),

Municipal institutions are slowly winning legitimacy; today, more people vote in mayoral elections than in congressional and presidential elections. Mayors are generally responsive to community pressures and to the major problems of their municipalities, among other reasons because of the political toll that poor management will take on their parties and movements. Earlier fears that mayors would take a militantly populist line or that public monies would be pillaged have been unfounded; on the contrary, municipal governments are increasing investments while reducing operating expenses.

In addition, a longitudinal study of Cubatao, Brazil, shows how local social movements were able to work with elected officials and technical experts to reduce high levels of air and water pollution in an

⁶ Paul Singer, the secretary of planning for Sao Paulo from 1989 to 1992, indicates that the participatory budgeting system involved both positive and negative elements: "In Sao Paulo, during Luiza Erundina's government, popular participation in budgeting took several forms. One primary form was the creation of municipal councils for each agency, such as the secretariats of health, of education, and of housing. These councils were comprised of representatives of social movements and NGOs related to their activities. They played a very active role in the preparation of the estimates for the budget proposal. The councils interacted with the officers in allocating funds inside the secretariats, making the policies so adopted more responsive to the needs of the users (actual and potential) of those services. Besides that, the councils certainly contributed to expanding the estimates by pointing out the large amounts of still unmet demands. This intensified the struggle for funds among secretariats inside the government, the outcome of which was largely determined through arbitration by the mayor and her secretary for planning. In this experience popular participation was effective in improving the intrasectoral allocations of funds but frustrating to the extent that it heightened conflicts, contributing thereby to the closing of the process" (Singer 1996, pp. 117–18).

industrial city once democratic governance was restored at the state and urban level (Lemos 1998). Overall, a World Bank study suggests, decentralization and democratic reforms in Latin America amount to a quiet revolution in local governance, in which more educated and professional municipal officers are elected, taxes and revenues have increased, and the community is more involved in municipal affairs (Campbell 1996).

Except for the case of South Africa, local democratization trends in Africa have been more modest than in Latin America. Based on new decentralization legislation in the 1980s and 1990s, incremental but positive improvements in municipal management and financial controls have been reported for Senegal (Diop and Diouf 1993), the Côte d'Ivoire and Burkina Faso in francophone West Africa (Attahi 1996a,b). By the late 1990s, a number of countries had functioning multiparty systems at the municipal level, including Benin, Côte d'Ivoire, Kenya, Senegal, and Tanzania. For the francophone countries, highly centralized for decades with either military regimes or single-party systems in control at the national level, this represented a major change in local governance. In the case of Côte d'Ivoire, for example, where 3,900 municipal councilors were elected in the mid-1990s, attachment to the local communes on the part of urban populations has become a remarkable phenomenon. As an Ivoirian observer comments:

The role of the communes in the daily life of the people is becoming increasingly evident. In addition to administrative responsibilities transferred by the central government, other functions exercised by the communes include the maintenance of the civil registry, military bureau, census, and public security. Communes are also active in the creation and maintenance of educational infrastructure (both secondary and primary), the maintenance of urban roads, the building of markets, public water taps and latrines, and the removal of household waste. They develop and manage residential and industrial subdivisions. All these services bring satisfaction to the people, who turn increasingly to the communes for their needs...At the local level, people now look first to the commune, in the process shifting the responsibilities of the central administration from urban to rural areas (Attahi 1996b, p. 122).

Perhaps surprisingly, the country's former president, Henri Konan Bédié, seemed to support this analysis. In public forums he extolled the virtues and benefits of democratic local government. In one address, the president observed that: "Democracy was built in an urban setting. The real challenge remains in the city, therefore and nowhere else. We should encourage citizens to reappropriate urban space by helping democracy that is local and close to them to flourish" (Bédié 1998, p. 5). In his remarks, the president went on to support local "associative life and neighborhood councils" and to comment favorably on the increasing tendency of citizens to contact their mayors for their needs (Bédié 1998, p.5). In the specific case of Adjamé, one of the 10 constituent communes of the city of Abidjan, the current mayor represents a political party in opposition to the governing Parti démocratique de la Côte d'Ivoire. Since the early 1990s, this commune, with close to 1 million inhabitants, has in the words of a *New York Times* observer "been all but transformed. Once trash-filled streets are now kept clean by broom-wielding city workers. A multistory African-style market is rising to replace a warren of cluttered and dangerous side streets that served as the neighborhood's informal bazaar. And white-smocked inspectors regularly make the rounds of the community's innumerable cafes ensuring that food served to the working class population is not only cheap, but sanitary" (French 1998, p. 4). The mayor attributes these changes, at least in part, to the competitive electoral system. "What is being done here," he says, "represents a night and day change from the past, when elections were formalities and the office of mayor was largely an honorific title. We have managed to triple our budget by raising local taxes, and nobody has complained because they see that local government is giving them valuable services for the first time" (French 1998, p. 5).

Components of the Local: The New Localism

As global changes affect local government areas—especially municipalities and urban regions—local political responses are not necessarily passive or even incoherent. The combined effects of heightened civil society activity in many countries (for example, environmental movements, identity groups with claims for recognition, local organizational representatives of global NGOs), decentralization giving more powers to local governments, and increased importance of local development strategies to attract outside capital investment in a more competitive international environment have enhanced the importance of local jurisdictions. Although much development thinking revolves around the policies of the national state, "Local officials the world over operate under heightened conditions of economic and political uncertainty. They now have social and economic roles and responsibilities that are often new and unanticipated. In each instance, global restructuring pressures compel local officials to reconstruct relations between the public and private sectors at the local level as well as to reconsider the most basic governance issues" (Clarke 1993, pp. 1–2). The important new role local officials play in this context is an aspect of what has been called the new localism. The new localism approach looks at the way cities organize and position themselves within the new globalized economic system. Features of the new localism include shifts in central-local relations, more privatization of local authority functions, the rise of local public entrepreneurs, and the construction of new development coalitions. That the city does not respond to international forces in a mechanical or automatic fashion, despite the economic logic behind these changes, however, is also made clear. Clarke and Gaile (1997) argue that this new localism gives a lot of leeway to local political coalitions and leaders, along with associated epistemic communities, to interpret the correct approach to a local definition of a policy agenda. One of the important reasons for the new emphasis on local coalitions and competitive urban strategies, they point out, is the cutting of national funding to community programs and their indirect replacement with transfer payments to individuals.

Competitive Urban Strategies in the United States

Many researchers, working within the new localism approach stress the strategic choices available to cities within the context of the emerging global economic system. One of the more systematic approaches to this question is a widely read book, *World Class*, by Kanter (1995). In this study, the author explores (mainly within the American experience) the varieties of responses that local governments in partnership with businesses have been promoting since the 1980s. Kanter based her arguments on thousands of interviews with business leaders, public officials, and community leaders in five major urban areas of the United States. She argued that world-class cities, or cities that are successful in meeting global challenges, must excel in at least one of three main roles: as "thinkers" (developers of concepts and ideas), as "makers" (manufacturers or producers), or as "traders" (making connections between cultures and countries). In the process of developing these abilities, cities need certain successful core institutions that attract business (or develop it locally) in the first place, but they must also create and maintain a civic and social infrastructure that will hold businesses in place. Some might dispute her choice as to those cities that are successful,⁷ but Kanter (1995, p. 364) argued that cities must achieve a balance between the needs of locals and cosmopolitans:

⁷ For example, Shuman (1998, p. 3) argues that Cleveland has not been as successful as Kanter and others have portrayed it. "Beyond the hype about the new Cleveland...are some disquieting facts. Over the past 35 years, nearly half the city's population has moved to the wealthier suburbs, creating an explosive level of economic and racial segregation: Three out of four poor African-Americans live in impoverished neighborhoods in Cleveland; three out of four poor whites, in contrast, live in more affluent areas. A quarter of a million people—42 percent of its residents—live below the poverty line...Two out of three kids never graduate from high school... In the quest to find lower-wage venues elsewhere in the world, local industries have taken 96,000 high-paying manufacturing jobs out of the city since 1979, with offsetting job growth occurring primarily in low-pay professions like sales and clerking."

The need is urgent in many places. America's cities and surrounding regions must strengthen their infrastructure for collaboration in order to solve pressing urban problems of crime, education, housing, and welfare that trap local isolates in a cycle of disadvantage. Deteriorating quality of community life not only hurts locals directly, but also encourages cosmopolitans to take their concepts, competence, and connections—and their jobs—elsewhere. Cities and their regions must strengthen their community problem-solving and skills-building capacity in order to compete in the global market for investment.

In a recent comparative study of 15 medium-sized American cities Clarke and Gaile (1998) take a closer and more nuanced look at the urban response to global economic restructuring. Their findings stress the new reality of the local policy context as it has been differentially shaped by a variety of external and internal forces. Taking their cue from Reich (1991), whose book *The Work of Nations* argues that nations must change their policy agenda in the face of a new global capitalism, Clarke and Gaile propose that the work of cities must also change. Not only will decisionmaking power shift from national arenas to both supranational and to local-regional arenas, but they argue that successful communities will be those that are able to "reinvent local citizenship." This reinvention would take place through policies that value and reward education and training, while mitigating social polarization and segregation. However, in this enabling—and risky—environment, cities will choose contextually specific paths, "in part because their constitutional, economic, and social features vary, but also in response to political configurations at the local level. [Thus] there is no 'silver bullet' promising successful local adaptation to a global era" (Clarke and Gaile 1998, p. 8).

Best Practice Outside the United States: By Design or Circumstance?

Outside the United States, the experience (and the advice offered) is more uneven. An important comparative study of nine northern and southern cities' responses to structural adjustment yields two interesting, if inconsistent, observations. On the one hand, cities in both the north and the south have reacted to structural adjustment and to the ensuing package of macroeconomic reforms (privatization, downsizing of the public sector, loosening of regulations, freeing of exchange rates) by taking a more active role in thinking about their future, creating new public-private coalitions, developing plans to improve modern urban infrastructure, and promoting themselves internationally through conventions, sports, and cultural events (Harris 1996). On the other hand, echoing some of the points made by Clarke and Gaile, a synthesis chapter in the same book points out that the comparison between northern and southern cities does not yield easy conclusions:

Although there have been many attempts to identify good practice by city governments, and by public-private partnerships, in confronting the problems that result from economic structural adjustment, the transfer of policies from one context to another is a process with some dangers. Differing resource levels, political and administrative structures and even geographical locations may mean that an approach or a policy successful in one city may be less successful, or just infeasible, elsewhere. Although the problems of cities undergoing structural adjustment may be easy to identify and fairly ubiquitous—a decline in manufacturing, rising unemployment, inner-city decay and dereliction in industrial and port areas, and strong negative social effects—a single policy prescription is unlikely to meet the needs of all, or even most cities (Lever 1996, p.93).

Aside from sheer difference and complexity, cities have a more general reason to pay attention to their own specific contextual circumstances. While the world market in which the successful compete is not completely fixed, the successes of some may very well imply the failure, or even marginalization, of others. Many writers have pointed to the decline of certain regions (even within the United States) as a result of global competition; however, decline extends also to major groups of countries, and even to large parts of continents such as Africa (Castells 1998). In the end, the new localism model of urban

strategic choice cannot embrace all cities, because all do not have the required resources and institutions that can respond to the challenges of the larger market. Poorer cities—particularly in developing countries—may engage in this competitive process only if they can formulate a coherent approach to development that recognizes and incorporates the full range of their people (and not just the elites) that receives support from higher levels of government and that involves genuine collaboration with other cities, either in the North or the South (Stren 2000).

Decentralized Cooperation

The necessity for collaboration is one of the important factors behind the rise of decentralized cooperation over the last decade. This approach to development involves groups or associations of cities helping each other directly, rather than operating through orthodox development channels defined by their national governments. By the late 1990s, two major, broad-based international associations of municipalities: the International Union of Local Authorities, founded in 1913, and the United Towns Organization, founded in 1957. While the International Union of Local Authorities is largely based on national associations of municipalities, the members of the United Towns Organization are mostly individual cities and have a formal membership approaching 2,500. In addition, two international associations' members comprise only major metropolitan areas (Metropolis and the Summit Conference of Major Cities of the World [Summit]). These four organizations, together with a number of regional municipal organizations, became known as the G4+ group and were responsible for important municipal contributions to the Habitat II conference in 1996. In addition to the broad-based organizations, a plethora of thematic or regional groups exist. These include such organizations as the Healthy Cities Network, which includes some 400 cities; Sister Cities International, which includes some 1,040 American cities twinned with more than 1,800 cities in 113 countries; and Medcities, a network of 18 Mediterranean cities (Gilbert and others 1996, chapter 4). Among the explanations for the rapid rise of these networks for cooperation between cities are the relatively low cost and flexible arrangements possible in city-to-city project assistance and the high level of interest among community groups and NGOs in northern cities in support of partner cities in the south.

A good example of the scope of north-south partnerships that have developed over the last decade is the Municipal Partnerships program of the Federation of Canadian Municipalities (FCM). This program, largely funded by a grant to the FCM by the Canadian International Development Agency currently includes 46 municipal partnerships involving largely small or medium-sized Canadian cities and their counterparts in 15 countries. Typically, the individual partnerships involve some matching by FCM staff at the outset, followed by visits and meetings by municipal officials from both sides. The meetings are businesslike and in most cases result in small-scale projects that are funded by a combination of resources raised by Canadian community organizations, such as Rotary or Lion's clubs, and grant funds indirectly channeled from the Canadian International Development Agency allocation. While FCM officials use their working time to perform partnership activities, many of the municipal officials in Canada use their own time (holidays or time without pay) to participate. In many cases, Canadian municipal officials pay for their own travel and that of their spouses. The programs are judged to be successful because of their relatively low cost, the widespread involvement of community groups in both the north and the south, and the fact that close professional and personal relationships are established on both sides, lasting over a relatively long period. Most of the projects in this program involve sharing expertise and technology and focus on the improvement of municipal management and governance.

Conclusions

We are only beginning to understand some of the institutional and political effects caused by the tendency toward globalization in the world of the early 21st century. As we globalize, we also localize. The emergence of various components of a new localism can be seen in three important ways, each of

which reflects a different institutional logic. First, we can observe the growing importance of organized civil society, particularly in countries in the developing world, but also in the north, as refracted through the environmental movement. Civil society organizations and social movements emerged as central actors in Latin America during the 1960s and 1970s, when more direct forms of institutional demand-making were not available in many countries. These organizations left in their wake a strong NGO network that is increasingly working with municipal governments to improve services and participatory structures for the relatively disadvantaged majority. In Africa, where civil society and associational life has been slower to develop (except in South Africa), global forces have created an amorphous informal sector that gives increasing importance to women and to nonstate initiatives at the local level. In the north, new concern for the local arises to a significant extent from attention to and concern with environmental risk. It is at the local level that community groups confront their anxieties over unregulated toxic emissions by attempting to influence municipal by-laws and regulations.

As civil society becomes more organized and effective, municipal institutions have been democratizing. Some direct connection between these trends exists in that more active civil society both requires and responds to more participatory local structures. However, decentralization and local responsibility is also a response to global financial imperatives. In any event, local elections (and elected mayors) and multiparty electoral choice have become increasingly common in Latin America and in parts of Africa, South Asia, and South-East Asia. In many cases—such as in Brazil, India, and South Africa— this expansion of local democratic government has been substantially reinforced by innovative constitutional reforms. Although the full evidence is not yet in, encouraging signs indicate that municipal performance is improving in response to democratization. If this is indeed a consistent trend, municipal institutions will attain much more than constitutional and legal justification; they will begin to attain legitimacy.

Given an emerging civil society and democratic municipal institutions, the third political element of what we can call the growing importance of the local has to do with how communities make choices. For better or for worse, local political coalitions in consort with important groups from civil society are attempting to position their cities and towns in such a way that they can maximize what they consider the opportunities to be gained from the global system. This may involve campaigns against crime or plans to improve the local environment to attract tourists, or it may involve strategies to reduce local taxes or develop a more comprehensive educational system to attract outside investment. In either case, municipal officials and their attentive publics are increasingly sensitive to the potential benefits of competitive strategies. By the same token, cities that do not have the resources to attract outside interest and investment may find themselves even more bereft and impoverished. To reduce the potential for such polarization, international assistance focusing on city-to-city programs is growing enormously in number and in popularity. Decentralized cooperation, operating at a global level, reinforces the importance of the local.

What practical implications can we draw from these trends? Three seem to be top priority. First, we need more systematic information on and comparisons of emerging municipal institutions. With this information, we will have a much better idea of what works and what does not under specific circumstances. With a more robust database that includes both contextual and technical information on the functioning of local institutions, we can help the more marginal local governments to better understand some of the options available. A second and related implication is that we need to find ways for local governments to connect with each other, across national boundaries, to seek both ideas and assistance. We need to be able to support this process. Finally, we need to think about more systematic ways of incorporating local communities and municipalities into our conceptual frameworks about development. Until now, the development literature has concentrated on the international and the national arenas. However, as local communities and local governments become more prominent actors in the political and economic life of both nation states and the international community in general, we need to recognize their presence to incorporate this new level of action into our plans and projects.

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10

Crime As a Social Cost of Poverty and Inequality: A Review Focusing on Developing Countries

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When rural life was still dominant in today's industrial countries, villagers often saw cities as the domain of evil and the realm of corruption and violence. At the time, the process of accelerated urbanization and economic development was seen as being inherently wicked. The widely publicized criminality and violence observed today in several metropolises in both industrial and developing economies seems in hindsight to justify this bucolic bias. The alarming surge of crime and violence in Mexico City, Rio de Janeiro, or São Paulo during the last 20 years may indeed be the result of the excessively rapid growth of these megacities. Similarly, the increasing minor criminality experienced today in many large cities' suburbs in industrial countries might be the delayed consequences of an urbanization process that was too quick and insufficiently controlled.

Yet all experiences are not alike. Big cities exist where crime and violence rates are at tolerable levels and have shown no sign of increasing in line with the cities' geographic or demographic size. These cities may have other problems like pollution or congestion, but they show that urbanization is not necessarily an evil and that economic development does not necessarily bring with it crime, violence, and, more generally, the erosion of social capital. Other conditions must be present for such an adverse evolution to take place. Identifying these conditions is important for minimizing the negative social externalities of economically profitable urbanization and development.

Many explanations exist for differences in criminality across countries or cities and its evolution over time. The most important causes are probably sociological or cultural. In this chapter we focus on causes that may be directly related to economic phenomena and, in particular, on two variables that have been repeatedly considered potentially powerful determinants of crime and violence: poverty and inequality. The economic motivation behind crime is essentially the appropriation of somebody else's property. Another motivation is the pursuit of illegal activity even at the risk of being caught and punished. Therefore, criminal offenders are likely to be found among those who have relatively more to gain from these activities and relatively little to lose in case they are caught. Individuals such as these presumably belong to the neediest groups in society, their number being greater and their motivation being stronger the more unequal the distribution of resources in society. If this is the case, then important questions to ask about the possible negative social externalities of urbanization are why this process may generate in some instances more poverty and inequality and how this may be remedied.

By focusing on the possible economic causes of urban crime and violence, we do not want to imply that other determinants are less important. Again, the major causes for differences in crime rates among countries or cities are probably found in cultural and political alienation, ethnic conflicts, media violence, inappropriate role models, and other related phenomena. Even though economists may have something to say, their views on all these issues are likely to be of secondary importance compared with those of criminologists and sociologists. Therefore, the main question we address in this chapter is whether economic conditions, and, in particular, the extent of absolute and relative poverty, may be considered

significant determinants of crime, together and possibly in connection with the preceding social factors. We will also address the independent issue of the economic cost of crime.

Even though the economic determinants of crime and violence may be considered essentially empirical, we also look at the issue of economic determinants from a theoretical perspective. The need for some theoretical analysis arises from the fact that the relationships among poverty, inequality, and criminality are not as simple as the preceding argument would suggest. In particular, keeping in mind that crime deterrence and protection expenditures are endogenous is important. As these factors may depend on the degree of inequality, the effect of inequality on crime is, on balance, not clear. Another concern that justifies some theoretical analysis is that casual observation suggests that property crime, which corresponds to the simple economic model alluded to earlier, is neither the only type of urban criminality nor the only cause of urban violence. Deadly gang wars across poor neighborhoods and murders and crimes caused by or linked to alcohol, drug consumption, and drug dealing are in many large cities of the developing and industrial world the everyday expression of urban criminality and violence. Can some economic model explain the appearance of these phenomena and their deleterious effects on the communities and neighborhoods where these types of activity take place? Or, again, is the explanation to be mostly found elsewhere?

The need for theoretical reasoning also arises because of the paucity of relevant data measuring the importance of these various phenomena and how they relate to various economic and social factors. As we shall see, data on crime and violence are scarce and often not comparable across countries. This difficulty is even greater in developing countries. Interpreting the little evidence that is available thus requires greater reliance on deductive arguments and hypotheses borne out from simple economic analysis than would be the case if a more data-intensive statistical analysis were possible.

This being said, available evidence, even though it is limited, suggests that inequality and poverty may indeed have a significant positive effect on criminality. Cross-country differences are not inconsistent with such a view, but they may be contaminated by various fixed effects and may not be convincing. Pooled, cross-sectional time series data provide stronger evidence that changes in poverty or inequality are generally accompanied by changes in criminality and that this effect exhibits some persistence. Evidence also indicates that the social cost of crimes may be considerable in countries with a higher than average level of criminality. Rough estimates suggest, for instance, that the cost of crime may be larger than 7 percent of gross domestic product (GDP) in Latin America, in comparison with 4 percent in the United States and 2 percent or less in European countries and many Asian countries. Still higher figures would be obtained in the case of Latin America if focusing exclusively in urban areas were possible.

These various pieces of evidence taken together suggest that the social cost of any increase in inequality and poverty that occurs through the channel of higher criminality may be substantial. Under these conditions, making sure that economic development, and, in particular, the urbanization process, which is more closely related to the evolution of crime, takes place evenly and equitably is an important requirement for its overall efficiency. Alternatively, if one believes that other, noneconomic determinants of crime are more important than poverty or inequality, the preceding figures suggest that the benefit of any policy aimed at reducing the effect of these noneconomic determinants may in some cases be large.

Crime and Crime Trends: International Comparisons of Orders of Magnitude

This section must start with an important warning. Data on criminality are generally of rather bad quality. The most common source consists of police reports. However, this source is biased in that far from all crimes are reported to the police. Various reasons for this bias exist. Victims may not want to report crimes to the police because they are not easily accessible, or because they prefer to rely on their community's internal justice. Sometimes victims will not report crimes because they know that the police are powerless to apprehend criminals and obtain reparation. Sometimes they do not want others to know what happened to them. Police reports are therefore likely to yield an underestimation of criminality and to unevenly cover

different areas and different types of crimes. It may also be in the interest of the police to report inaccurate figures. In particular, under-reporting will occur if there is a need to hide inefficient performance. Victimization surveys, in which a representative sample of individuals is asked whether they have been victims of a crime, at what cost, and under what circumstances, are more reliable data sources. They also show that police reports are indeed biased. Although such surveys are currently available only in a limited number of countries and often at a single point in time, their number is increasing.

As a result of these surveys' scarcity, international comparisons must rely primarily on police report data. Because of the nature of the biases just mentioned, these data may be considered better for serious crimes, such as homicides and major robberies. They are certainly decreasingly reliable as one goes down in the hierarchy of crimes. This may be readily observed in the database maintained by the United Nations, the United Nations World Crime Surveys of Crime Trends and Operations of Criminal Trust. Series for homicides are available for a rather large number of countries, at least for some subperiods. They are apparently consistent in the sense that no abnormal change in orders of magnitude occurs in the series. Yet these series are unavailable for various countries or available for periods that are too short or too distant to be of much interest. Series for robberies are available for still fewer countries and often show inconsistencies suggesting radical changes of definition or coverage. Yet identifying a subsample where data are approximately consistent is still possible. Series for crimes of less gravity—major thefts, thefts, burglaries, fraud, and so on—are still worse and practically unusable, except for those of a few industrial countries.

We discuss here some summary statistics obtained from the homicide and the robbery series of the United Nations database. As discussed, the homicide series is likely to be the most reliable.¹ Moreover, it can be expected to correlate somewhat with the actual, as opposed to the observed, robbery rate. This is the case, for instance, if a more or less constant proportion of robberies led to the death of a victim. In effect, the correlation between both sets of series in the United Nations database is rather high. The rank correlation computed for all series after pooling all countries is 0.40.

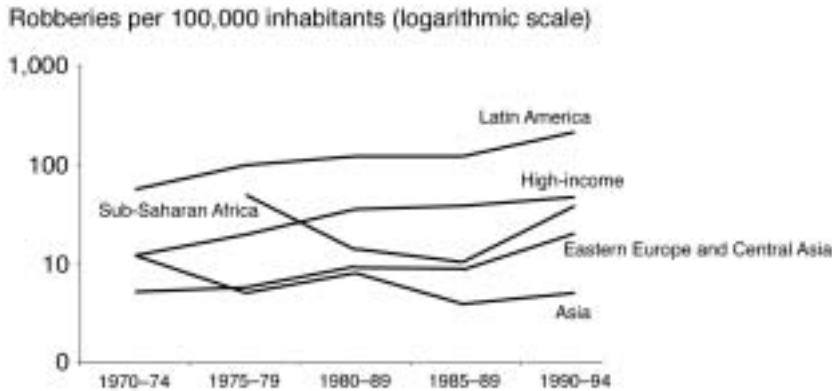
Figures 10.1 and 10.2 show the evolution of five-year average crime rates for large regions of the world, as roughly estimated using figures from the United Nations database (Fajnzylber, Lederman, and Loayza 1998). These figures refer to the median of five-year country averages in each region. Note that (a) the sample of countries may change from one period to another, and (b) the number of years for which averages are computed differs across countries and subperiods. However, as the time variation of crime rates in contiguous years is not important, the major potential source of bias is due to the changes that take place in the sample of countries. Computations made on samples comprising too few countries have been eliminated, which is the reason the Middle East and North Africa region does not appear in figure 10.1. However, some observations are of little significance. This is, in particular, the case for the 1985–89 drop in African crime rates. Following Fajnzylber, Lederman, and Loayza (1998), the median may be considered more reliable than the mean, because it is insensitive to potentially inconsistent extreme values. However, the overall picture is not that different whether one uses the median or the mean.

Before examining these figures, it may be useful to keep some orders of magnitude in mind for further reference. Because data are more reliable in high-income countries, it seems natural to use these countries as a basis for comparison. Among them, the United States stands at the upper extreme with a frequency of robbery ranging from 170 to 260 per 100,000 inhabitants in 1970–94, and a homicide rate ranging from 6.5 to 10 per 100,000 inhabitants. Criminality is roughly 30 percent lower in Europe. The United Kingdom is at the lower end of the range for large countries with a robbery rate around 60 per 100,000 inhabitants and a homicide rate below 2 per 100,000 inhabitants in 1970–94. In figure 10.1, we can see that these numbers roughly correspond to median rates of the whole group of high-income countries.

¹ To test this reliability, it is also possible to compare these series with data from the World Health Organization on causes of death, one of which is homicide. An informal calculation based on mean homicide rates from the period 1970–84 or subperiods led to a rank correlation between the two sources equal to 0.60. This is not too bad, but far from satisfactory for both sides of the comparison.

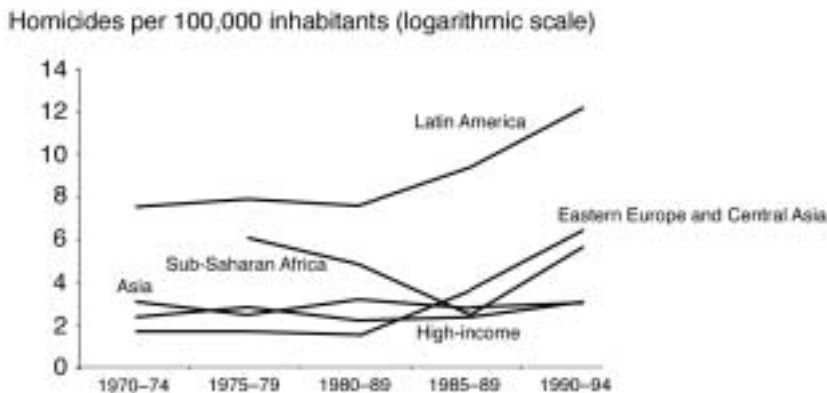
However, it must be kept in mind that all the preceding figures are national averages. Criminality would be higher if only major metropolitan areas were considered. For instance, the homicide rate in New York City is approximately twice the national average, or 20 per 100,000 inhabitants compared with the national average of 10 homicides per 100,000 inhabitants.

Figure 10.1. *Evolution of Robbery Rates: Regional Median 1970–94*



Source: Fajnzylber, Lederman, and Loayza (1998).

Figure 10.2. *Evolution of Homicide Rates: Regional Median 1970–94*



Source: Fajnzylber, Lederman, and Loayza (1998).

When looking at the different regions, the most salient feature of figure 10.1 is without doubt the extremely high level of criminality in Latin American and Caribbean countries. The level, compared with the other regions of the world, is striking. The reported robbery rates are almost uniformly comparable among Latin American and Caribbean countries to what the reported robbery rate is in the United States, that is, around 200 per 100,000 inhabitants. It is often higher, even in countries such as Costa Rica or Uruguay that one would have considered rather peaceful or nonviolent in view of their relatively

developed social services systems. The same is true of homicide rates, which probably are more directly comparable across countries. Homicide rates are close to 5 per 100,000 inhabitants in Argentina, 7 per 100,000 inhabitants in Costa Rica, 14 per 100,000 inhabitants in Venezuela, 18 per 100,000 inhabitants in Mexico, and 20 per 100,000 inhabitants in Brazil. A somewhat exceptional case is Colombia with its homicide rate of 80 per 100,000 inhabitants.

Again, these figures are severe underestimates of what is going on in cities. In 1995, the homicide rate was 80 per 100,000 inhabitants in Rio de Janeiro and 52 per 100,000 inhabitants in Caracas, as opposed to 20 per 100,000 inhabitants and 14 per 100,000 inhabitants for national figures (Londoño and Guerrero 1998). The same tendency to underestimate is probably true for robbery. Although the following figures are not comparable with robbery rates appearing in the United Nations database, Londoño and Guerrero (1998) report the results of victimization surveys where the proportion of adults who have been the victims of armed robbery in the preceding 12 months reached 9 percent in Rio de Janeiro and 17 percent in Caracas. These figures are more than ten times those of the highest police-reported robbery rates in the region. However, it is likely that the definitions of crime used in these various sources are not fully consistent with each other.

Criminality is much less of a factor in other regions of the world and, with the exception of Africa for homicide rates, more comparable with what may be observed in high-income countries. However, a serious underreporting bias for robberies in many of these countries may exist compared with high-income countries. In addition, a lot of diversity may be present behind the median rates shown in figure 10.1. For instance, the figures for Asia do not mean that criminality is uniformly lower there than in the rest of the world. The homicide rate in Thailand, 20 per 100,000 inhabitants, is one of the highest in the world and that of India is comparable with the homicide rate in the United States.

Given the lack of comparability of crime rates across countries, the time dimension in figure 10.1 may be more relevant than the cross-sectional dimension. From this point of view a clear upward trend seems to be present in various regions either throughout the period, or at least over the last 5 to 10 years. This is most noticeable for Latin America and Caribbean and the Eastern Europe and Central Asia regions, for both homicide and robbery rates. The robbery rate in high-income countries also seems to be experiencing an upward trend.

Unfortunately, considering longer historical trends in these regions with the same degree of precision is not possible. Some evidence indicates that, overall, crime and violence has been falling since the beginning of the 19th century (see Chesnais 1981). However, this process may not be continuous. For instance, the evolution of homicide rates in industrial Western societies may have followed a J curve, the bottom of the curve having been reached around 1930 (Tonry (1997, introduction).

On the whole, the few aggregate data reviewed in this section suggest that at all levels of development considerable heterogeneity is present in all countries with respect to the extent of criminality. This does not hold true when countries are grouped by regions, because of the concentration of most Latin American and Caribbean countries at the upper end of the criminality range. However, a considerable heterogeneity remains within practically all regions. The significant change in crime rates in various countries at different levels of development over the last 10 years shows that criminality is not a purely structural characteristic of society that can only change slowly and ineluctably in time with the process of economic, social, and cultural development. It is therefore important to examine the possible determinants of that evolution. The rest of this paper provides a review of existing economic theories of crime and an examination of the empirical relationship between criminality and its possible determinants.

Crime, Poverty, and Inequality: What Economic Theory Has to Say

Becker first developed the canonical theoretical model of the economics of crime in 1968, and Ehrlich (1973) subsequently gave it some empirical content. We briefly summarize the basic argument behind this model with a simple general framework that will be used throughout this chapter. Then we will discuss

the implications of the canonical model and consider various possible extensions likely to modify these implications. (A more systematic review of theoretical models of crime is available in Bourguignon 1998.)

Let us assume that society is divided into three classes: the poor (p), the middle (m), and the rich (r), with resources or wealth (w), such that $w_p < w_m < w_r$. Let also n_p , n_m , and n_r be the demographic weights of these three classes in society. Assume that the utility function of wealth is logarithmic and let crime activity be represented in the following simple manner. Crime pays a benefit (x) with probability $(1-q)$ or crime results in sanction or fine (F) with probability q ; q is the probability of being caught. We do not specify how much the fine, F , is, but assuming that it is proportional to the wealth of the individual (i), w_i , makes things simpler. Criminal activity is an all or nothing decision. In each class, an individual i with wealth w_i will opt for criminal activity if:

$$(10.1) \quad (1-q) \cdot \text{Log}(w_i + x) + q \cdot \text{Log}(w_i - F) > \text{Log} w_i + h_i$$

The variable h_i describes the degree of honesty of the individual. It is assumed that this variable is independent of the level of income and that it is distributed uniformly throughout the population over the interval $[0, H]$, where H is a characteristic of the whole population. Where F is proportional to wealth, it can be seen that rich people for whom x is small in proportion to their initial wealth, w_i , will never find crime an attractive option. To simplify, let us go further and assume that for individuals in the middle and rich classes engaging in criminal activities is never an optimal choice, even if their degree of honesty is low. In other words, condition (10.1) is never satisfied for people in classes m and r even when $h_i = 0$. However, we assume that it is satisfied when $h_i = 0$ in class p , but not when $h_i = H$. This means that a proportion of people is always present in the poor class, p , who will engage in crime. Finally, suppose that the benefit from crime x is a proportion b of the mean income or wealth in the population: $x = b\bar{w}$. This would be the case, for instance, if crimes consisted of robberies and thefts the victims of which are randomly selected from the population. When comparing different societies, this assumption is also a way of representing the fact that, loosely speaking, the benefit of crime is related to the average level of affluence in society.

Given these assumptions, the following equation gives the crime rate, or percentage c of criminals in the whole population. The following rate is simply the product of the proportion of poor in society times the proportion of individuals among the poor with h satisfying condition (10.1):

$$(10.2) \quad c = \frac{n_p}{H} \cdot \left[\text{Log} \frac{w_p + b\bar{w}}{w_p} - q \cdot \text{Log} \frac{w_p + b\bar{w}}{w_p - F} \right] = C(n_p, \frac{\bar{w}}{w_p}, \frac{F}{w_p}, q, H)$$

According to the canonical model, the crime rate thus depends positively on the extent of poverty and income inequality, as measured by the proportion of poor, n_p , and the ratio w/w_p , and negatively on crime-deterrent variables. The latter variables consist of the probability of being caught, q , and the size of the penalty, F , relative to initial income. In addition, the crime rate depends negatively on the cultural or sociological attitude toward crime or the extent of honesty within society, as represented by H .

Although urbanization does not appear anywhere in the preceding argument, it is implicit in the preceding model. In comparison with small villages and rural areas, cities guarantee anonymity and therefore diminish the probability q of being caught after a crime. Starting from a small city size, one may expect that, other things being equal, the crime rate increases with the increasing size of the city.

The probability of crime detection cannot be taken as given and independent of the crime rate. What is more likely to be exogenous is the amount that the urban community is spending on crime prevention and detection, or, roughly speaking, on police. Assume P to be the corresponding amount of public and private expenditure on crime prevention per inhabitant, for example, police expenditure per capita. It is natural to assume that:

$$(10.3) \quad q = G(P, c)$$

where $G(\cdot)$ is a kind of production function of police activity. The probability q of being caught is assumed to increase—at a decreasing rate—with P and decrease—at an increasing rate—with the crime rate c . Substituting in (10.2) and solving with respect to c yields a new reduced form crime function:

$$(10.4) \quad c = C^*(n_p, \frac{\bar{w}}{w_p}, \frac{F}{w_p}, P, H)$$

where the argument corresponding to the probability of being caught, q , has simply been replaced with police expenditures per inhabitant. Therefore, the statement that the crime rate increases with city size, at least to some extent, implicitly assumes that police expenditures do not increase with city size. This raises the question of what determines the importance of police expenditures, which we will discuss in more detail later.

To complete this simple theoretical framework, we now evaluate the social loss due to crime. This loss is made of three components: (a) the direct cost of crime, that is, the physical and psychological pain of the victims, (b) the cost of crime prevention P and the cost of the judicial system, (c) the implicit cost F of sanctions to convicted criminals, typically foregone earnings, due to imprisonment, which justifies F being proportional to w_i . Assuming that the cost of pain is a proportion s of the economic cost of crime, $x = b\bar{w}$, the social loss L per capita associated with a crime rate c amounts to

$$(10.5) \quad L = c.m.s.(b\bar{w}) + P + c.q.[j] + c.q.F$$

where q and c are given by (10.3) and (10.4), m is the number of crimes committed by each criminal, and j is the average cost of criminal justice per criminal. Note that the direct economic cost of crime, $x = b\bar{w}$, does not appear in that expression. This is because crime is actually equivalent to a transfer from victims to criminals and therefore cannot be considered a social loss. Sala-i-Martin (1996) proposes an analysis of the effects of crime on growth that follows these lines.

Despite its obvious simplicity, the preceding model has several interesting and important implications for the analysis of crime. To understand them better, however, it is important to define more precisely the kind of criminality that is the basis of this model. It must be clear, that the preceding economic argument better fits crimes concerning property that offer some economic gain, than crimes against persons. It cannot be denied that homicides, intentional or not, are more frequent among poor and less educated people and in areas where the police presence is small. The homicide rate in a given area may thus be determined much by the same variables as the rate of property crime. However, given the exceptional character of this type of crime—when it is not directly linked to property crime as in some robberies—the relationship among these variables is most likely to be weaker than it is for property crime. In particular, one expects the urban bias in criminality to be much less pronounced for homicide than it is for property crimes. This being said, the argument leading to the crime rate function (10.4) also applies to any illegal activity in which somebody else's property is criminally confiscated. Drug dealing, illegal gambling, and prostitution also fit the basic representation (10.1) that gives the likelihood for an individual to undertake some form of criminal activity. However, the reward of the latter activities need not be related to the average affluence of victims. For that kind of crime $b\bar{w}$ in (10.4) should be replaced by some arbitrary value x , which may still depend to some extent on the affluence of society. The relationship between crime and inequality or poverty would then be somewhat modified.

From the point of view of economic policy, the first arguments in the general crime function (4) are the most interesting. They suggest that a process of economic development, or in the present context, a process of urbanization, accompanied by an increase in the rate of poverty or in the degree of inequality should lead, other things being equal, to an increase in the rate of crime. Rigorously speaking, the additional income generated in the process of urbanization should thus be reduced by the social loss of

crime appearing in equation (5) and the rate of economic growth corrected accordingly. We shall soon see that this cutback may be substantial.

This in turn raises the question of what type of urbanization to encourage. The distinction between push and pull factors in internal migrations is relevant here. On the one hand, urbanization proceeding mostly from factors that push rural population toward cities without any dynamic process of job creation in place will most probably contribute to an increase in urban poverty and inequality, and therefore in criminality. On the other hand, urbanization driven by a fast process of accumulation that results in a rapid expansion of the demand for labor should contribute to an increase in urban incomes and therefore a drop in the rate of crime and illegal activity. In practice, the migration process lies somewhere between these two extremes and may be directly influenced by policy. This is true in particular when migrants have a foreign origin, which may add an additional sociological dimension to the original model.

The preceding argument, or hypothesis, has a long-term orientation. In the shorter term, according to the general crime function $C^*(\cdot)$, any increase in the extent of poverty, either through an increase in the term n_p , or through a drop in w_p , is likely to increase the crime rate. This is reinforced by the natural inertia in the other arguments of the function. Under these conditions, a surge in criminality can be expected to accompany violent economic recessions. In addition, if there is some hysteresis in this process, for instance, through progressive erosion of the honesty variable h in times of higher criminality, then the volatility of economic activity may be considered a factor that aggravates crime.² According to these hypotheses, the social cost of macroeconomic adjustment—which often falls disproportionately on the urban sector—must be measured not only in terms of increased urban poverty, but also in terms of increased present and future criminality.

The third and fourth arguments of the general crime function, $C^*(\cdot)$, refer to the direct control that policymakers may have on crime through the sanctions decided by the judicial system and the probability of crime detection, which is determined by expenditures on the police force. The proposition that sanctions must be as tough as possible to deter crime for the lowest possible social cost has been well known since Becker's (1968) article. At the limit, an infinite penalty F would altogether deter crime and would make police almost unnecessary. However, some constraints naturally prevent this from happening. These constraints include concerns about the moral and constitutional rights of criminals, which prevents implementation of sanctions that are too severe and the necessary graduation of severity in relation to the severity of crime. Another constraint is the cost of administering sanctions (incarceration) or, more generally, the administrative capacity of the judicial system and possibly the social cost of sanctions, for example, days of work lost in imprisonment. An important part of the theoretical literature in this area focuses on the case where part of the sanction is a fine with negligible implementation costs (Garoupa 1997 provides a complete survey of this literature). Naturally, payment cannot be obtained from convicted criminals who have no economic resources, which is probably most frequently the case in most developing countries. This means that incarceration is the main type of sanction, at least in countries adhering to human rights and thus excluding archaic physical sanctions such as cutting off thieves' hands as in the law of some countries. To summarize these last points, much like expenditures on police, the severity of sanctions and the capacity of the judicial system to administer them often result from budgetary decisions, and therefore tradeoffs among various uses of public money.

In view of this, two lines of analysis may be developed. From a policy point of view, one may examine what would be the most efficient allocation of public funds between criminal justice and police systems on one hand and all alternative uses on the other. This allocation depends on existing technology in the field of crime deterrence and punishment and requires determining with some precision the marginal social costs and benefits of existing instruments. This is a rather delicate task. Some work has been done on whether

² One channel hysteresis goes through is the anticipation of the probability q of being caught by would-be criminals. In times of recession, the rate of criminality increases as a result of the first arguments of function (4), whereas police expenditures remain the same. It follows that the rate of crime increases and the rate of detection falls. When returning to normal times, criminals' anticipation of the probability of crime detection and therefore the rate of crime may fail to adjust to their initial level. For such an expectational model of crime, see Sah (1991).

"prisons pay" in the United States (Piehl and DiIulio 1995). The desirability of anticrime policies such as "zero tolerance", "three strikes and you're out," "fixing broken windows," which have been debated extensively in the United States, would also need to be analyzed within such a framework (Kelling and Colis 1996; Massing 1998). However, in most countries, and particularly in developing countries, the database necessary to make the corresponding calculations is not generally available.

Public expenditures on criminal justice and police lead to an analysis of crime and its evolution that is partly based on the public decisionmaking process behind these expenditures. In times of rapid urban expansion, all public infrastructure, including that linked to crime prevention and sanction, tends to lag behind the needs of the population. This implies an increase in criminality, if all other things are the same. In turn, civil society expresses an increased demand for crime deterrence, part of which will be effectively met. How much depends on public spending decision mechanisms, and possibly on the social structure of urban society. Through the political economy mechanisms that determine spending on crime deterrence, economic and social inequality may in effect play an indirect role on crime, in addition to the direct incentives economic and social inequality represent for criminals. It is not clear, however, whether more inequality should lead to a larger anticrime budget or whether the opposite is true. Not only the structure of society and the political weight of the various classes is important here, but also the social geography of the city and the technology available for crime prevention. One may well imagine instances where the public decision mechanism concerning spending on crime deterrence leads to rich neighborhoods and business districts being heavily protected and relatively little being spent on poor neighborhoods and more general crime disincentives. Such a mechanism may explain why, in many societies, not only criminals, but also victims, are found predominantly among disadvantaged social groups.

Another point to take into account is the ability of part of the population to buy private protection in the form of more or less sophisticated alarm systems, private guards, and strict residential segregation, which improves the capacity to spot intruders and would-be criminals. If the social class that can afford this type of security has some control over political decisions, one may well imagine a situation where nothing substantial is done to increase public security outside these residential areas despite mounting criminality overall.

An important implication of private protection against crime is that it may drastically modify the relationships among poverty, inequality, and crime. In effect, self-insurance against crime minimizes the relationship between the crime rate and poverty. This works because potential victims anticipate the increased poverty and inequality that is associated with an unbalanced process of urbanization to increase crime risks and buy additional protection, which reduces the actual change in criminality. However, the marginal social cost of poverty and inequality going directly or indirectly through crime remains the same. Expression (5) illustrates this loss; the effect of a marginal increase in the rate of crime c at constant police expenditures P is simply replaced with a change in the private protection part of P .

The last argument of the general crime function (4) is certainly the most difficult to discuss for an economist. For the sake of simplicity, it was referred to as an honesty parameter. However, one should actually include in it all the variables that may explain that given specific cost-benefit ratios of crime and some other characteristics of the justice and police systems, the degree of crime may vary drastically from city to city or from country to country. These variables include ethnicity, religion, family structures, residential segregation, and so on. Some of these factors may clearly be related to economic phenomena. The increase in the numbers of lone mothers in urban areas is probably not unrelated to the conditions of the labor market (see, for instance, Burtless and Karoly 1995 for the case of the United States). Large numbers of lone mothers are also often singled out as a powerful sociological factor of violence (Akerlof 1998; diIulio 1996). Likewise, residential segregation has been analyzed as a mechanism for reproducing existing economic inequalities (see, for instance, Benabou 1994). The parameter H in the general crime function (4) thus provides a third channel through which economic cycles or the equalizing or unequalizing nature of the urbanization process may affect crime and violence. The first channel is through the direct benefit and cost of crime, and the second goes through public decisionmaking in

matters of crime deterrence, while this third one goes through the influence of economic conditions on some sociological factors behind the propensity of individuals to commit crime. For a general analysis of these factors with a framework similar to the one presented here, see Hagan (1994).

In any case, the main economic mechanism directly linked to the honesty variable is probably the way social capital may be eroded durably due to an increase in the crime rate whose causes lie in the economic sphere. In the presence of more crime that results from the adverse effects on poverty and equality of a long and severe economic recession, moral and social structures are likely to be weakened, which in turn may increase the prevalence of crime and violence (Akerlof and Yellen 1994).

A possible objection to this and most of the preceding arguments is that they take too much an economist's view of criminal behavior and they may therefore be misleading for policy. For instance, many observers insist that violence in big metropolitan areas of industrial and developing countries is often not directed toward the property of others, but takes place internally within specific segments of society located in the poorest districts (Moser 1998). An obvious example of this is the violence involved in conflicts that relate to the control of illicit activities like drug dealing, drug trafficking, gambling, and prostitution. In many violent parts of today's metropolises this type of activity, rather than more conventional property crimes like burglary or robbery, seems to be the single dominant cause for the development of violence and the surge in homicides. Another departure from the canonical model might lie in the low probability of crime detection and sanction noted in many crime and violence studies in marginalized urban areas of developing countries. Typically, the probability of being arrested and incarcerated for a murder is estimated to be lower than 10 percent in many Latin American cities. A rate of 8 percent is reported for El Salvador in Londoño and Guerrero (1998). In Cali, this figure was lower than 6 percent in 1983 and probably of the same order of magnitude in other metropolitan areas in Colombia. Moreover, this situation most certainly has worsened since then (Guerrero 1998).

Are these stylized facts consistent with the previous general model? If this is not the case, how do they modify the model's predictions, in particular, with respect to the economic determinants of crime and violence? If we consider the extreme case where a market of a given size exists for illicit activities and where those engaged in these activities run no great risk of being arrested and prosecuted, then the issue becomes one of industrial organization and occupational choice. The main difference with other economic sectors and occupational choices is that there is likely to be no market rule in the control or production of illegal activities. As a result, individuals operating in these sorts of illegal activities rely solely on their capacity to physically neutralize or eliminate potential competitors. At some stages of the organizational development of this sector in a given environment, nonmarket competition is strong and is responsible for a high level of violence among persons or gangs. At another stage or in a different environment, the sector may be fully controlled by organized crime resulting, paradoxically, in a drop in the level of violence. Therefore the analysis of crime and violence linked to illegal activities becomes the study of the conditions under which some types of organizations in this particular sector will predominate over others (Fiorentini and Peltzman 1995).

If a high degree of nonmarket competition in the illegal activities sector is responsible for the violence and criminality observed in some parts of metropolitan areas in developing countries, are the causes and possible remedies identified before still valid? This analysis of causes of violence does not significantly alter the nature of the initial crime model. As noted previously, it simply makes the benefit, x , gained from getting involved in illegal activity exogenous, rather than more or less loosely related to the mean income of the whole urban population. In addition, it modifies the nature of the risk, q , involved and the penalty F incurred. Public expenditures on crime deterrence no longer determine the level of risk involved. These public expenditures are too small for deterrence to be effective. Risk now depends on the organization of the illegal sector itself. For instance, risk may be determined by the probability of being killed by a competitor who wishes to control a given territory for drug dealing. However, the main economic factor pushing people toward crime is the income they may gain if they stay in legal activities compared with the expected utility of illegal activity. In the present framework, as in the original model,

any reduction in the level of people's income, that is, any increase in urban poverty, increases the incentives to switch to illegal activities. Unlike what is seen in the canonical model, however, it is not clear what influence inequality in society has on crime and violence. Levels of crime and violence essentially depend on the way the illegal sector is organized and, of course, on the size of that sector (Bourguignon 1998).

Transforming the original model to account for the fact that crime and violence often develop within poor districts of metropolitan areas in connection with illegal activity, rather than property crime, and extremely low apprehension probabilities does not radically modify the initial analysis. It remains true that an increase in urban poverty should, other things being equal, result in an increase in violence. It is also still the case that increasing effective crime deterrence should reduce the extent of violence. However, a new determinant of the general level of crime and violence exists, and it is the importance of the market for illegal activity and the way demand for its services, such as initial drug consumption, depends on the characteristics of the city or the urbanization process.

The Limited Available Evidence on the Relationships among Inequality, Poverty, and Crime

The main conclusion of the preceding inductive analysis is that urban inequality and poverty are the main economic determinants of crime and violence. Through this crime and violence, urban inequality and poverty can inflict serious losses to society. This relationship can be direct, as in the case of more inequality and poverty making crime more profitable at a given level of crime deterrence. It may also be indirect and go through the amount that a society is willing to spend on crime deterrence. The questions we ask in this section are (a) whether evidence exists that shows such a relationship between crime and inequality or poverty, and (b) how important is the negative effect of inequality on the total urban income going through the criminal sector. We also briefly address the issue of the possible influence of inequality on crime deterrence.

Answering the preceding questions is extremely difficult. Two main sets of reasons explain this. First, a host of sociological factors could be responsible for the degree of violence observed in a society, but controlling for them in a statistical analysis of crime is practically impossible. Even though there is little doubt that economic disadvantages have always been an important and necessary cause of criminality, they certainly do not represent a sufficient condition of high crime rates in a given social group. This is particularly clear in all studies of the ethnic dimension of crime and violence. While minority groups in industrial countries with high crime rates are characterized by high levels of social and economic disadvantage, the converse is not necessarily true. In England, Indian migrants are as discriminated against as Caribbeans and Africans; however, crime and imprisonment rates are much higher in the second group. The same relationship holds true between Moroccans and Turks in the Netherlands, or between Southeast Asian and Latin American immigrants in the United States (Tonry 1997).

The second difficulty is purely statistical. We have previously seen how difficult it is to get reliable series and data on crime and violence across countries or cities, and even across time in a given country or city. It is still more difficult to gather evidence of the relationship between these series and data on international or intertemporal differences in poverty and inequality. Even though we are more interested in developing countries, we shall begin by briefly reviewing the case of the United States, because it is undoubtedly the country where crime data are the least scarce. We shall then move to cross-country comparisons involving both industrial and developing countries.

Before doing so, one may wonder whether historical trends are in agreement with the hypothesis that, all other things being equal, more inequality in terms of relative poverty should cause more crime. However, the condition that all things be equal is extremely demanding in this case. For instance, it is well known that inequality in the United Kingdom rose throughout the 19th century, leveled off at the turn of the century, and then went down quite substantially until it started rising again in the early 1980s. Likewise, inequality in the United States is thought to have peaked around 1930 and then fallen sharply until the

1950s. After the 1950s, inequality remained stable before starting to increase again at the end of the 1970s. According to the simple hypothesis we stated previously, we should have seen criminality increase in the 19th century and decrease during most of the 20th in the United Kingdom. The same changes should have been observed in the United States with crime peaking around 1930, or possibly later, allowing for some delay in the sequence of effects (Lindert 1998). However, too many deep sociological changes happened at the same time to really hope that such a relationship could be observed. As mentioned before, the general change that has taken place since the beginning of the 19th century is one of declining violence, which does not fit well with the evolution of inequality in the United Kingdom. The rise in violence observed in the 1930s in the United States may not be inconsistent with a peak of inequality around 1930, but this is weak evidence indeed. Similarly inconclusive evidence can be gathered for continental Europe. Clearly, more rigorous analysis controlling for other factors that may influence the evolution of violence and crime is necessary, but all the data needed for such a long-term time series analysis are not available. A lack of necessary data already characterizes the study of more recent periods.

Crime and Inequality in the United States in the Recent Past

Ever since the pioneering work of Ehrlich (1973), and in contrast with the preceding long-run historical perspective, cross-state or cross-city analyses at given points in time suggest that income inequality is indeed positively and significantly associated with crime rates. This is true of both property crime—robbery, burglaries, and the like—and homicides (Freeman 1996). In addition, the elasticity of the crime rate with respect to inequality appears to be substantial. Ehrlich's original estimates indicated that, in 1960, a 1 percent increase in relative poverty, measured by the number of people with less than half of the median income in one state increased the property crime rate by approximately 2 percent. Using more recent data, Lee (1993, cited by Freeman 1996, p. 33) found that when observations for various states at different times were pooled together, the increase in inequality that occurred in the 1980s may have caused an estimated 10 percent increase in crime rates. Interestingly enough, this order of magnitude turns out not to differ much from Ehrlich's estimates.

Time series analyses do not seem to lead to such clear conclusions. Freeman (1996), still reporting Lee's results, notes that changes in crime rates in U.S. metropolitan areas in the 1980s were not significantly correlated with changes in inequality. Allen (1996) found no significant effect of inequality—and a negative effect of absolute poverty—on the aggregate crime rate during the last 30 years. Allen also reported insignificant effects of poverty and inequality in other time series analyses. A possible explanation of the positive results obtained with cross-sectional data is simply that in some states crime and inequality are either higher or lower than average because of a third unobserved factor that holds more or less constant over time. Cross-sectional analysis thus simply picks up the effect of these factors and concludes a positive relationship between crime and inequality, even though there may not be any causal relationship between the variables.

Freeman (1996) proposed an important correction to time series analysis of crime in view of the substantial increase in the number of incarcerated people observed during the period of greatest increase in inequality. This number doubled between 1980 and 1990 from 0.5 to 1.1 million (DiIulio 1996). Freeman's point was that if the frequency of crimes had remained the same, this increase in the incarceration rate should have produced a drop in the aggregate crime rate. However, no such drop occurred, so one must conclude either that the frequency of criminal activity increased among nonincarcerated criminals or that the number of criminals increased in relation to the population. Transforming observed crime rates into propensities to commit crime by the non-incarcerated population leads to a series that increases quite substantially in the 1980s, a few years after relative poverty and inequality of both individual earnings and household income started to rise (Juhn, Murphy, and Pierce 1993). There is little doubt that this correction would significantly modify the results obtained in time series regressions of criminality on inequality. However, the fact that only one big change took place in the distribution of earnings in the last 30 years

probably makes these results statistically inconclusive, even though the economic change clearly preceded an increase in the propensity to commit crime. Combined with cross-sectional evidence, this argument nevertheless supports the hypothesis that criminality is positively and significantly associated with the degree of inequality and relative poverty in the United States.

The recent evolution of criminality in the United States does not invalidate the preceding argument about the role of incarceration and crime prevention. Each year since 1992, the crime rate has declined in the United States. This evolution was so dramatic that public attention has been drawn to a few police chiefs and criminologists thought to be responsible for it. Instead of explaining this change with new crime prevention and law enforcement policy, some observers link it to the end of the war for control of crack cocaine distribution. But others note that as in the 1980s, incarceration rates have increased substantially in recent years. Indeed, the total number of people in prisons rose from 1.1 million in 1990 to 1.7 million in 1997, the same absolute increase as the one observed during the 1980s (Massing 1998). Also, expenditure on crime prevention and law enforcement increased substantially. That the propensity to commit crime may not have changed radically despite the drop in crime rates since 1992 is a hypothesis that cannot be discarded.

A systematic investigation of the evolution of crime in all countries where substantial changes took place in income distribution during the last 10 or 20 years to see whether a simultaneous increase occurred in crime rates would be interesting. According to United Nations statistics, the robbery rate increased in the United Kingdom in the first half of the 1980s at the same time that inequality increased quite substantially. Unfortunately, a break occurs in the series between 1985 and 1989. When the series resumes, the robbery rate is at a much higher level, which favors the hypothesis that more inequality leads to more crime. However, this increase may also be due to a change in definitions. The United Kingdom and the United States are practically the only industrial countries where drastic changes in inequality took place in the last 20 or so years. Both countries also show evidence of concomitant increases in criminality. Inequality has also increased significantly in Sweden and in the Netherlands since the mid-1980s (Gottschalk and Smeeding 1998). But crime rates apparently did not change much. However, inequality in both countries increased more because of changes at the top, rather than at the bottom of the distribution. According to the theoretical arguments, the latter is supposed to matter for the evolution of crime.

Crime and Inequality: Cross-Sectional Evidence

As it is impossible to find other countries with reasonably good time series on both crime and inequality that have experienced substantial changes in inequality, additional evidence on the relationship between crime and inequality can only be found in cross-sectional studies. Probably the most comprehensive study of this type is that of Fajnzylber, Lederman, and Loayza (1998), which is based on United Nations data for a few countries complemented with homicide rate series obtained from cause of death statistics compiled by the World Health Organization. As discussed before, the United Nations database is imperfect, but it is unfortunately the only one available on a sufficiently large scale. An interesting feature, though, is that it is both cross-sectional and longitudinal. To some extent, this permits minimizing the effect of cross-sectional measurement errors that are likely to be the most serious source of bias. Inequality data are taken from Deininger and Squire (1996) and are not themselves free from problems. In particular, they are not available for all countries and all points of time, which further reduces the data sample Fajnzylber, Lederman, and Loayza (1998) used.

Standard cross-sectional analysis on mean robbery and homicide rates for 1970–94 is based on samples of 50 to 60 countries depending on the explanatory variables being used. The core independent variables are gross national product per capita, the Gini index for the distribution of income, average education, urbanization rate, and variables controlling for the importance of drug consumption. Among them, the only variable that is more or less consistently significant turns out to be the Gini index which, as expected, shows that the distribution of income has a positive effect on crime. Moreover, this effect is

sizable. All other things being equal, a 5 percent point change in the Gini index, which corresponds roughly to the increase in household income inequality observed during the 1980s in the United States and in the United Kingdom, would produce, on average, an increase of approximately 15 percent in the homicide rate and two or three times this figure for the robbery rate.

However, it is worrisome that, in the case of homicides, the corresponding coefficient becomes insignificant when one controls for regions. This is particularly true for Latin America when a dummy variable is used as an explanatory variable. In view of the regional orders of magnitude of crime rates reviewed before, this is not really surprising. This result suggests that inequality's significance as a determinant of crime in a cross-section of countries may be due to unobserved factors simultaneously affecting inequality and crime, rather than to some causal relationship between these two variables. Results obtained with robbery rates are more robust. In this case, the coefficient of the Gini index remains significant even when dummy variables controlling for regions or other groupings of countries are introduced. This means that inequality appears to have a significant association with the crime rate within these various groups of countries, rather than across them. Somehow, this is reassuring because it fits the idea that the economic determinants of crime are likely to have a stronger association with property rather than other crimes.

Other variables do not reveal significant correlations. This is not surprising for gross national product per capita because most of the economic explanation of crime refers to relative, rather than absolute, income factors. The average educational level of the population at working age, drug consumption, and the urbanization rate are factors that seem less likely to turn out to be insignificant. Measurement errors may affect the first two variables. The average level of education should refer to younger generations rather than to the whole population, which may make a big difference in developing countries. Drug consumption is proxied by the drug possession crime rate, which most likely is badly recorded or badly approximated in some countries. The urbanization rate does not have these problems. Interestingly enough, its effect is positive and not far from statistical significance for robberies, whereas it is close to zero and far from significance for homicides. Simple theory suggests a similar conclusion.

As recalled earlier, the ambiguity of pure cross-sectional estimates is well known. One way of eliminating this ambiguity is to use panel data and to control for country fixed effects. This is what Fajnzylber, Lederman, and Loayza's (1998) study does. However, the study also takes into account the hysteresis effect of criminality by explicitly allowing the crime rate of a given year to depend on that of the previous year. This rules out standard fixed effect estimation and requires estimating an autoregressive model based on first differences. Fajnzylber, Lederman, and Loayza do so on smaller samples of countries defined by the availability of all variables of interest after taking first differences and lags. They also use as instruments the lagged values of the model's explanatory variables so as to avoid endogeneity problems. The resulting estimates are reproduced in table 10.1.

These estimates, which are essentially based on the longitudinal dimension of the data, confirm the results of the cross-sectional analysis and show additional effects. However, the comparison is not totally valid because the samples of countries used in each case differ due to distinct data requirements. Nevertheless, such a coincidence between cross-sectional and longitudinal estimates is remarkable and suggests that the phenomena revealed by these regressions are robust.

This seems to be true, first of all, for the effect of income inequality upon criminality. This effect is significant and substantial for both homicides and robberies. In the short-run, a 1 percent point increase in the Gini coefficient would produce, on average, a 3.6 percent increase in the homicide rate and a 1.1 percent increase in the robbery rate in the countries included in the sample. However, this effect is much stronger in the long run because of the compounding effect of hysteresis on crime rates. The coefficients of the lagged crime rate are such that the effect of inequality would be multiplied by three for homicides and by seven for robberies. These multiplicative factors are simply the inverse of $1 - \lambda$, where λ is the coefficient of the lagged crime rate in table 10.1. If one keeps in mind major changes in inequality like those observed recently in the 1980s in the United Kingdom, the United States, and several Latin American countries, increases of 3 or 5

percentage points in the Gini coefficients are not unreasonable orders of magnitude for periods extending over five years or more (Atkinson, Rainwater, and Smeeding 1995; Gottschalk and Smeeding (1998); Morley (1995). Other things being equal, this corresponds with an increase in crime rates from 40 to 60 percent with a horizon of 10 to 15 years, a rather frightening order of magnitude. This long-run effect may be somewhat biased, because the data sample does not include national time series long enough for a complete and satisfactory representation of the dynamic processes governing crime rates.

Table 10.1. *Panel Regressions of Crime Rates: First Difference Auto-Regressive Models*
(p-values in italics)

<i>Explanatory variables</i>	<i>Homicide rate (growth rate)</i>	<i>Robbery rate (growth rate)</i>
Gini coefficient ^a	0.036 <i>0.000</i>	0.011 <i>0.009</i>
Urbanization rate	0.004 <i>0.063</i>	0.011 <i>0.000</i>
GDP per capita (log)	-0.207 <i>0.000</i>	-0.045 <i>0.035</i>
GDP growth rate ^a	-0.036 <i>0.001</i>	-0.072 <i>0.000</i>
Drug possession crime rate	0.001 <i>0.047</i>	0.001 <i>0.019</i>
Secondary enrollment rate	0.009 <i>0.000</i>	0.002 <i>0.191</i>
Lagged homicide rate	0.640 <i>0.000</i>	0.839 <i>0.000</i>
Number of observations (countries)	58(20)	50 (17)

Note: Generalized method of moments estimates. Second lags and third lags of dependent and independent variables are used as instruments with the exception of the lagged crime rate, for which the third lag is used as an instrument.

a. Strictly exogeneous.

Source: Fajnzylber, Lederman, and Loayza (1998).

A second effect discussed in connection with the cross-sectional model is that of the urbanization rate. It still fails to show a sizable and significant correlation with homicides, but it does have a strong correlation with robberies. In the latter case, an increase in the urbanization rate by 1 percent produces in the long run an increase in the nationwide crime rate that is equal to 8 percent. Although the model imperfectly represents the full dynamics of this process, the increase in the crime rate becomes still larger when the continuity of the urbanization process is taken into account. For instance, in a country where the urbanization rate is increasing by 0.5 percentage points per year, a reasonable estimate in view of the experience of many developing countries over the last two or three decades, the nationwide robbery rate would increase by approximately 60 percent in 20 years. If nothing else changed, this figure would essentially reflect urban-rural differences in crime rates. However, other variables affecting crime are likely to change simultaneously with the urbanization process. In particular, the estimates reported in table 10.1 suggest that economic growth tends to offset the adverse effects of urbanization. In other words, only if urbanization proceeded without sufficiently rapid economic growth would crime develop as suggested by the preceding figure. This is in agreement with the theoretical argument of the push and pull factors of urbanization. Overall, Fajnzylber, Lederman, and Loayza's (1998) results thus describe a rather complex combination of forces that together contributes to possible changes in crime rates or, alternatively, enable keeping it steady in the course of development.

Another interesting feature of the preceding equations is the substantial hysteresis they suggest is occurring in the evolution of criminality. Here again, as could be expected, it is more pronounced for robberies than for homicides. In the case of robberies, a simple calculation made on the basis of the coefficients shown in table 10.1 suggests that a major recession leading to a sudden 5 percent drop in GDP would produce an instantaneous 50 percent increase in the robbery rate. However, the hysteresis effect is such that the crime rate would still be 10 percent above its prerecession level seven years after the economy resumed normal growth. (Because of the symmetry built into the model, this effect would disappear if the drop in GDP were fully reversed by faster growth in the following years.) Again, these orders of magnitude are only indicative. However, such recessions are not uncommon in developing countries, and the preceding figures show that the lasting rise in crime caused by a temporary surge in poverty may add much to the social cost of recessions.

Given that the preceding results are based on a restricted number of observations and countries, they may be thought to not be truly representative. It turns out that fixed effects are less of a problem in the case of homicides than in the case of robberies, so that alternative specifications may be estimated on larger samples. The results reported by Fajnzylber, Lederman, and Loayza lead to the same general conclusions concerning the link between recessions and increases in crime rates related before. In addition, they confirm that crime deterrence variables, essentially police and conviction rates, have a significant negative influence on homicides.

Londoño and Guerreo (1998) reported convergent findings. They ran fixed effect regressions on homicides in a panel sample of 17 Latin American countries between 1970 and 1995. The specification that they chose to estimate is not as complete as that of Fajnzylber, Lederman, and Loayza, so a detailed comparison is not possible. However, Londoño and Guerrero (1998) found that poverty and inequality produce sizable effects on homicide also. According to their figures, a 1 percent point increase in the population of poor people would produce, on average, an instantaneous 2.5 percent increase in the number of homicides. This does not differ much from the orders of magnitude seen before. It would certainly be worthwhile to obtain estimates based on this sample that are comparable to those Fajnzylber, Lederman, and Loayza give.

Having said this, the preceding estimates must be viewed with much care. We have already insisted on the natural limitations of pure cross-sectional exercises. The introduction of fixed effects in samples where observations of different countries at different points of time are pooled together should certainly lead to more satisfactory conclusions. In the present case, however, in both the Fajnzylber, Lederman, and Loayza study and that of Londoño and Guerrero the corresponding samples of observations are limited. As a result, the relevant effects may be estimated on the basis of few observations, which points to the need for better and more consistent data collection on crime and victimization, both across and within countries over time.

The Social Cost of Crime and Inequality: Rough Estimates

Given the preceding evidence of likely positive associations among crime, poverty, and inequality, we now seek to measure the social cost of crime and then that part of the social cost of inequality that goes through crime. This should give some idea of the scope of policies aimed at controlling and reducing the extent of inequality and poverty in urban areas. Although we can rely only on rough estimates, we shall see that controlling and reducing the extent of inequality and poverty in urban areas is surprisingly important.

Table 10.2 puts together some crude estimates of the various components of the cost of crime in the United States and in Latin America as a proportion of GDP, that draw on Freeman (1996) and Londoño and Guerrero (1998). As a first approximation, estimates for other countries or regions may be obtained by scaling these estimates up or down depending on observed crime rates.

Table 10.2. *Estimates of the Cost of Crime in the United States and in Latin America, Around 1995*
(percentage of GDP)

	<i>United States</i>	<i>Latin America</i>
"Transfers" = monetary amount of property crime	(0.5)	(1.5)
Monetary cost (medical expenses, opportunity cost of time, and so on)	0.2	0.6
Nonmonetary cost (cost of pain)	0.7	2.1
Human capital loss (homicides)	0.3	1.7
Opportunity cost of incarceration	0.6	0.1
Criminal justice	1.3	1.6
Private crime prevention	0.6	1.4
Total	3.7	7.5

Source: Freeman (1996); Londoño and Guerrero (1998), and author calculations.

The first row of the table is a straight estimate of the total monetary value of property crime, that is, the income from robberies, thefts, burglaries, frauds, embezzlements, and so on. For the United States' estimate, the figure is taken from Freeman (1996). For Latin America, it is based on special surveys taken in Brazil, Colombia, El Salvador, Mexico, Peru, and Venezuela as part of a research project organized by the Inter-American Development Bank—see Londoño and Guerrero (1998). Assuming that the average amount involved in property crimes is proportional to income per capita, the figures appearing in this row of table 10.2 suggest that the rate of property crime in Latin America is three times that observed in the United States, which seems a reasonable order of magnitude (note that these same proportions hold for homicides). Notice that this top row is entitled transfers and is not included in the social cost of crime. Such a view corresponds to the theoretical model described previously in equation (5) where property crime appears as a simple transfer of wealth or income from the victim to the criminal. However, part of this wealth may be destroyed in the transfer. This part appears in the second line of table 10.2 as the monetary cost of crime. This item also includes the actual costs incurred by victims in addition to what they lost, for example, medical expenses in the case of violent robbery, repair of property in the case of a burglary, time spent dealing with the police or justice personnel, and so on. No direct estimate of that cost is made in the Latin American case.³ The figure appearing in table 10.2 is obtained by assuming the same proportionality factor as in the United States. The monetary costs of property crime are rather moderate. They amount to only 0.2 percent of GDP in the United States and 0.6 in Latin America.

To these monetary costs, we now add nonmonetary costs corresponding to the cost of the pain and suffering in case of property crime and to the disappearance of human capital in case of homicides. The first figure is based on jury estimates of the cost of pain in cases of U.S. property crimes, and it is approximately equal to the material cost of crime appearing in the first two rows of table 10.2, that is, 0.7 percent of GDP. The same proportionality factor with respect to the total amount of property crime is applied to Latin American figures leading to a cost of 2.1 percent of GDP. Actually Londoño and Guerrero give a much larger estimate for that component, 5.3 percent of GDP, based on reported willingness to pay for safety. However, the figure they derive from the surveys at their disposal seems artificially high compared with the U.S. figure. In terms of human capital loss in Latin America, they base their computations on the average life expectancy of homicide victims and on wage rates for unskilled laborers. The resulting cost is substantial, amounting to 1.7 percent of GDP. The figure for the United States is in proportion with the homicide rate, that is, approximately a 1:4 ratio between the U.S. figure and that of Latin America.

³ Londoño and Guerrero (1998) report a mere 0.2 percent for medical expenses and a much greater amount for productivity losses, which we do not take into account in table 10.2.

Crime prevention and punishment incur other costs. Freeman (1996) estimated the opportunity cost of the time incarcerated individuals spend in the United States to be 0.6 percent of GDP. In Latin America, assuming this cost is proportional to the number of incarcerated people per inhabitant leads to a figure of 0.1 percent of GDP. The incarceration rate, that is, the number of incarcerated persons per inhabitant, is a little more than five times higher in the United States than in Latin America. The extent to which this difference in incarceration rates is related to observed disparities in crime rates is not clear, however. Incarceration rates in European countries are comparable to those observed in Latin America. However, crime rates there are much lower than in both Latin American countries and in the United States. Expenditures on criminal justice and police may compensate somewhat for this difference as these expenditures amount to 1.6 percent of GDP in Latin America and only 1.3 percent in the United States. More is also spent on private crime prevention through security guards, alarm systems, armored cars, and the like in Latin America. As a result, total expenditures on crime prevention and sanction amount to a higher proportion of GDP in Latin American countries than they do in the United States, although the ratio between these two figures differs from the ratio of crime rates.

Summing up all these components yields a sizable total cost of crime equal to 3.7 percent of GDP in the United States and a high 7.5 percent in Latin America. Of course, both figures are rough. However, it is not difficult to believe that their orders of magnitude are about right. By world standards, the countries covered by the preceding analysis have levels of criminality far above average. The same calculation would be likely to lead to figures lower than 2 percent of GDP in most Asian and European countries.

When taken together, the various estimates discussed in this section lead to a strikingly high order of magnitude for that part of the social cost of poverty and inequality that goes through crime and violence in Latin American countries. Consider, for instance, the elasticities of crime rates with respect to inequality and poverty suggested by the Gini coefficient reported in table 10.1. According to these elasticities, a 5 percent point increase in the Gini coefficient in a given country may, after some delay, produce an increase in the crime rate of the order of 50 percent. The same kind of effect may be expected from a major recession leading to a 5 percent or greater drop in GDP. That part of the social cost that goes through crime may be inferred from the figures appearing in table 10.2. If nothing is done to increase crime deterrence, then the numbers in the bottom half of the table will not change. However, the top half is likely to increase in proportion with the crime rate. In a country with a medium level of crime as in the United States, this would entail a social cost of about 0.6 percent of GDP. In high crime countries like many Latin American countries, the cost would be greater than 2 percent of GDP. Moreover, if one takes into account that the increase in criminality is likely to be concentrated in large metropolitan areas, then the local social cost in these areas should be much larger. These are not minor effects. In addition, they are likely to be magnified by hysteresis.

If governments were to implement active crime deterrence policies, the cost of unequal development or recessions might be reduced. In this case, the lower half of table 10.2 would be modified. The extent of modification depends on the efficiency of crime deterrence. However, little may be gained from active deterrence as the situation in the United State in the 1980s illustrates. As the dramatic fall in the real income of low-skilled workers could have indicated, the potential increase in criminality was likely to have been offset by a drastic increase in the incarceration rate, which more than doubled starting in 1980. If this was the case, then approximately half the opportunity cost of incarceration and that part of the budget of criminal justice covering the direct cost of that policy, that is, the cost of prisons, must be considered the price that society had to pay for increasing inequalities. As the table shows, the resulting figure is not far from the hypothetical 0.6 percent that would have been observed if crime had been allowed to continue increasing.

Inequality and the Demand for Safety

Analyzing the determinants of crime deterrence measures with the same cross-sectional and longitudinal tools as crime itself would be an interesting exercise. It would permit providing evidence for the role played by social structures, inequality in particular, which is probably essential. Unfortunately the relevant data for such analysis are missing.

Pradhan and Ravallion (1998) provided interesting evidence for Brazil. Drawing on subjective evaluations of the importance of public safety collected in the 1996 Brazilian Living Standard Measurement Survey, these authors found that the current evaluation of public safety and the desire for improving increase with households' standard of living. The uneven evaluation of public safety is an important result that means crime and crime deterrence measures are another source of inequality in an urban environment. In other words, if crime is partly the consequence of existing economic inequalities, its uneven geographical distribution may contribute to a magnification of these inequalities. The second important point is not that the desire for public safety increases with income, but that it does so at a declining rate. This means that increasing inequality should lead to a lower aggregate demand of public safety. However, this is only partial evidence based on subjective evaluations and much more work is needed to get a better idea of the relationship between inequality and the social demand for safety.

Conclusion

This chapter shows that crime and violence are likely to be a socially costly byproduct of, among other factors, uneven or irregular economic development processes. Simple economic theory shows how property crime and, more generally, the violence associated with illegal activity may partly be the consequence of excessive inequality and poverty. The limited evidence available in this field suggests that an increase in the degree of relative poverty or income inequality in a country generally leads to a rise in criminality, be it in the crime rate itself or in the propensity to commit crime in the part of the population that is not confined to prison. Because they increase the extent of poverty, major recessions may have a comparable effect on crime. Moreover, hysteresis may considerably magnify these effects. It follows that, through crime and violence, the social cost of inequality and poverty may be large. In countries where the level of crime is already high, thinking that severe recessions or major increases in inequality measures could be responsible for social losses as high as 2 or 3 percent of GDP is not unreasonable. This order of magnitude would even be greater if urban areas alone were considered.

Observed aggregate regional differences in criminality are consistent with this analysis. Latin America is by far the region with the highest level of crime, and at the same time it is a region where the distribution of income is generally more unequal than elsewhere. Latin America is also an area where economic growth has been extremely volatile. The recent surge in criminality in some former socialist countries in Central Asia and Central Europe could probably be analyzed in the same way. These changes also raise the issue of the social control of crime. High levels of inequality or increases in poverty need not lead to a higher rate of crime if crime deterrence is simultaneously strengthened. However, this leads to two observations. First, in a political economy framework unequal levels of crime deterrence may themselves be the consequence of existing or increasing inequality, because a highly unequal society may have a low propensity to invest in safety infrastructure. Indirect evidence of this was shown in the case of Brazil. Second, even if increased crime deterrence measures may prevent concomitant increases in inequality and levels of crime, these measures are costly, and it is not clear that they are socially less costly than crime itself.

Through crime or through crime prevention, inequality and poverty may inflict sizable social losses to society. From a policy point of view, this clearly makes the need for controlling the distributional effects of economic development all the more important. This is especially the case in urban areas where propensities for crime are higher, as is the volatility of economic activity responsible for transitory acute poverty, with lasting consequences for crime and violence.

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11

Urban Poverty: Some Thoughts About its Scale and Nature and About Responses to It

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This chapter reflects on the context within which urban poverty develops, the deprivations associated with it, and some of the ways in which it can be addressed. It has five sections. The first describes the different forms of deprivation associated with urban poverty and how conventional poverty definitions and measurements miss many of these. The second section discusses the influence of some key economic and spatial changes on urban poverty, especially economic growth, trade liberalization, and the pace of urbanization. The third discusses the effectiveness and limitations of community initiatives to address urban poverty. The fourth considers measures that increase access to jobs. The final section considers the complementary roles of the central government in supporting community initiatives to reduce urban poverty.

Defining Urban Poverty

Absolute poverty in an urban context usually involves five interrelated aspects, namely:

- Inadequate or unstable income, which translates into inadequate consumption of basic necessities
- Inadequate, unstable, or risky asset base for individuals, households, or communities, including those assets that are important for maintaining income, for coping with economic shocks, and for limiting environmental hazards that can have serious health and economic costs
- Limited or no right to make demands within the political system and to receive entitlements, often within a framework that does not guarantee civil and political rights, such as the right to representative government or the right to organize, make demands, and get a fair response
- Poor quality and/or insecure housing with inadequate provision of public infrastructure and services (piped water, sanitation, drainage, health care, schools, emergency services), which imposes a large health burden
- Inadequate protection from the law, for instance, for civil and political rights, for health and safety in the work place, for protection from pollution through environmental legislation, and for protection from violence.

Absolute poverty is also generally linked to discrimination or exploitation. Examples include the discrimination women face in labor markets, women's limited access to credit and services, and the discrimination certain groups face as a result of their ethnic origin or caste. These different aspects of urban poverty can be seen as a pyramid as shown in table 11.1. Obviously, there are strong links between these different aspects—for instance as poor quality, insecure housing with inadequate provision of 'public' infrastructure and services reflects the occupants' very limited capacity to pay for housing—but it is useful to stress each of these different aspects, because each highlights a different entry-point for interventions that can reduce poverty.

Table 11.1. *The Association between the World's Largest Economies and Largest Cities, 1990*

<i>Size of economy</i>	<i>City populations</i>		
	<i>10 million</i>	<i>5 million</i>	<i>1 million</i>
The world's five largest economies ^a	6	11	103
The following ten largest economies	5	11	67
The following ten largest economies	0	4	34
The rest of the world	1	7	77
Total	12	33	281

Note: Data on the 10 million plus and million cities from United Nations (1995) were adjusted based on new census data and UNDP (1993) data on the world's largest economies were based on real gross domestic product (purchasing power parity U.S. dollars).

a. In 1993, China, Germany, Japan, the Russian Federation, and the United States were the world's five largest economies.

Source: Satterthwaite (1996); UNDP (1993); United Nations (1995).

Although it may be difficult for those who are used to equating poverty with income alone to accept this broader view, and it is difficult to incorporate many of these aspects into the quantitative measurement of poverty, it is important for many reasons. The following are brief summaries of these reasons.

A growing number of case studies show how deprivations associated with low income can be reduced without increasing income by increasing assets or improving basic services. Political changes that allow low-income groups to negotiate more support or less harassment have also been shown to reduce deprivations. Regarding the right to make demands, the more successful poverty reduction programs—often with little or no funds from foreign interests or local authorities—feature groups of urban poor that successfully negotiate resources and room for autonomous action and end previous harassment from local authorities. If this is generally true, the scope of actions that can help to reduce poverty widens greatly.

Governments and nongovernmental organizations (NGOs) are often better able to address an inadequate asset base, limitations in political rights, inadequate basic services, and discrimination than the problem of limited income, which is, in any case, influenced by general levels of prosperity and growth (although recent experiences with microfinance may suggest a greater ability to address the problem of limited income). In addition, basic service provision can be important for income levels indirectly, because improved basic services can often greatly reduce loss of income resulting from earners having to take time off for their own or a family member's illness or injury or from the cost of treatment and medicines. Improved basic services may also increase income indirectly. For instance, a new piped water supply can lower the amount households have to spend on buying water from vendors. Safer and more secure housing protects households against loss of assets; it is almost always the poorer groups that lose their homes and other assets to floods, landslides, and earthquakes. Safer housing can also be a source of income, for example, by extending the house to rent out rooms or house a small enterprise or by using it as collateral for a loan. In some cases, poor people's capacity to pay for improved basic services and for safer housing is limited. Where this is the case, the ability to negotiate with local authorities for less harassment (for example, removal of the threat of eviction) and modest resources (for example, the loan of equipment to help dig or clear drainage ditches, weekly collection of solid waste) can provide considerable benefits.

Increasing income may not be enough to enable households to move out of poverty. In many urban centers, provision for urban infrastructure and services is so limited and the capacity of local governments to expand or improve it so weak that even middle-income groups cannot find housing with adequate provision for water and sanitation and protection against natural disasters. In such circumstances, the private sector often develops residential enclaves for the middle and upper classes

with privately provided and managed infrastructure and services, but rarely do these services reach more than a small proportion of a city's population.

Furthermore, an income-based poverty line has no validity unless it accurately reflects the income level that an urban household needs to avoid poverty. This income level varies very considerably within cities, between cities within the same country, and between cities in different countries. This is why the universal US\$1 a day or US\$2 a day poverty lines are so inappropriate. For instance, US\$1 a day may be enough to avoid serious deprivation in a small urban center in a poor region of India, but not in larger, wealthier cities. In some cities, US\$1 a day would not cover the cost incurred by going to and from work. In some low-income communities, it hardly covers the cost of water that has to be purchased from water vendors.

One of the great unknowns is the amount of variation from place to place in the level of income needed by a household to avoid poverty. A single income-based poverty line applied to a whole country assumes that there is no variation at all, which is known to be invalid. Certainly, many urban households need a higher cash income than many rural households to avoid poverty. The following list indicates some reasons why the urban poor may have a greater need for cash income.

- Public transport costs resulting from the need to get to and from work and essential services; various studies of urban poor communities reveal that public transport costs represent a significant part of total household expenditure.
- School fees and associated costs, including getting to and from school, are often higher in urban areas. Even if no charges are made for entry into schools, there are often other costs, such as school meals, uniforms, and examination fees that low-income households have difficulty meeting (see, for example, Kanji 1995).
- Housing costs include rent or greater expenses if living in a self-built house, because land for the house and building materials are expensive. Many tenant households spend more than a quarter of their income on rent (see, for instance, Barbosa, Cabannes, and Moraes 1997; Richmond 1997; UNCHS 1993; UNCHS and World Bank 1993). Households that rent rooms or live in illegal settlements may also be paying high prices for other services. For instance, low-income households frequently spend a significant proportion of their income on water, sanitation, and garbage collection. Payments made to water vendors represent a major item of household expenditure, often 20 percent of household income. Some case studies show even higher proportions spent on water (Cairncross 1990). Many urban households have no washing and sanitation facilities within their homes and have to pay fees to use communal or public latrines and washing facilities that can represent 5 to 10 percent of household income (see, for instance, the case of Kumasi described in Devas and Korboe 2000).
- Food is generally more expensive in cities. In addition, urban households generally have more limited opportunities than rural dwellers to offset this cost by growing food or raising livestock.
- Healthcare can be more expensive in urban areas. In some cases, no public or NGO provision is available, and private services have to be purchased. A study (Pryer 1993) of a slum area in Khulna, Bangladesh, highlights the large economic burden caused by poor health that is associated with poor-quality housing. The study also shows how the economic cost in terms of income lost from days off work and from medical expenses was greater than the cost of improving the infrastructure to eliminate the health problems. In Karachi, the low-cost sanitation system supported by the Orangi Pilot Project brought the cost of good-quality sewers down to the point where the installation cost per household is likely to be less than the savings from one year of less time off from work and reduced treatment costs (Orangi Pilot Program 1995).
- Childcare costs occur in households where all adult members have to find income-earning opportunities. Low-cost or no-cost solutions are seldom available, although this difficulty is often solved through reciprocal arrangements with other members of the community or by leaving older siblings in charge.

- Most low-income urban households have other costs that go unrecognized by those who define income-based poverty lines, including payments to community-based organizations, bribes to the police, fines for illegal street vending, and payments for energy (for cooking and heating water, lighting and electrical appliances, and space heating where necessary).

Low-income households vary considerably in the proportion of income they spend in these different categories. For instance, many low-income urban households choose to live in peripheral areas because accommodation costs are lower, space is more plentiful, and greater possibilities of home ownership exist, but this means higher transport costs. Others chose more central locations, for instance, renting a room in an inner city tenement, which means they generally pay less transport and more for housing (through rent).

Most governments set income-based poverty lines and use these to determine or estimate the proportion of urban and rural populations that are “poor.” However, few income-based poverty lines recognize the scale and diversity of nonfood income needs for urban households, such as those listed. Most poverty lines are based on the cost of a food basket with some minor upward adjustment for nonfood items—typically a 15 to 30 percent increase above the cost of food—yet in many urban centers the cost of nonfood necessities is much higher than this. This upward adjustment is sometimes based on data from household surveys of what the poorest 20 percent of households spend on nonfood items, but this is not the same as the income level they need to avoid deprivation. It is hardly appropriate to say that households need incomes that allow food to be purchased plus 20 percent to cover other costs simply because low-income households who live in poor-quality housing lacking basic services pay 20 percent of their income for such housing.

Some countries have recognized that the income needed to avoid poverty in urban areas is generally higher than in rural areas, and so set income-based poverty lines for urban areas that are slightly higher than those for rural areas (see, for instance, Jonsson and Satterthwaite 2000; Tabatabai and Fouad 1993). However, the scale of this adjustment is generally too small in relation to the income needed to avoid poverty in most urban areas, especially the larger or more prosperous cities.

In response to the differentiations made here, in subsequent discussions of associations or links between poverty and other factors we will use terms such as income poverty and basic services poverty.

Seeking to Explain the Influence of Key Economic and Spatial Trends on Urban Poverty

The different aspects of poverty listed in table 11.1 do not necessarily go together. For instance, many Latin American nations faced serious economic declines during the 1980s, with a considerable proportion of the low-income population getting poorer and a considerable proportion of the nonpoor becoming poor (Minujin 1995). However, at the same time, many of these countries’ governments became democratic, resulting in much less abuse of human rights, including less repression of civil society organizations that represented groups of the urban poor. In those countries whose political structures became more decentralized and democratic, the scope for local government action and response to urban poor demands expanded. Constitutional changes like these took place in countries such as Brazil, Colombia, and Peru, increasing the scope for local democratic governance with more programs and policies that were favorable to the poor.¹

The precise impact of such political changes on urban poverty is difficult to estimate. In discussions within international development organizations, such changes are usually not considered as part of poverty reduction, partly because the framework for defining and discussing poverty has borrowed too heavily from Western concepts of poverty, which tend to focus on income only (Beck 1994; Chambers

¹ A growing number of case studies of specific initiatives or of new policies implemented by local authorities have been documented. See, for instance, Balvín Díaz, Follegatti, and Hordijk (1996) and Follegatti (1999) on the Peruvian city of Ilo; Davila (2000) on Cali, Colombia; Vélasquez (1998, 1999) on Manizales, Colombia; Souza (forthcoming) on the Brazilian city of Porto Alegre).

1995; Wratten 1995), and partly because the changes are difficult or impossible to measure. However, using one of the most extreme cases to emphasize the point, the transition to democracy and a nonapartheid government in South Africa has clearly brought benefits to the urban poor. These benefits take the form of dramatic reductions in repression and contravention of human rights and improvements in political structures in which the poor have more influence. In addition, some services have improved, even though the real incomes for many of the urban poor in South Africa probably have not changed much. Similarly, in much of Latin America, the transition or return to democracy during the 1980s reduced harassment of the poor. For instance, the scope of large-scale eviction programs that were common under nondemocratic regimes was reduced, as was repression of the urban poor (Audefroy 1994; Hardoy and Satterthwaite 1989). These changes are important to the lives and survival strategies of many of the urban poor, yet go unmeasured and unconsidered if poverty is only considered as inadequate income.

This illustrates the difficulties of measuring many aspects of urban poverty. There are comparable difficulties in understanding the links between major economic and spatial changes and urban poverty. Discussion of some of these follows.

Inadequate Data on How Income Poverty Has Changed

For most countries, no data exist on changes in incomes in different urban areas and changes in the prices for basic necessities or the cost of avoiding poverty. Data on income changes for urban populations without data on changes in the costs of basic necessities can not tell us much about how poverty has changed. Even where data on the price of a basket of basic goods exists, this basket usually fails to include many of the key basic household necessities such as water, sanitation, rent, transport, health care, and keeping children at school.

Inadequate Data on Changes in Service Provision

It would be interesting to see how the provision of water and sanitation has changed in urban areas in different countries and to get a sense of whether improvements have been associated with economic growth. However, the data on basic service provision in urban areas are patchy. For example, official statistics on the provision of water and sanitation in urban areas are known to have many inaccuracies, with many national figures for provision in urban areas greatly overstating the proportion of people with adequate provision (Hardoy, Mitlin, and Satterthwaite 2000; Satterthwaite 1995). Among the main reasons for this are inappropriate criteria set for what is adequate and limited capacity among the international agencies that publish these statistics to question the validity of statistics provided by member governments.

According to the water and sanitation statistics published by the World Bank and the United Nations Development Programme, in many of the poorest African and Asian nations virtually all the urban population have piped water and adequate provision for sanitation (see, for instance, UNDP 1996; World Bank 2000). However, detailed city studies within these countries show this is not the case (Hardoy, Mitlin, and Satterthwaite 2000). These conflicting results are partly due to the criteria used to define what is adequate in terms of provision of water and sanitation being too vague. For instance, squatter settlements with hundreds of people per standpipe and irregular and often poor-quality water supply to the standpipes are considered adequately served because people have a standpipe within 200 meters of their homes. Similar problems exist for criteria that define adequate sanitation. For example, governments often classify people living in areas served by communal latrines as adequately served; however, the number of latrines relative to people is often far too small and the latrines are poorly managed; as a result many people are forced to defecate outside (Satterthwaite 1995; WHO 1996). Thus, we do not have data on how provision of water and sanitation in urban areas has changed in most countries.

Diverse Trends between Cities

Any attempt to consider how the scale and nature of urban poverty has changed in a country must also consider that circumstances can vary enormously between cities, and even within cities, for different groups. For instance, in countries with large populations, great diversity is likely to exist between cities. These differences may not be seen so much in incomes as in the quality of basic service provision. An example of this can be seen in the 20 year difference in life expectancy between the wealthier, well-managed and the poorer, poorly managed cities in Brazil (Mueller 1995).

Some governments have sought to improve the information base about urban poverty. For instance, in various Latin American countries this is accomplished by using a measure of unsatisfied basic needs, but this approach has been introduced too recently to provide much information on how basic service provision has changed.

In countries with well-managed censuses, there is a large potential for examining in greater detail the quality of basic service provision for each city (and for each district or municipality within larger cities). In some countries, examining how the quality of basic service provision has changed between censuses is another possibility. In this case, the problem is not that data do not exist, but that these data are not published. For instance, census data frequently show the proportion of urban and rural populations that is served by piped water and by different forms of sanitation, but no disaggregation into different urban centers or different districts within urban centers is shown. Contacts with census offices or government statistical offices can often produce this information, although doing so is time-consuming. In some countries and cities such information is available and could be used to illustrate qualitative changes in basic service provision. However, the range of information about basic service provision that most censuses collect is limited. For instance, the data collected about water supply for most of the censuses held around 1990 did not include data about cost, reliability, or quality.

Inadequate Data on the Pace of Urbanization

One particular interest of the authors of the 1999/2000 *World Development Report* (World Bank 1999) was whether there were links between the pace of urbanization and the scale or rate of change of urban poverty, but the data to allow much discussion of this do not exist. As if the data problems that have been outlined were not enough, we do not know how urbanization levels have changed for most countries since 1990, because this is the last date for which census data are available. It will be 2002 or 2003 before enough data are available from the new round of censuses to know what the pace of urbanization was during the 1990s. For some countries, especially in Sub-Saharan Africa, the data problem is more severe because there has been no census for 15 to 20 years. No other data source is reliable for urbanization levels. Without census data, the estimates and projections made by the United Nations Population Division as to how nations' urbanization levels are changing cannot be used as a substitute, because this simply builds the assumptions used for making estimates and projections into any analysis of linkages between urbanization levels and economic or social data. When new census data become available, they often show the inaccuracies of previous estimates, for instance, the great overestimations of the scale of population growth in the world's major cities (Hardoy and Satterthwaite 1989; Satterthwaite 1996).

These problems make most of the following analysis tentative, or even speculative. However, a number of subthemes emerge from the original question, which focuses on the core relationships among economic growth, poverty, and urbanization.

Pace of Urbanization and Economic Growth

Clearly, the higher the per capita income of a country or a region within a country, the higher the level of urbanization generally is. However, many wealthy nations have stopped urbanizing, and the levels of urbanization in high-income countries are diverse. In general, the countries with the highest economic

growth rates in the 1960s and 1970s were usually the countries with the largest increases in levels of urbanization. This association probably continued in the 1980s. Note that our analysis is limited to those countries for which census data on levels of urbanization exist.

Most of the world's largest cities are in the world's largest economies. This should not be surprising, but this fact does add weight to the idea that rapidly growing large cities and increased urbanization levels are generally associated with economic growth.

There are important exceptions to the expected association between increased levels of urbanization and economic growth that usually center on political circumstances. For instance, South Africa urbanized less during the 1960s and 1970s than might have been expected if one considers only its economy and its economic growth. However, the less than expected urbanization of South Africa during these decades can be understood when we consider the apartheid state's restrictions on labor movement and its denial of the right of most of the population to live in urban areas.

Sub-Saharan Africa is often held up as an example of a region that urbanized rapidly without economic growth. At least for the 1990s, we do not know whether it urbanized because there has been no census since 1990, or if there has, the data are not available. Most Sub-Saharan African countries urbanized more than might be expected in the 1960s to 1980s given their generally low levels of economic growth. In addition, this region also had some of the fastest growing cities in the world. However, for most nations, we have little or no census data from the last 10 to 15 years to indicate how much they urbanized in recent years. Perhaps the most immediate reason for the rapid growth of cities in this region was the small urban base that they started with. Among the 18 cities in Sub-Saharan Africa with more than 1 million inhabitants in 1990, half had fewer than 200,000 people living in them in 1950, while five of them (Abidjan, Conakry, Dar es Salaam, Maputo, and Nairobi) had fewer than 100,000. Because these began with such a small base, their population growth rates starting in the 1950s are much higher than those of major cities in most other regions of the world that were already much larger in the 1950s or 1960s. Note that the population growth rates of these cities are certainly not historically unprecedented; many cities in the southern United States that started with small bases and grew to be major cities in the first half of the 20th century had high average population growth rates (Satterthwaite 1996). Some of Latin America's largest cities experienced a similar growth pattern in the late 19th and early 20th centuries (Satterthwaite 1996).

One of the main reasons for Sub-Saharan African cities' small initial base was the deliberate urban population control that European colonial powers had implemented by imposing restrictions on the rights of local people to live and work in urban centers. Thus, these cities' populations grew rapidly just before or after the end of colonial rule because the colonial apartheid-like controls on population movements were removed or weakened. This allowed women and children, who had been forced to live separately in rural areas, to join their husbands and fathers who were working in the city (see, for instance, Bryceson 1983; Potts 1995).

Another reason many Sub-Saharan African cities grew so rapidly during the 1960s and 1970s was the achievement of political independence by the nations in which they were located. These cities saw the development of the institutions associated with an independent state and of a higher education system, which had remained undeveloped under colonial rule. A third reason for rapid growth was the division of what under colonial rule had been one country into two or more. As a result, each new country needed a capital that subsequently experienced rapid growth (Bairoch 1988). If much of the in-migration into Sub-Saharan Africa's largest cities can be explained by the movement of women and children and by the expansion of higher education and the institutions associated with independent nation states, it cannot be said that this was urbanization out of control. No Sub-Saharan African city appears as one of the world's 20 fastest growing cities in the 1950s, 1960s, or 1970s if its growth is measured in terms of the city's annual average increase in population per decade.

Urban Income Poverty and the Pace of Urbanization

In terms of income poverty, some obvious likely associations exist. For example, countries that were fast urbanizers in particular decades were generally the countries with the most rapid economic growth. (There are some exceptions to this in Sub-Saharan Africa during the 1980s for reasons noted already.) In addition, the scale of these countries' economic growth is associated with the extent to which income poverty was reduced. For example, in Latin America generally, income poverty decreased in the 1960s and 1970s, especially in countries with rapid economic growth, which were generally the countries with the largest increase in levels of urbanization. Subsequently, an increase in income poverty occurred in the 1980s, when economic growth ceased (or went into decline) and the pace of urbanization slowed.

Poor economic performance during the 1980s was also associated with large falls in the growth rates of most large cities in Latin America. However, poor economic performance is also associated with changed economic orientation. The largest cities were generally the centers for industry that had developed under import substitution support, while other cities benefited from the change to export promotion. Changed political structures also influenced economic performance. A downsizing of government hit national capitals hardest, especially in countries with highly centralized government structures. Note also that major cities' slower growth rates were also generally associated with lower rates of natural population increase, reflecting falls in fertility levels.

For most of Sub-Saharan Africa, we suspect that the pace of urbanization slowed in the 1980s and 1990s, reflecting economic decline and cuts in the size of the public sector (most public sector employees live in urban areas). The exceptions would primarily be where civil war or conflict drives rural people to particular cities; thus no link exists between a city's attraction for migrants and its economic performance. Few data are available to test this, because so few countries have had recent censuses. However, a few indicators do exist. Initial returns from Mali suggest slower urban growth, and the Nigerian 1991 census showed much less urbanization than most had expected.

Thus, a consideration of links between economic change and poverty reduction raises many questions for which there are little or no data to answer them. Has an important change taken place in the implications for urban poverty reduction based on what we know about economic growth in the 1990s compared with economic growth in the 1970s and 1980s? Has this growth been directly or indirectly less labor absorbing? Or do the implications for urban poverty reduction vary between countries depending on the nature of economic growth, for example, is successful tourist development more labor absorbing than manufacturing?

Urban Basic Services Poverty and the Pace of Urbanization

The data on the proportion of nations' urban populations that are adequately served with water, sanitation, and health care have too many inaccuracies to allow their use in discussing the association between the pace of urbanization and improvements in the proportion of the urban population served. Assuming the figures from the Housing Indicators Program to be more robust than national figures because they were produced or checked by local researchers, an association exists between the proportion of a city's population served with piped water and national per capita income. However, considerable variation exists in the extent to which city populations are served with piped water among cities in nations with comparable per capita incomes (see, for instance, UNCHS 1996).

There are examples of cities with rapid population growth that have also achieved high levels of basic service provision. These demonstrate that for individual cities, rapid population growth does not necessarily mean increased basic service poverty. For example, Porto Alegre and Curitiba in Brazil, each with more than a million inhabitants, are among the world's most rapidly growing cities during the last three decades, and these cities also have some of the highest proportions of their population served with piped water and adequate sanitation (Menegat 1998; Rabinovitch 1992). São Paulo, for all its problems, has a relatively high proportion of its population served with piped water and sanitation, although its

sheer population size means that millions of people still are not served or are inadequately served (Jacobi 1994). However, there are also rapidly growing, prosperous cities where basic service provision for large sections of the population have not improved, as in the case of Bangalore in India (Benjamin 2000). Many booming cities and smaller urban centers in India have large inadequacies in basic service provision (Agarwal, Narain, and Sen 1999). Without competent and effective local authorities that represent and respond to the needs of their lower-income households, a city's rapid economic growth does not translate into improved service provision.

Considering how successful informal sector enterprises and community action have been in improving basic service provision in the absence of government or private sector provision is also important. An example of this is the Orangi Pilot Project in Karachi, where hundreds of thousands of households received good-quality sewers through self-funded construction programs that were supported by a local NGO (Hasan 1997; Orangi Pilot Program 1995). Another example is the great range of community-directed initiatives in the squatter settlement of El Mesquital in Guatemala City, which included health care, daycare, water, and sanitation (although unlike Orangi, this received substantial international funding) (Diaz and others 2000).

There are obvious links between good governance and the reduction of basic services poverty. Rapid growth in individual cities can bring increased basic services poverty. This is especially true in cities where rapid growth is not accompanied by economic growth, for example, in many Sub-Saharan African cities, especially during the 1980s. It is also true even in prosperous cities where city authorities are either unwilling or unable to ensure basic service provision. Examples of this unwillingness or inability can be seen in Surat in India before the plague outbreak there, which focused attention on the extent to which this city's economic boom had not been translated into improvements in basic service provision. Another well-documented example is that of Cubatao's development under the military regime in Brazil (Lemos 1998). However, if economic growth is accompanied by improvements in the capacity and competence of city authorities, then rapid growth can reduce basic services poverty, as has occurred in Brazil in Belo Horizonte, Curitiba, and Porto Alegre. Is the extent of decentralization and democratization a key factor in ensuring that rapid city growth is accompanied by reduced basic services poverty, in terms of both the quality and extent of public sector investment and its capacity to support, or at least not suppress, community initiatives?

Links between Increased Life Expectancy and Pace of Urbanization

The life expectancy at birth in a country is among the most valuable single indicators of social achievement. Life expectancy at birth is a measure of the extent to which economic, social, and political factors within a country have made it possible for citizens to avoid premature death and, in general, lead a healthy life. The figure for a country's average life expectancy tells one much about the quality and extent of basic service provision. A country cannot achieve a high average life expectancy without most of its inhabitants having good-quality housing that includes safe and sufficient water supplies and adequate provision for sanitation. Nor can a country achieve a high life expectancy without wide health care coverage that includes special provision for infants and children and for women's reproductive health. Given the lack of data about basic service provision and the questionable accuracy of the data that are available, looking at the associations between changes in life expectancy and changes in levels of urbanization might be instructive.

In 1995 we analyzed the links between changes in life expectancy and changes in per capita income while preparing *An Urbanizing World: Global Report on Human Settlements 1996* (UNCHS 1996). This analysis produced few surprises. We found that, in general, the countries with the highest life expectancies are also the countries with the highest per capita income, while the countries with the largest increases in life expectancy in 1960–92 were also generally those with the largest increases in per capita

income. Within these groups countries known to prioritize basic services provision achieved well above average performance in increasing life expectancy relative to increasing per capita income.

Plotting increases in the level of urbanization in 1960–90 against increases in life expectancy in 1960–92 is possible, although doing so requires a few words of caution. First, note that life expectancy is much easier to increase when it is starting from a low base. Many of the countries with the smallest increases in life expectancy in 1960–92 were simply those that had already achieved high life expectancy by 1960. Second, similar problems occur when plotting increasing urbanization levels; increasing the population that has urbanized from 20 percent to 40 percent requires smaller shifts in population than moving from 40 to 60 percent. In addition, for many countries we have no census data for the 1980s, but eliminating any country without census data since 1985 from the analysis easily solves this problem. However, this eliminates most countries in Sub-Saharan Africa from the analysis. Further words of caution are needed where the nature of the analysis and the statistics are concerned. An example of an issue to keep in mind concerning the nature of the analysis is whether increasing levels of urbanization are in response to particular economic changes or to political changes. Issues relating to statistics refer to the different definitions countries use to define their urban populations.

Having said this, the final picture is diverse. Some countries with some of the largest increases in life expectancy had relatively low increases in urbanization levels, for example, China, India, Indonesia, Thailand, and Vietnam. Others had large increases in urbanization levels, the Republic of Korea especially, but also Iran, Iraq, Malaysia, and Turkey. However, for some of these, this may be because of the urban definition. This is certainly the case for China, where a large population living in urban centers remains classified as rural for historic reasons (UNCHS 1996). Brazil, Chile, Ecuador, Mexico, and Venezuela had average performance in both indicators; however, this was in part due to their relatively high levels of urbanization in 1960.

Australia, Austria, Canada, France, New Zealand, Sweden, the United States, and others had low increases in both. These countries were simply those that were already urbanized and had relatively high life expectancies in 1960. The cases of Burundi, Malawi, and Rwanda show the need for care in this analysis, as they held similar positions as this group of wealthy countries with high life expectancies. These African countries urbanized little and experienced only small increases in life expectancy despite starting at a low level in both of these in 1960. A group of Eastern European countries, the former Czechoslovakia, Hungary, Lithuania, and Romania, experienced large increases in urbanization levels and relatively small increases in life expectancy.

After the improvements in life expectancy are adjusted according to the formula suggested by Dasgupta and Weil (1992) to compensate for the fact that achieving increases in life expectancy is easier from a low base, some interesting changes take place. An obvious grouping of poor countries with relatively small increases in life expectancy and urbanization levels appears. These countries are Burundi, Malawi, Rwanda, and Somalia. Another obvious grouping consists of countries with large increases in life expectancy and relatively small increases in levels of urbanization, which includes the countries that were already relatively urbanized in 1960: Australia, Canada, France, Germany, Italy, Japan, and the United States. However, generally the results are fairly diverse, with no clear association between large increases in levels of urbanization and large increases in life expectancy.

To compensate for the fact that achieving increases in levels of urbanization is easier when starting with a small base, we introduce a formula that is similar to the one used for life expectancy. The results remain diverse, although the following clear regional groupings are apparent:

- *Sub-Saharan Africa.* A clear grouping of low-income Sub-Saharan African countries had the lowest performance both in increased levels of urbanization and in increased levels of life expectancy. This group includes Burundi, Chad, Malawi, Mali, Nigeria, Rwanda, Senegal, and Somalia. Unlike in other groupings, these stand by themselves with no countries from other regions.
- *Latin America.* Some of the highest increases in urbanization levels and relatively good performance in increased life expectancy are seen in a group of Latin American countries,

including Argentina, Brazil, Chile, Colombia, the Dominican Republic, Mexico, and Venezuela. This group includes most of the countries with the best economic performance in the region. Countries such as Bolivia, El Salvador, and Panama have smaller increases in levels of urbanization, but comparable increases in life expectancy.

- *Wealthy northern countries.* In general, wealthy northern countries show a greater than average increase in life expectancy and small to medium increases in urbanization levels.
- *Asian newly industrializing economies.* These countries show greater than average performance in life expectancy increases, but a great range in terms of increased levels of urbanization. For example, China, Indonesia, and Thailand have lower increases in urbanization than might be expected. However, this may be related to the ways in which urbanization is measured, as previously noted for China. Hong Kong (China) and Korea had among the highest increases in both life expectancy and urbanization level.
- *Eastern Europe.* This group of countries had average to greater than average increases in levels of urbanization and lower than average increases in life expectancy.

How Has Urban Poverty Been Affected by Trade Liberalization

The experience in the area of trade liberalization's effect on urban poverty is perhaps too diverse to allow general comments. Clearly, substantial increases took place in the scale and intensity of urban poverty after structural adjustment in many countries (Kanji 1995; Latapí and de la Rocha 1995; Minujin 1995; Moser, Herbert, and Makonnen 1993; Woodward 1992; Wratten 1995). Whether these countries were worse off than they would have been without structural adjustment is not clear. Most of these economies were in crisis anyway, with severe problems in terms of servicing foreign debt. However, a general consensus exists among these authors that the social impacts of structural adjustment, including the large impact on urban poverty, could and should have been lessened. Governments could have paid more attention to local measures that could have reduced the negative impact, for example, by protecting the level of expenditure for the most effective social programs or providing support for those most impoverished by the structural adjustment measures.

Some countries in Latin America did experience improved economic performance after structural adjustment. However, the inadequate and limited literature on this suggests that this economic improvement may have brought less reduction in income poverty than it did in the 1960s and 1970s. In other words, the nature of economic growth in the successful Latin American economies of the last few years was less income poverty reducing than before.

Questions This Section Has Not Answered

No data sources that we are aware of allow comment on how income distribution has been affected by the pace of urbanization or by the industrial or size characteristics of cities. An interesting question for which we would like more data is whether a rapidly urbanizing population and a rapidly increasing industrial work force change the political context to allow the urban poor to get a better deal. Rapid urbanization and rapid growth in industry imply rapid economic growth, so changes in income distribution are linked to the nature of ownership of the expanding economic activities, the power of the work force to negotiate adequate wage levels, and the extent to which the government provides for redistributive mechanisms. Growing income inequality within a city may affect its economic performance, for example, indirectly through growing levels of crime that deter new investment from locating there.

The lack of data allowing accurate comparisons between countries or cities regarding urban poverty makes it difficult to comment on whether foreign direct investment (FDI) has influenced urban poverty levels. If FDI has generally been associated with economic growth, then it is presumably a positive factor for urban poverty reduction, assuming that it takes extreme repression for economic growth not to have a

beneficial influence on urban poverty. However, FDI is likely to be concentrated in relatively few countries and cities. Also, in some cities the relatively small scale of employment creation, and in many instances the relatively low wages of the jobs that resulted from FDI, have been disappointing. For example, despite the success of Cebu, the Philippines, in attracting FDI, the level of urban poverty remains high (Etemadi 2000).

Thus, we have to recognize that the different impacts of the global competitive market on levels of poverty in different nations and cities are not well understood. The global market has provided the basis for many cities to become rich and successful, but unsuccessful urban centers exist in far greater numbers in the South. Can all find a prosperous niche within their local, national, or international context within an increasingly globalized economy?

While studies of individual cities, areas, and countries exist, little supports a robust and comprehensive understanding of the links between urbanization and urban poverty and the related issue of economic growth and urbanization at the subnational, national, supranational, and global levels.

Community Initiatives and Poverty Reduction

How effective have community initiatives such as self-help housing, safety nets, and community banking been in poverty reduction? Under what specific circumstances, such as forms of governance, are these initiatives most likely to flourish?

Groups seeking to address urban poverty have, from diverse starting points, developed remarkably consistent approaches that demonstrate some insights into the questions raised here and in the next section. Within these approaches economic growth evidently matters, but no simple relationship exists between economic growth and poverty reduction. Households and individuals make choices about urban or rural locations and about who within the household moves in response to opportunities and constraints. However, low-income households in particular remain vulnerable to powerful international economic forces, therefore addressing such vulnerability is still important.

Within many of the larger urban centers, a great variety of community organizations and professional groups work in support of community initiatives. In smaller urban centers, grassroots organizations often actively seek to improve their local neighborhoods and homes, but not as many professional agencies, such as local government, NGOs, or national government programs, are supporting these activities. Grassroots initiatives emerge for many reasons and the speed and consistency of collective action suggest that the more pessimistic assumptions about the associational capacity of urban communities are misplaced. When seeking to better understand such initiatives and the support that they can offer urban poverty reduction, distinguishing between the following three main factors is helpful:

- The approach underlying the intervention
- The main actors involved
- The sectors for improvement: housing, services, infrastructure, employment, and livelihoods.

If the intention behind gathering experience from community initiatives is learning for action, the issue of transferability from one successful initiative to a second attempt elsewhere is immediately raised. Experience suggests that any strategy to replicate a successful community initiative is not an easy one, because specific community initiatives are successful within specific circumstances. The circumstances that help to determine the success of community initiatives relate both to factors in the external environment, in particular, the scale of economic growth and the response of political and state agencies, and to factors that are internal and relate to matters of organization, capacity, and resource mobilization.

To better understand the underpinnings of successful community initiatives, it is useful to differentiate between the following four different core approaches within which the individual interventions supported by professional agencies can be placed:

- *Market integration* is based on the expectation that urban poverty can be effectively addressed by assisting the poor to obtain higher and more secure incomes. Success depends on securing markets for poor people's labor or their goods.
- *Direct welfare provision* is a result of the recognition that the lack of basic services and infrastructure creates many difficulties and costs for the urban poor. As a result, professional agencies are working in low-income neighborhoods to provide a range of services, such as improving water and sanitation and providing health care, roads, and pathways. Success depends on a source of funds to support such work.
- *Claim making* on the state is a response to the lack of public recognition of and support for the needs of low-income residents. Many civil society organizations have taken on a claim-making role, arguing for improved provision of a wide range of public services both for neighborhood improvement and for increasing access to livelihood opportunities. Success depends on a supportive political environment, especially if new or modified laws and regulations that are favorable to the poor are to be translated into tangible progress. Many examples of new laws imply more government actions that are favorable to the poor, but lack of implementation or actions by vested interests limit their impact.
- *Alternative asset accumulating models* for urban development are based on scaling up self-help solutions to address the difficulties that the poor face in securing basic necessities, including services and housing, and in finding employment. In addition, these models are based on seeking to add value to such self-help solutions. Success generally depends on the capacity to negotiate resources to support the scaling up of such initiatives and a supportive institutional environment.

Inevitably, making precise distinctions between these strategies is difficult, particularly for those groups that work closely with grassroots organizations. The work of grassroots organizations themselves defies categorization. Their work moves between one approach and another as opportunities in the external context open or close to them, as leadership changes within the group, or as other groups take up the struggle for local improvements. City-level federations of community groups generally become more strategic and follow one rather than another approach. Furthermore, overlaps exist between the approaches, for example, when NGOs make claims on the state, fail in their endeavors, and are forced to help groups that have been left without state support. Another example of these overlaps is when those seeking alternative development models start with groups' self-help efforts, which include market-based livelihood strategies.

What emerges from considering initiatives within this category is the lack of a clear distinction between community initiatives that support neighborhood improvements and those that increase access to jobs. Community initiatives may be thought of as both income enhancing, seeking to support access to jobs and productive activities, and expenditure reducing, seeking to reduce the costs of essential services and thereby enabling limited incomes to go further. In this section, the focus is on expenditure reducing interventions. The following section will consider those interventions that focus on enhancing incomes.

The term community initiative is used here in its widest sense to include both grassroots initiatives and the community interventions of external agencies. The discussions of the latter are usually divided by type of agency. Perhaps the most important distinction between agencies is the one between NGOs and government agencies. The support of international agencies (especially official bilateral and multilateral organizations) is generally channeled through one of these actors. The term NGO includes the work of both southern and northern NGOs, particularly in Latin America and Asia, with the recognition that NGO activities in southern towns and cities are primarily those of indigenous organizations. However, an increasing number of programs show that the distinction between NGOs and governments has become blurred. Numerous examples of NGO programs now exist that have been scaled up by government and implemented in partnership with NGOs. In addition, some government programs now have a distinctive and substantive role for NGOs. However, despite these trends, the division between civil society and state actors is still robust for cities in the South.

A consideration of the effectiveness of community initiatives to address urban poverty might differ by actor and approach. Table 11.2 presents various strategies of government groups and NGOs.

Table 11.2. *Community Initiatives in Southern Cities: Activities and Examples*

<i>Approaches/actors</i>	<i>NGOs</i>	<i>Government agencies</i>
Market integration	Microfinance initiatives and support for enterprise development and income generation. Examples: SEWA (India), ITDG (Bangladesh and Zimbabwe), some of the programmes of the Carvajal Foundation (Colombia).	Government support for small-scale enterprise or for facilities for informal sector enterprises.
Welfare provision	Relief assistance and support for groups in particular need, such as street children or evicted families. Examples, Hogar el Cristo (free and subsidized housing, Chile); Undugu (street children, Kenya).	Provision for those in specific need, often with a focus on health, education, and basic infrastructure. Includes the work of some social funds and many community health programs.
Claim making	Lobbying and advocacy for greater rights for the poor, including changes to regulations, laws, and the present distribution of resources. Examples: Urban Land Reform Task Force (housing and land, Philippines); NGO coalition (constitutional changes, Colombia); APPACAN (street children, Africa).	Support for greater participation of grassroots organizations in the municipal plans and activities. Participatory budgeting (infrastructure, Porto Alegre and some other Brazilian cities); some local agenda for the 21 st century in Latin America (Ilo in Peru, Manizales in Colombia).
Alternative development	Range of initiatives related to strengthening community efforts to secure and strengthen economic activities (creation of local markets) and neighborhood upgrading (housing and infrastructure). Examples: SPARC (housing and income generation, India), ENDA (sanitation and income generation, Senegal), Cearah Periferia (housing and income generation, Brazil), Orangi (sanitation and other interventions, Karachi), International Institute for Environment and Development–America Latina's barrio support programme in Buenos Aires, People's Dialogue on Land and Shelter (South Africa).	Innovative projects and programs to provide appropriate support to community initiatives. Urban Community Development Office (housing, land, income generation, Thailand); Sindh Katchi Abadi Authority (land and infrastructure, Pakistan).

Source: Authors.

With regard to success in poverty reduction, some limitations can be identified as follows:

- Many market intervention strategies depend on the success of the market, particularly for informal goods and services. The recent recession in Asia may result in a reconsideration of this approach depending on what happens with repayment of loans for microenterprise development.
- The scale of approaches related to welfare provision inevitably depends on the availability of organizational and financial resources to provide such support. For many poor people, especially in urban Africa, such resources are very limited.

- Claim making strategies have secured successes at the level of policy and advocacy, but translating such successes into changes in practice seems more difficult.
- Alternative development approaches can achieve success in settlements and neighborhoods, but such models may face constraints as they seek to scale up beyond the level of the neighborhood and require both a favorable policy and practice environment and significant investment capital.

Many studies of community life deal in part with the capacity of communities to address their needs for housing, infrastructure, and services. Few of these studies look specifically at community initiatives or deal in precise terms with their impact on poverty. However, such studies offer an understanding of what low-income urban residents seek to do for themselves through formal and informal grassroots organizations (Arévalo 1997; Cuenya and others 1990; Davila 1990; Peattie 1990; Schuurman and Van Naerssen 1989; van de Linden 1997). What emerges from most of the studies is these initiatives' inability to deal with structural issues or to obtain substantive allocations of funds at the city level. While individual communities secure improvement, few initiatives have succeeded in making substantive progress beyond this level.

Two exceptions to this are the experiences described in Abers (1998) and Barbosa, Cabannes, and Moraes (1997). In the first study, grassroots organizations developed a strategy to secure control of the city council, resulting in the start of the participative budgeting experience in Porto Alegre, Brazil. Abers (1998) argues that this has transformed relationships both between leaders and the city authorities and elected officials and between the leaders and their membership. The second study, from Goiania, Brazil, is equally relevant, although in a different context. A federation of tenants implemented an aggressive strategy to acquire land that supported the informal organization of renters and enabled tens of thousands of low-income households to gain both land and the spatial location necessary to lobby for services and infrastructure. These and other experiences suggest that the poor will do better where land is available and where they succeed in transforming relationships with the city authorities in a way that eliminates patronage and dependency.

A number of other studies concentrate on the perspective of donor agencies and analyze and assess their capacity to support the development of grassroots organizations and community initiatives. Participation, in particular, has been a popular theme. The importance of effective community participation in the development interventions of external agencies is increasingly being recognized (Korten and Klauss 1984). While much of the literature has focused on rural development, the importance of community participation in urban areas has also been recognized (Abbott 1996; Moser 1989; Paul 1986). Moser looked at this issue with a view to better understanding some of the contradictions involved in community participation within urban interventions. With this contribution, the discussion broadened to consider problematic issues, such as whose participation, and to recognize the heterogeneity within communities and the fact that different groups involved in a project often have different objectives.

A specific focus of Moser's study is housing, although interventions concerned with sanitation and health care are also included. Her analysis concurs with that of Paul (1986) in recognizing that a number of different objectives are often sought, and that progress toward community participation in any specific intervention cannot be understood without considering the related objectives. Moser's tentative conclusions suggest that interventions strong on empowerment objectives may also be more successful in securing other objectives such as cost recovery. In addition, she suggests that NGO programs appear to be more successful than those of official agencies in securing higher levels of participation, and flexible planning and strong, decentralized, community-oriented implementation strategies are needed if participation is to be effective.

Other work has sought to draw out some of the key principles of professional support. Turner (1976, 1988) has long argued that enablement is the key to better state support for housing development and that more recognition should be given to people's own planning and construction, with the state playing a supportive rather than directive role. During the 1980s, such ideas were given increasing credence, and in 1988 the United Nations Center for Human Settlements made the concept of enablement integral to the global shelter strategy

for 2000. The global report on human settlements (UNCHS 1996, p. 295) concludes that in the last 10 to 15 years, there has been "greater stress on public authorities working with the private sector and community organizations and in many aspects of their work moving from control to enablement." The concept of an enabling role for governments has been further reinforced by the Habitat Agenda, the main document to emerge from Habitat II, the second United Nations conference on human settlements.

However, questions have also been raised about the ease with which governments are able to make this transition. Douglass (1992), in a review of urban poverty and environmental management in Asia, concluded that governments have been ineffectual in assisting the poor to better manage the local environment. He argued that community-based environmental management is an important avenue for addressing environmental deterioration, although he is concerned that governments rarely support such initiatives. His analysis is echoed in UNCHS (1996, p. 425), which notes that: "In most cities in Africa, Asia, and Latin America, the individual, household and community efforts that have such a central role in building cities and developing services have long been ignored by governments, banks, and aid agencies."

A range of experiences demonstrate that groups of the urban poor are able to both articulate the necessary reforms and to ensure that they are made into law (see, for example, Karaos, Gatpatan and Hotz 1995 and their discussion of the Urban Development and Housing Act in the Philippines). However, a recurrent problem in this context is one of enforcement. Obtaining new legislation through organized campaigns within democratic societies is easier than ensuring that the legislation is implemented. An additional, related problem is that such laws may appear to be far from the reality of local people's lives and may not address their immediate needs and concerns, such as sufficient income for food and water. Unless laws appear to be immediately relevant, local pressure is not likely to be strong enough to change the practices of more powerful groups, however desirable these laws may seem.

In this context, the shift toward localization in the sense of a shift in the focus of political activity to the subnational level as documented by the World Bank (1999) may need some reinterpretation. Experience suggests that in addition to a shift from national to local government, groups favoring localization should seek to discuss the broader context of a move beyond the structures of government toward local control. Localization is seen not as a transfer from national government to local government, but rather as a recognition of the merits of self-government and a willingness to support the capacity of local actors to address their own needs (Fox 1997). Such a realization does not do away with the need for local government (or national government), but suggests that the style of national government needs to be transformative, seeking to mobilize and support local groups. Such a realization is not new to the NGO movement, although disagreement exists on this point. Hirschman (1984, p. 96) suggested that participants in grassroots development in Latin America may have come to believe that "there is something illusory about the importance widely attributed to the large-scale political changes...that have been characteristic of so many countries for so long in Latin America." Box 11.1 exemplifies the work of one NGO and its grassroots alliance in Mumbai, which has sought to develop the grassroots capacity to put such a model into practice.

Such work illustrates a move toward increasing the capacity of poor people to address their own needs, either directly or through new forms of relationships with the required range of government agencies. Perhaps the single most important lesson arising from such experiences is the emphasis that external agencies need to place on understanding the realities of the poor themselves, and working with these realities in seeking substantive and lasting improvements.

Measures that Increase Access to Jobs

What measures can be introduced to increase access to jobs? What initiatives register some success in terms of poverty reduction? This section looks particularly at initiatives that are income enhancing. Within such a focus, distinguishing between the following three approaches can be helpful:

Box 11.1. *From Policy to Practice: The Experience of the Society for the Promotion of Area Resource Centres*

In the last 12 years, the role of the Mumbai-based NGO Society for the Promotion of Area Resource Centres (SPARC) has been transformed from that of a small NGO working on the periphery of state activities to that of an agency that is listened to in governmental and international forums. Central to SPARC's transformation is its alliance with two grassroots organizations, Mahila Milan, a network of women's cooperatives largely formed by women pavement (or street) dwellers, and the National Slum Dwellers Federation. SPARC seek to engage with the government because its members understand that this is critical for scaling up the work of the alliance. However, in their engagement, they seek to overcome a problem associated with other policy initiatives. Too often, NGOs put forward proposals for policy reform without exploring these proposals at the community level with local residents. SPARC, due to its alliance with the National Slum Dwellers Federation, has sought another way to influence policy. It involves developing demonstrable alternatives together with local residents and then engaging local and national officials in a dialogue with communities about these pilot projects and how they can be scaled up. Their work includes changing building regulations to enable construction of housing developments that better suit the needs of low-income groups and participating in the design and realization of a new state policy for legalizing and improving housing for the poor in Mumbai. In addition, they have taken part in developing a community design for toilet provision and proposing and implementing schemes for resettling urban communities. While SPARC's experience has demonstrated the unreliability of both national government commitments and international agencies, the communities that SPARC works with have sought to maximize the benefits to the urban poor in each situation.

Source: Patel and d'Cruz (1993); Patel and Sharma (1998); SPARC (1996).

- *Providing jobs directly.* Initiatives such as the Agency for the Implementation of Public Interest Work in Senegal have sought to provide jobs in labor-intensive public works within a broader context of economic recession and cutbacks in public employment. Other programs have sought to use food for work as the financing base for employment.
- *Providing credit and other support services to the informal sector.* In the context of a general shift away from state interventions, support for private sector activities and the informal sector has gained popularity. The success of a number of NGO-instituted programs to provide credit to the poor have further encouraged such measures. More recently, the recognition came that financial services are not enough (a lack of access to credit is not the main constraint on many people attempting to get out of poverty) and that such strategies may not be of immediate benefit to the poorest people.
- *Increasing markets for the informal sector.* A number of new initiatives have sought complementarities between neighborhood improvements and income generation. While this work is at an early stage, some interesting synergies have begun to appear. In particular, this work gives economic meaning to the concept of localization. Rather than simply being considered in the context of government structures, localization considered in this sense means strengthening local markets and ensuring that sales of goods and services within the immediate neighborhood meet a basic level of demand. This basic demand enables production economies to be achieved and informal sector activities to be more successful.

The direct provision of jobs has been important in reducing poverty in some contexts, but we know relatively little about this. Three facts explain our lack of knowledge. First, direct provision of jobs is not an area in which we have specialized. Second, few general studies are available. Third, large-scale public works programs depend on large-scale state initiatives, and these have not been popular forms of development intervention for some time.

The Limitations of Addressing Poverty through Increasing Incomes

We noted earlier the different kinds of deprivation the urban poor face and the extent to which a focus on income poverty alone misses the importance of other forms of deprivation and other forms of intervention. While increasing income is a necessary component of addressing poverty, it is not sufficient. The following three main elements explain why:

- *Vulnerability.* Increasing incomes, whether through employment or microenterprise development, primarily addresses individual and household needs. For the citizen as a private entrepreneur, this focus on the individual does not necessarily matter. However, for the citizen that is a resident of a low-income community, mutual support between neighbors may be critical for well being, particularly for women and those with the lowest incomes. The poorest members of a community may be left out of economic development as help is provided to those who are able to take loans or respond to market opportunities. Close cooperation can do much to address the vulnerability associated with being poor, and stronger collective awareness and mutual support may be one of the best ways to reduce vulnerability. Note the example of community-managed credit among the women pavement (street) dwellers in Mumbai (Patel and d’Cruz 1993). In addition, improved basic service provision can greatly reduce health burdens and their associated economic burdens and capacities to suddenly cut incomes.
- *Recessions.* The markets in which many of the poor are involved lack stability and income gains may only be temporary. In times of economic prosperity, these markets may be effective, but life may become more difficult during periods of economic recession or other adverse economic changes.
- *Poverty and power.* Some of the problems that the poor face cannot be addressed by increasing income or by applying self-help measures. What is needed is a local organization that ensures that government facilitates low-income groups’ struggle for legal land tenure, provides services to settlements, and enables low-income residents to have access to the same kinds of benefits that other citizens enjoy. Government itself rarely provides for low-income settlements; instead, these settlements have to secure such recognition through community organizations or residents’ associations that apply pressure to local state bodies.

Some have referred to the increase in microfinance interventions as the microfinance revolution. "The poor are beginning to learn that institutional, commercial microfinance can help them to improve their enterprises and increase their incomes. Simultaneously, the formal financial sector has begun to realize that financing the poor can be both economically and socially profitable and that microfinance is one of the largest potential markets in the world" (Robinson 1996, p. 161). At its simplest, microfinance is the extension of banking services within low-income communities on less exploitative terms than in the existing informal sector and on a scale that self-help savings groups, which lack access to external funds, cannot achieve.

Few assumptions can be made about how such an extension is done. In many cases, small groups are established among members of the community to strengthen social relationships and enable mutual collateral and guarantees. Different perspectives and experiences with microfinance are brought together in a special volume of the *Journal of International Development* (1996) that includes comments from both enthusiasts and sceptics. Hulme and Mosley (1996) and Otero and Rhyne (1994) exemplify studies that synthesize case studies of microfinance experiences and conclude that such initiatives demonstrate how extending financial services can make a critical contribution to development. This extension does so through a mechanism that the combined resources of the poor and the commercial sector can expand. However, assuming that all microfinance initiatives are built on market orientations would be incorrect, and Copestake (1996) explores the differing orientations within microfinance programs.

More recently observers have expressed some caution, particularly with respect to two elements: the emphasis on providing credit without additional services and the capacity of such initiatives to reach the poor. Dawson and Jeans (1997, p. 1) argue that the emphasis on minimalist credit, that is, the provision of

credit alone, is misplaced, and stated that "the effectiveness and impact of credit schemes is likely to be significantly enhanced if other, complementary tools are available." They particularly stress the need for business development services. Johnson and Rogaly (1997, p. 12) suggest that with respect to microfinance projects for enterprise development "its appropriateness as a strategy for poverty reduction in the case of the poorest people is questionable."

A number of microfinance schemes have sought to use credit as a tool for empowerment, rather than as a mechanism for ensuring that the poor can better access the market, and hence increase their incomes and assets (Mitlin 1997). Such programs have sought to develop community organizations by working with savings schemes and locally managed financial mechanisms. Such savings schemes are central to the work of SPARC and Mahila Milan discussed earlier. This type of scheme is also central to the expanding program of the South African Homeless People's Federation, given the many community-based savings and credit schemes that make up the Federation (Bolnick 1993, 1996).

A consequence of strong grassroots control is that local funds are used to address the priorities of those managing the finances. Thus, finances tend to have multiple uses as many such programs fund housing, infrastructure, enterprise development, and crises and emergencies. In a few cases, the managers of such programs have developed more conscious attempts to consolidate a local market with synergies between the different components and a strong local base for the production of goods and services. While conceptually such ideas return to the discussion of Schumacher (1973), they have not been elaborated and considered at a more general level. However, such programs suggest an important and positive way forward for the urban poor (Cabannes 1997; Gaye and Diallo 1997).

Once again, we will turn to some concrete cases of cities and programs to demonstrate the significance of direct public employment programs in addressing the needs of the urban poor who directly benefit and in general support the economy. The latter point has been recognized since Keynes' ideas resulted in the public works programs of the 1930s. More recently, economic planners and policymakers have suggested that such government action may be expensive and counterproductive in the long run. A reduced role for the public sector and greater support for private initiative are more important. Nevertheless, the scale of poverty and recession in some counties in the South has resulted in some such initiatives in recent years (see, for example, the illustration of the Agency for the Implementation of Public Interest Work in MELISSA 1998).

In employment terms, the number of jobs such programs produce remains well below the scale of need. In some instances, particular circumstances, for example, combinations of general economic problems, low levels of growth, and disasters, have resulted in the distribution of emergency relief, and local workers have been sought to try to ensure that such emergency relief programs are more effective. The use of food-for-work is another way in which the goals of poverty reduction have been combined with the local need for income and the goal to increase local employment.

The work of CARE International in Lusaka (Zambia) provides one example of this kind of program. In the early 1990s, its approach was primarily concerned with food for work. During the mid-1990s the focus shifted toward support for micro-enterprise development (income enhancing) and the provision of water (expenditure reducing.) The shift within this CARE program from directly providing work to enhancing private entrepreneurial activity demonstrates a widespread, and in part self-fulfilling, belief that the future economic renaissance will emerge within the private sector. While some of the best known microfinance initiatives have been established in rural areas, many others seek to serve the small-scale manufacturing and trading enterprises operating in urban areas.

However, the success of the informal sector is obviously linked to the actual or potential market for informal sector goods and services. While the market for informal production and trading has rarely been problematic in Asia, where a number of countries have enjoyed a high level of economic growth, the market has experienced more problems elsewhere. One group in Fortaleza, Brazil has long been aware that many poor people buy a considerable proportion of the goods they need from the formal sector. This group has therefore sought to increase the demand for informal sector goods within low-income

settlements. To this end, neighborhood centers to encourage enterprise development have been developed in a number of low-income areas. One community recently sought to take this development one step further by establishing a local credit card. This joint NGO-government-grassroots initiative sought to address the need for improved housing and living conditions for the 800,000 squatters in the city. The poor economic opportunities available to the residents of the squatter settlements meant that the issue of poor economic opportunities was immediately raised and support for workshops and trading centers has now become an integral part of the work of the NGO involved, Cearah Periferia. Lending to resident associations in the city was a recent initiative with the aim of establishing these workshops and trading centers more widely. These associations subsequently repay the loans with funds received from community activities and charging rent for the space to local entrepreneurs.

Creative thinking about how to link housing and neighborhood improvements with strong local markets has resulted in the development of a community credit card by one of the grassroots organizations working with Cearah Periferia. The community credit card is the first product to be launched by a popular bank newly set up in Palmeira, a low-income settlement in southern Fortaleza. Having succeeded in securing water, drainage, and sanitation, the resident association decided in January 1997 that the next priority should be improving local economic development. In March the association agreed to bring together the local producers, who rarely sold to their neighbors, and the local residents, who made most of their purchases outside the neighborhood. By increasing sales within the settlement, the association hoped that small entrepreneurs would have more income and be able to expand their enterprises. The credit card is now used in 57 local enterprises by 150 cardholders. Local entrepreneurs are delighted with the increase in their trade. The bank is now planning to expand by attracting more participants from Palmeira and possibly opening branches in other neighborhoods. Before long, 700 people will have PalmaCards, 300 will receive microenterprise loans, 100 will receive housing loans, and the bank will have 350 savers (Cabannes 1997).

Experiences such as this one point to what is increasingly being considered good practice among development agencies everywhere. We now know that effectively addressing urban poverty requires

- Material improvements in tenure, housing and infrastructure, and services
- Opportunities to combine such material improvements with support for income generation and construction of housing to further contribute to economic development by increasing local demand
- Stronger informal networks that address the economic vulnerability of low-income households and that enable a transformation of grassroots organizations into democratic and accountable organizations that seek to address the needs of their poorest members
- Stronger community skills that help people engage effectively with external agencies (at the district, city, and national levels) and transform existing relationships of dependency and exploitation.

Central Government's Future Role in Alleviating Urban Poverty

What is the future role of central government, as opposed to local government, in alleviating urban poverty?

Central government seems to have at least four critical roles to play in alleviating urban poverty. The first is to develop a framework for city and municipal governments to become more effective, accountable, and committed to poverty reduction. NGOs and grassroots organizations generally negotiate with local governments for rights and resources. These local governments are often responsible for providing, or supervising the provision of, a wide range of basic infrastructure and services that are central to reducing basic service poverty. In addition, the attitudes and approaches local authorities take toward the development of illegal or informal settlements and the activities of informal sector enterprises have major implications for the scale and nature of urban poverty.

The competence, attitude, and level of accountability of city and municipal governments and government agencies have strongly influenced the scope and effectiveness of community initiatives to reduce poverty. Effective poverty reduction in urban areas generally depends heavily on more competent, representative local authorities with adequate resources, because even if other actors, such as national agencies, NGOs, private sector firms, and community organizations, are the main implementers, these actors will have to work within local authority frameworks. The increased importance given to private sector involvement in infrastructure and service provision also requires public sector officials to take on roles as regulators and contract managers, which requires skills and capacities that existing authorities often lack. Effective poverty reduction initiatives also need local decisionmaking processes that respond to democratic pressures and give adequate attention to the needs and priorities of low-income groups, minority groups, and groups whose particular needs are often ignored, for example, those of women and children.

Because higher levels of government have retained power and control over resources, most city and municipal authorities have limited authority to meet their responsibility of providing basic infrastructure and services. In most urban centers where data are available about the revenue base, an enormous gap exists between the need for investment in infrastructure and services and the revenues available to local authorities to allow them to do so (UNCHS 1996). Decentralization policies of some kind have been implemented in most countries in the South over the last 15 years (Dillinger 1993; UNCHS 1996). However, in many cases the underlying reason for these policies had more to do with the condition of the central state or the desire to reduce its role than a desire to support decentralization. These changes appear to take place more in the delegation of responsibilities than in any reduction of power and funding.

In some countries decentralization reforms have not only reallocated responsibilities to local authorities, but have also reallocated resources or the power to raise funds locally. For instance, various examples of innovative local authorities in Brazil, Colombia, and Peru have been helped by constitutional changes that enhance the powers and roles of local authorities and democratization at local levels (Miranda and Hordijk 1998; Vélasquez 1998). However, in Peru, some limitations also exist because of the recent recentralization of power and the overlaps between new responsibilities allocated to local authorities and the traditional role of national agencies. In India, some examples of more innovative local authorities are linked to constitutional changes that give city authorities more power and room to maneuver (Dutta 2000; Prakash Mathur 1997).

Decentralization is particularly important for urban poverty reduction because it enhances local capacities to make choices that fit local circumstances and enhance local resource mobilization. In addition, decentralization makes local decisionmakers accountable for their choices. Information about how and why government funds are spent encourages citizen involvement in government decisionmaking and changes the nature of government itself. In various cases, innovative partnerships exist between local authorities and representatives of community initiatives to alleviate basic services poverty as in the community-municipality partnerships in Ilo, Peru (Follegatti 1999), the *kampung* improvement program and waste management initiatives in Surabaya (Silas 1992), and the participatory budgeting program in Porto Alegre (Abers 1998).

The second key role for central governments in alleviating urban poverty involves setting the legal and institutional framework for the law, which includes provisions to ensure that its citizens' civil and political rights are respected. This topic is often not part of the discussions of poverty reduction, yet the protection that civil and political rights can provide by, for example, protecting urban communities from forced evictions and allowing urban poor groups to organize and make demands is important. The national legal and institutional framework for protecting citizens from other hazards also has importance for the urban poor, for instance, by ensuring occupational health and safety standards and controlling air and water pollution (Hardoy, Mitlin, and Satterthwaite 2000). There is also growing recognition of the extent to which violence affects the livelihoods and well-being of many low-income groups and the importance of a legal framework that contributes to violence prevention (see, for instance, Moser and McIlwaine 1999).

The third role of central government concerns the quality and extent of service provision for those services that are funded and managed by national agencies, which generally include parts of the education and healthcare system. Often complex institutional arrangements exist between central and local government agencies over the funding and management of such services.

The fourth critical role for central government in alleviating urban poverty covers national programs or projects that seek to directly address poverty. These can take the form of national agencies that provide direct assistance to the urban poor, such as the Community Mortgage Program in the Philippines or the Urban Community Development Office in Thailand. These projects can also take the form of national agencies that encourage and support local government initiatives, such as Nicaragua's local development program PRODEL. Box 11.2 describes the Urban Community Development Office and PRODEL.

Box 11.2. *Government Programs to Alleviate Poverty*

In March 1992, the Thai government approved a budget of US\$50 million to initiate an Urban Poor Development Program as part of the Seventh National Economic and Social Development Plan. The approval of this budget resulted in the establishment of a new organization, the Urban Community Development Office (UCDO) to implement the program nationwide. Drawing on experience, UCDO is responsible for providing flexible strategies that enable urban communities to obtain the development assistance they need.

The overall objective of the Urban Poor Development Program is to strengthen the capacity of the urban poor and those living in illegal settlements to obtain higher and more secure incomes, appropriate housing with secure tenure, an improved local environment, and better living conditions. The people themselves are considered to be the main actors in the community development process. Based on this understanding, UCDO concentrates on assisting the establishment of savings group cooperatives, supporting the development of community organizations and their networking activities, helping households secure economic development, and providing credit to savings groups that are able to manage these funds as requested. The program provides an integrated credit system for community development with access to a range of different loans, including loans for income generation, small revolving funds, and housing. This approach responds directly to the needs of the communities.

Increasingly, UCDO is working in partnership with a range of locally based development committees. These invariably involve a local committee representing groups such as the municipality, academics, religious leaders, and NGOs. UCDO funds these local committees for up to two years to support people-centered development processes through microfinance activities. The committees are responsible for strengthening networks of community organizations. As the committees become more successful at supporting these networks, they take on more of an advisory and facilitation role. These committees have enabled the community to change traditional relationships with the municipality to one in which ideas and activities are shared as equals.

PRODEL seeks to improve living conditions, access to basic services, and incomes among low-income families living in marginal neighborhoods in five departmental capitals in Nicaragua. Unlike most government programs, it does not implement the work, but provides technical assistance and financial support to households, community organizations, municipal authorities, and national institutions. PRODEL's loans to households and microenterprises are implemented by the government-owned Popular Credit Bank, which approves loans, supervises their correct use, and collects repayments. PRODEL has four main components as follows:

- A community infrastructure and services component that aims to improve, repair, and expand basic infrastructure and service. This takes place through grants of up to US\$25,000 that available to local authorities and beneficiary communities as long as these beneficiaries contribute more than 35 percent of the project's value in labor, machinery, funds, and other in-kind contributions. Over a three-year period, 162 projects were supported in more than 80 neighborhoods. Loans for housing improvement for low-income families for upgrades, repairs, and extensions.
- Microenterprise loans.
- Institutional development and technical assistance.

The Nicaraguan government and the Swedish International Development Authority supply funds for PRODEL.

Source: Boonyabancha (1996); SIDA (1997); Stein (1996).

Even within a more decentralized system of government that places greater weight on local bodies, central governments still have an obvious role to play. For instance, central governments must be involved in channeling support to the weaker and poorer local governments; in promoting attitudinal change; and in managing funds allocated to poverty reduction, even if most are allocated to local authorities. In addition, a considerable proportion of poor households have livelihood or survival strategies that draw from rural and urban areas (Tacoli 1998), which implies the need for some coherence between urban and rural poverty reduction initiatives, and thus a role for national agencies.

Finally, some obvious issues far beyond the scope of this chapter relate to the national government's role in providing the macroeconomic and macropolitical context that supports innovation and investment in urban centers. Economic growth requires stability in inflation, exchange rates, and interest rates. Without such robustness, it is difficult for city authorities to support a strategy for growth.

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12

Urban Poverty Alleviation in the Age of Globalization in Pacific Asia

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In 2000, almost one out of every two people lives in an urban area. Although a low overall level of urbanization characterizes Pacific Asia, which includes East and Southeast Asia, the region has the largest urban population in the world. By 2000, Pacific Asia had approximately 804 million urban inhabitants, representing 27.5 percent of the world's urban population. Many of these people live in large cities; of the world's 15 largest cities with more than 10 million inhabitants, 6 are located in Pacific Asia.

Pacific Asia's rapid economic growth in recent decades accompanies its urban dominance. Following the example of Japan's postwar economic transformation, the newly industrializing economies (NIEs) of Hong Kong, China (henceforth referred to as Hong Kong); Singapore; the Republic of Korea; Taiwan, China (henceforth referred to as Taiwan); selected members of the Association of Southeast Asian Nations (ASEAN); and more recently China have successively taken off. Together, these NIEs form the fastest-growing region in the world. The region's rapid economic growth, at sustained annual rates of 5 to 8 percent in gross domestic product (GDP) growth since 1980 has been greatly buttressed by globalization processes. Globalization has been a powerful propelling influence that, until the onset of the financial crisis in 1997, was widely viewed as a source of rapid economic uplift.

The conjuncture of rapid urbanization and accelerating globalization, coupled with impressive economic growth, has enabled many governments in the region to make major inroads into poverty reduction within a relatively short time. Yet these compelling forces have also affected the urban poor in ways that have been more severe and more sudden than ever before. The challenge in the 21st century is how to provide the urban poor with a fair chance of improving their lot and contributing to a new society in a global environment. What new policies and innovative thinking can governments bring to bear to banish poverty from the earth?

Urban Poverty Status

Urban poverty is a multidimensional and complex state of deprivation that varies with countries, cities, and social conditions. The term *absolute poverty* is commonly used to define conditions of deprivation in reference to a poverty line as measured in monetary equivalents of food subsistence. *Relative poverty* is a derivative measurement that attempts to depict a standard of living in relation to a reference group in society, such as the mean, median, or some other quantifier. Less quantifiable is the political dimension of poverty, which relates to the extent of civil participation and openness in society. In the Philippines an additional measurement is used to show a psychological dimension; there, researchers use a self-rated poverty index to allow people to describe their own situation.

Urban poverty can be traced to policy failures and inadequate commitment. Macroeconomic policies that are slanted toward large-scale, capital-intensive, and metropolis-based industrialization do not directly benefit the poor. Public investment in infrastructure tends to favor large urban areas, which

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benefits the nonpoor and encourages rural-urban migration. Public expenditure on human capital accumulation, especially education and health, in its emphasis on the tertiary level, tends to benefit the affluent more than it benefits the poor (Pernia 1994, p. 46).

To allow a trickle-down mechanism to work, a country's economy must grow at 7 to 8 percent per year to ensure that the poorest 40 percent of its population has access to affordable basic necessities, such as food, shelter, water, and electricity (UNDP 1996, p. 77). Slower rates of growth would also improve the economic situation, but the trickle-down to the poor would not be as noticeable or as rapid. Many economies in Pacific Asia have experienced growth rates of this magnitude in the past two decades. As a consequence, the achievements in reducing urban poverty have been quite remarkable. By head count ratios, urban poverty in China was reduced from 19 percent in 1981 to 4 percent in 1990, in Indonesia from 38.8 percent in 1976 to 16.8 percent in 1990, and in Korea from 54.9 percent in 1965 to 4.6 percent in 1984 (Mathur 1996). The incidence of urban poverty has been vastly reduced. Nevertheless, the differences among economies remain huge. In 1992, 10.2 percent of Thailand's urban population was considered below the poverty line, whereas 39.0 percent of the Philippines' urban population was below the poverty line in 1991.

The uneven economic conditions among economies in the region are matched by equally uneven income distributions within these economies. Table 12.1 shows the highly inequitable distribution of income in five economies, revealing that the highest quintile group garners the lion's share of total income. China already displays the same pattern of income distribution as the other countries did in 1995 after less than two decades of switching from a socialist to a market economy. The tendency for the rich to get richer is apparent in the table. For example, the richest 20 percent of households in Thailand earned about 49.3 percent of total income in 1976, with the proportion rising to about 54.9 percent in 1988. By contrast, the poorest 20 percent earned only about 6.1 percent of total income in 1976, falling further to 4.5 percent in 1988 (Pernia 1994). The pattern of increasingly inequitable income distribution is confirmed by a recent study in Southeast Asia (Porio 1997, p. 27). In many cases, the poorest 40 percent of the population in urban areas receives at best 20 percent of total income. The richest 10 percent receives 7 to 15 times the income of the poorest 10 percent (ESCAP 1993, pp. 4–15).

Table 12.1. *Income Distribution, China and Southeast Asian Countries, Selected Years*

Country	Survey year	Percentage of total income or consumption						
		Lowest 10 percent	Lowest 20 percent	Second 20 percent	Third 20 percent	Fourth 20 percent	Highest 20 percent	Highest 10 percent
China	1995	2.2	5.5	9.8	14.9	22.3	47.5	30.9
Indonesia	1995	3.6	8.4	12.0	15.5	21.0	43.1	28.3
Malaysia	1989	1.9	4.6	8.3	13.0	20.4	53.7	37.9
Philippines	1994	2.4	5.9	9.6	13.9	21.1	49.6	33.5
Thailand	1992	2.5	5.6	8.7	13.0	20.0	52.7	37.1

Source: World Bank (1998, table 5).

The increasingly global economies that Pacific Asian economies have embraced have polarized their societies, economically and socially. The prevailing economic development model of unfettered economic growth, unregulated markets, privatization of public assets and functions, and global economic integration was questioned in the Kuantan Declaration organized by the United Nations Development Programme's Asia-Pacific 2000 Program in 1995. Doubts were voiced in response to the fact that the urban poor in the region had suffered considerable hardships in the wake of structural adjustment programs in the 1980s. Higher prices of goods and services, reduced subsidies, privatization of public

services, and currency devaluation hit the urban poor hard (UNDP 1996, pp. 80–92). Some scholars have defined Pacific Asia as an emerging Japan-dominated system of production and investment, with economic growth engendering widespread poverty and degradation of workers (especially women), ecological crises, and social conflicts (Hart-Landsberg and Burkett 1998). Similarly, the increasingly global environment and uneven development, which exclude dissident social forces from the arena of state policymaking, are generating social and political tensions. These are byproducts of a failed policy of high growth and the emerging crisis of global capitalism (Schmidt 1998). What should be underscored here is that despite the rapid economic growth in the region and the successful reduction of urban poverty, recent empirical studies have pointed to an undercurrent of social discontent emanating from policies that accent high growth without sufficient regard for the plight of the urban poor. Whether such policy emphasis is a failure or not is subject to debate.

During Asia's financial crisis, the interdependent nature of the global economy adversely affected the countries in the region. Technological upgrading of Asian manufacturing resulted in the region's reliance on imported raw materials. Devalued currencies have priced many imports out of reach, with Indonesia's imports having dropped nearly 30 percent and Korea's by 36 percent. Consequently, their exports plunged sharply in early 1998 despite substantial currency devaluations (Ignatius 1998). In the three hardest hit Asian countries, unemployment reached record levels. By the end of 1998 unemployment reached 15 percent in Indonesia, 9 percent in Thailand, and 8 percent in Korea, compared with the respective unemployment rates in 1996 of 4 percent, 1.5 percent, and 2.5 percent (ILO 1998; Vatikiotis 1998). At the same time, general price increases registered 6.0, 9.7, and 8.0 percent, respectively, in 1998, leading to political and social stress in these countries and inflicting severe pain on the urban poor (IMF 1998). Notwithstanding the extremely weak social assistance programs, only 1 percent of the jobless urban workers in Indonesia chose to return to the countryside (Liebhold 1998). However, another study reported that Indonesia's outlying islands have an army of 20 million workers who lost their jobs during the financial crisis and have migrated from Javan cities back to their home villages, where they often work on family farms (Moreau and Ford 1999).

Poverty Alleviation Initiatives

In the period after World War II, the countries in Pacific Asia dramatically and successfully reduced urban poverty, despite the increasing concentration of population in cities and unabated rural-urban migration. Broadly based economic growth has resulted in notable gains in urban poverty reduction in Indonesia, Malaysia, and Korea. The Malaysian experience is especially important because the government mainstreamed poverty reduction as one of its primary development objectives following the violent race riots in 1969. The new economic policy that was adopted in 1970 aimed at eradicating poverty, irrespective of area, ethnic identity, and religion. Poverty eradication henceforth formed a key component of sectoral and national development strategies.

The new economic policy was formulated as a 20 year policy aimed at eradicating poverty and restructuring Malaysian society, thereby achieving national unity. The policy was designed to guarantee special privileges, such as greater access to healthcare, education, and economic investment facilities, for those Malays, or *bumiputras*, who constituted the core of the poor population. The target was to enable these Malays to own and manage at least 30 percent of total commercial and industrial activities at all scales of operation by 1990. By this date, the proportion of households living below the poverty line reached 15 percent, a dramatic and huge drop from 50 percent in 1970, if one accepts the government's interim definition of income (Eyre 1997). During the same period, the Gini coefficient of the country fell from 0.513 to 0.445. However, critics have viewed the policy as a positive discrimination policy in favor of the Malays that has intensified identification along ethnic lines. Wealth has tended to concentrate in the hands of a small group of Malay elite across different sectors, and *bumiputra* equity ownership of the corporate sector reached a mere 20.3 percent at the end of 1990, far short of the 30 percent target (Khan

1996). Not surprisingly, therefore, Malaysia remains one of the countries in Pacific Asia with the most unequal income distribution (You 1998).

Most recognize economic growth as a principal antipoverty strategy. The most effective way of helping the poor is to provide them with economic opportunities to help themselves by earning income and increasing their assets. Economic growth that favors the poor expands the employment, productivity, and wages of poor people. Malaysia, whose gross national product per capita growth held steady at close to 4 percent per year between 1967 and 1989, is proud that the income of its poor people grew at a rate greater than 5 percent per year in the same period as a result of growth strategies that were favorable to the poor (UNDP 1997). It was a case of effective policy intervention. In contrast, Hong Kong, one of the fastest-growing economies, has had a deteriorating social environment. United Nations data reveal that Hong Kong ranked a dismal 79th place in the world in 1998 with a Gini coefficient of 0.518, behind Indonesia, the Philippines, and other Asian economies (*Ming Pao*, October 17, 1998). Large numbers of workers employed in the informal sector often complement formal sector employment in Pacific Asia. In Southeast Asia, surveys have shown that informal sector employment accounted for 49 percent of urban employment in Indonesia, 83 percent in the Philippines, and 40 percent in Thailand (Malik 1996).

Beyond rapid economic growth, Pacific Asia is rich in its experience of urban poverty alleviation through the provision of basic services, welfare programs, community banking, and institutional arrangements. A study that surveyed the state of basic service provision in Asian cities and poor people's access to them indicated that within this region, policymakers have developed some innovative and effective ways of delivering urban services to the urban poor (Yeung 1998). This can be seen in housing, land assembly, transport, water, sanitation, solid waste disposal, electricity, and public lighting. The diverse solutions to the problem of housing provision are particularly noteworthy in their varied resource mobilization, policy formulation, and social reach. Hong Kong and Singapore have been singularly successful in meeting the housing needs of their populace through massive deployment of domestic resources over several decades. However, Indonesia's Kampung Improvement Program began in 1969 as an indigenous initiative and later flowered into a huge multilateral program with substantial support from international assistance agencies such as the World Bank and the Asian Development Bank. Similarly, Thailand's Urban Community Development Organization, established in 1992, has been effective in providing credit for housing improvement and enterprise development in urban slums, particularly in Bangkok. In the Philippines, the Urban Basic Service Program under the Presidential Commission for the Urban Poor, in Manila and 14 other cities, started with primary healthcare, nutrition, and nonformal education for children, but has expanded to address the overall situation of the urban poor (Shubert 1996).

Despite the sustained rapid economic progress in the region, the safety net programs that governments have targeted to the urban poor are disproportionately skimpy. Table 12.2 shows that cash transfers in the form of social assistance and family assistance are unevenly distributed, and in-kind transfers through food subsidy are spotty. The comparative weakness of these economies' social safety nets is partly a function of the fiscal and institutional constraints these economies face and partly a reflection of social priorities where, traditionally, the family has been the primary source of support. Subsidized healthcare is the most popular form of welfare, whereas unemployment insurance is the least popular. Hong Kong, for instance, ranks 12th in GDP per capita in the world, yet its government spends less than 9 percent on social services, much less than the other NIEs in Asia. Changes to this pattern appear to be taking place, as government expenditure on the Comprehensive Social Security Assistance soared fivefold to HK\$13 billion in 1998 (Lam and Yim 1998). The inadequacy of the social safety net in protecting the needy became only too obvious during the financial crisis. In Indonesia, pensions are provided primarily to civil servants and military personnel, and in Thailand pension funds cover merely 10 percent of the labor force. Even in Korea, formal unemployment insurance is limited to firms with more than five workers. The International Monetary Fund has reported that those economies worst affected by the Asian financial crisis could consider different options to improve their situation (IMF 1998).

Table 12.2. *Public Assistance Programs, Pacific Asia*

<i>Economy</i>	<i>Unemployment insurance</i>	<i>Dole for poor</i>	<i>Regular food subsidy</i>	<i>Subsidized housing</i>	<i>Subsidized clinic</i>	<i>State-organized pension fund</i>
Hong Kong	×	✓	×	✓	✓	✓ ^a
Indonesia	×	×	✓	×	✓	—
Korea, Rep. of	✓	✓	✓	×	✓	—
Malaysia	×	—	✓	×	✓	✓
Philippines	×	×	×	×	✓	✓
Singapore	×	✓	×	✓	✓	✓
Taiwan (China)	✓	✓	×	×	✓	✓
Thailand	×	×	×	×	✓	✓ ^a

✓ yes.

×

— partial.

a. Still being established.

Source: Pao (1998).

The people in Pacific Asia are noted for their high savings rate, which typically exceeds 30 percent of GDP. Consequently, many varieties of community credit schemes thrive. However, in community banking for the urban poor, two are worthy of mention. In the Philippines, the Community Mortgage Program (CMP) is a national poverty alleviation effort created in 1988 that is now operating in 33 cities across the country (see box 12.1). It registers and organizes urban poor communities to enable them to obtain credit to purchase the land they live on through a community mortgage (Shubert 1996). In 1992, the government of Thailand set up the Urban Community Development Office under the National Housing Authority to facilitate urban poor people's access to credit. The functions of lending loans for emergencies, paying debts, and income generation and of savings and loans for housing are carried out by a collective process through urban poor groups that are governed by simple rules and regulations. More than 200 community savings and credit groups have emerged, with at least 173 in Bangkok and 23 in other cities. The combined savings of the groups totaled approximately US\$13 million (Boonyabancha 1995).

Box 12.1. *The Community Mortgage Program in the Philippines*

A government body within the National Home Mortgage Finance Corporation administers the CMP in Manila, which was established in 1988. It is mandated with providing finance to enable squatters and slum dwellers to acquire tenure rights and gain access to land. The CMP is operated by a group of applicants for housing finance that have an aggregate, or group, right to a mortgage to secure land and housing. Applicants themselves, not the government, initiate and implement the projects of the CMP. The role of the government is simply to finance, guide, and regulate.

To initiate a project, the group of applicants has to form a community association that must be registered with the Presidential Commission on the Urban Poor. The community association is also required to enter into an agreement with a CBO such as cooperative or charitable association (for example, Rotary or Lions clubs). In practice, CBOs acts as guardians, working with the community at each stage of program implementation and negotiating with landowners for the purchase of land, with government financial agencies guaranteeing payment. Most important, they are responsible for the legal origins of the mortgage. The National Home Mortgage Finance Corporation provides the mortgage by purchasing the land from the landowner and mortgaging it to the community association. Subsequently, it collects monthly repayments on heavily subsidized terms. Long-term mortgage loans are offered at an interest rate of 6 percent a year, repayable in equal monthly

(box continues on following page)

payments over 25 years. Provision of loans to the community is based on the principle of incrementalism. First, funds are provided for the purchase of the community land, then for the upgrading of the water supply, drainage, sanitation, and other infrastructure services, and finally, individual loans are made available for house improvement or reconstruction.

By early 1994, some 37,000 families had benefited from the program. About half of all communities assisted have been in the Manila area; 70 percent of all CMP projects are located in Metro Manila and two adjacent regions. Though the program was hailed for successfully providing the poor with access to credit on a large scale, it has helped less than 2 percent of the 2.5 million living in substandard urban housing in the Philippines. The major problems behind this small scale of achievement are (a) low participation rate of applicants in the program, (b) administrative delays in handling applications, and (c) internal conflicts among members of the community associations. The sustainability of the program depends on the state of loan recoveries. Forty-five percent of loan repayments are estimated to be overdue; only 20 percent of communities are recorded as being up-to-date with their payments. To reduce the deficits, the government injected additional funding from the national budget into the CMP so that 156,000 houses could be provided to the urban poor in 1999.

The main benefit of the CMP in the Philippines is the acceptance of informal settlements as a way to improve housing and tenure security of squatters, even though these settlements do not meet normal minimum standards for buildings and subdivisions. The critical factors for the program's success are participation of the beneficiaries and coordination between CBOs and government bodies.

Source: Alonzo (1994); Lee (1995).

Although Asia is traditionally known for cooperative and community-based types of rural development, a comparative study in the early 1980s focused on cooperative urban development in five economies in Pacific Asia. This study, covering Hong Kong, Indonesia, Korea, Malaysia, and the Philippines, revealed that despite highly varied economic and cultural settings, the theme of returning control of the delivery of basic services to the community level underlay all the country studies. Whether it involved the mutual aid committees in Hong Kong, Saemaul Undong urban communities in Korea (see box 12.2), or *kampung*s in Jakarta, the need for mechanisms that were controlled by and focused on the urban poor was evident (Yeung 1985). In the global environment of the 1990s, the call was to empower the urban poor, often in partnership with emerging institutions.

Box 12.2. *Urban Saemaul Undong in Korea*

In 1973, the Saemaul Undong (New Community Movement), a successful self-help movement that started in 1971 and gained widespread success in rural areas in Korea, was extended to urban areas. The movement consists of cooperative self-help activities initiated by community residents and promoted through cooperation among residents, resident leaders, and local governments. Such cooperative activities are designed to mobilize and organize residents' investments and available resources effectively. They involve efforts to make needed goods fully available to the community.

The highly organized and integrated community development scheme receives strong government support. When coupled with self-help activities sponsored by neighborhood institutions, the movement has resulted in improvement in a wide range of basic urban services, particularly in low-income communities. These self-help activities include housing improvement, water supply, drainage, garbage and manure collection, fire protection, and health services. Self-help efforts made through Saemaul Undong to improve housing are especially notable in squatter settlements, the on-site housing improvement represented by Itaewon in Seoul, and cooperative housing. Involved communities also organize income-generation projects aimed at the urban poor that may be divided into three types: income-supplement work, community credit unions, and cooperative retail business operations. In addition, these self-help efforts focus on immunization, vaccination, and birth control services.

Critical to the success of urban Saemaul Undong is residents' participation rallied by effective local leadership. In Korean cities, the upper tier resident organization is the *dong*, with a population of 15,000 to 25,000. *Dong* leaders are appointed. However, this is considered too large an administrative unit, whereas the next level, *tong* or *ban*, is too small. As a result, *saemaul* leaders are the driving forces in promoting community projects.

(box continues on following page)

In Korean cities, issues in cooperative self-help activities relate to the roles of residents, leaders, and the government, which could all be strengthened, clarified, and coordinated. Experience suggests that Saemaul Undong tends to favor projects that are associated with improving the living environment. The cultural aspects of cooperative activities should also be emphasized. A reorganization of the basic operating unit sustaining the movement, involving *dong* and *tong* adjustments, has been proposed. To succeed in the long run, effective local leaders must be identified, nurtured, and trained.

Source: Yeung and McGee (1986).

Under forces of globalization with improved information flows and heightened awareness of participation and transparency, good urban governance is being pursued to enable states and groups in civic society to cooperate and create structures and mechanisms that can discharge redistributive functions. In a recent study in Southeast Asia, researchers found that urban governance is becoming increasingly democratized. In the Philippines, the number of voluntary nongovernment organizations (NGOs) and community-based organizations (CBOs) has grown rapidly, and these organizations have become prominent in public policy issues in urban areas. By 1994, about 50,000 NGOs and 10,000 CBOs were registered in the Philippines. Some have specialized in assisting urban poor organizations. Similarly, in Thailand government officials traditionally did not consult NGOs or CBOs. They have since changed their approach by becoming more open and participatory in listening to more organized urban poor communities through NGOs. Such change has led to distinct progress in formulating and implementing urban development plans and projects. Even in Indonesia, periodic student mobilization and emerging business groups have pressured the state and the military to respond to the needs of the urban poor (Porio 1997). In Hong Kong, Korea, and Taiwan, policymakers are experimenting with more participatory governance models. Clearly, closer coalitions and partnerships among government organizations, NGOs, and CBOs are the way of the future in urban poverty alleviation in the region. In this connection, the Partners in Development Program under the Urban Poor Affairs Office in Naga City, the Philippines, is noteworthy (see box 12.3). The government–urban poor organization–NGO partnership is as much about the technical efficacy of the program as it is about the sincerity of the partners involved (Cerdena 1996).

Box 12.3. *Partners in Development Program in the Philippines*

Naga City, a medium-sized city in the Bicol region of the Philippines, successfully worked with partners to solve the land-related problems of the urban poor, who were estimated to represent approximately one-quarter of the city's population in 1994. The program began with the formation of the Urban Poor Affairs Office under the mayor's office in 1989, a year after Jesse M. Robredo was elected mayor.

The Partners in Development Program, which focuses on the urban poor, involves a three-way partnership between (a) the city government; (b) the urban poor federation, its member-organizations, and their partner NGOs; and (c) private landowners who participate in a variety of cases. Based on the principle of growth with equity, the city views it as a social amelioration program primarily designed to empower the urban poor by responding to two main problems of urban poverty, namely, the absence of secure land tenure and the lack of basic infrastructure services. Thus, the short-term objective of the program is to improve the living conditions of the poor, and in the long term the program aims at empowering the urban poor and integrating them into the mainstream of development.

The major activities of the program fall into four categories: on-site development, off-site development, capacity building, and auxiliary services. In 1994, the operating budget was P 521,000, which came primarily from the mayor's office, in addition to indirect support from other city government departments.

After four years of implementation, the program achieved notable results. In land acquisition and resettlement, the program enabled the dispersal of some 20 hectares of private and government-owned land to 1,400 landless families. Six additional hectares were secured for subdivision and distribution to another 500

(box continues on following page)

families. In urban upgrading, the program facilitated the development of 27 blighted communities in Naga, which received basic infrastructure facilities. The effectiveness of the program is also reflected in the increase in the number of upgraded urban poor communities from 9 in 1989 to 70 in 1994. However, the program's most important achievement is the provision of a mechanism through which the urban poor can tackle long-standing tenure problems and other land problems.

The success of the program is due to many reasons, including the vital role of allies in organizing Naga's urban poor as challengers to and sharers of power. In addition, the Community Organization of the Philippines Enterprise has contributed to the program, and Naga City has provided the physical and financial capacity to support an integrated urban poverty program.

The Partners in Development Program represents a model for cooperation among government organizations, private organizations, and NGOs. It contributes to a more secure future for the urban poor partner-beneficiaries and the overall development of the city. The critical factor for its success is the willingness and seriousness with which all parties are devoted to working together and solving problems and the technical and financial ability of the government.

Source: Cerdena (1996).

Factors Affecting Urban Poverty

Globalization and the reorientation of socialist economies to market economies in Pacific Asia have led to rapid economic growth. This, in turn, has brought marked gains in poverty reduction, especially in China and the NIEs. Further trade liberation under multilateralism has also brightened prospects of growth and increased domestic employment opportunities. However, recent studies have spotlighted the darker side of globalization.

Researchers have pointed out that much of the recent growth in the region has been driven by foreign direct investment (FDI). At the macroeconomic level, the hierarchical industrial relationships between Japan and other Pacific Asian economies are such that the former sells expensive value-added components and technologies in exchange for the latter's low-wage labor. To illustrate, Thailand's trade deficits with Japan and the NIEs overwhelmed its trade surplus with the European countries and the United States in 1992. Thailand depended on its FDI inflows to fund its chronic trade deficit, which was valued at 6.3 percent of its GDP in 1995 (Daniere 1996, p. 374). Ironically, and in a narrow sense, rapid economic growth, therefore, does not help poverty reduction because a sizable portion of GDP is destined for paying national debt and trade deficits rather than for public spending that benefits the poor. Export-led growth tends to preclude sustained improvements in the overall conditions and opportunities that are open to workers, urban poor workers in particular (Hart-Landsberg and Burkett 1998). One scholar even described the late 20th century as the period of the globalization of poverty that, for the developing world, coincided with the onslaught of the debt crisis (Chossudovsky 1998).

Subject to further research for verification, empirical studies so far have provided support for the proposition that FDI has an adverse effect on income distribution and, by inference, on social polarization. Table 12.3 shows the economies in Pacific Asia with the greatest FDI inflows since the early 1970s. The fact that the three economies with the highest FDI reliance—Hong Kong, Malaysia, and Singapore—all have at the same time the highest income inequality in their respective income groups is not a coincidence. These measurements result from a comparison of the inequality ratio (the ratio between the income shares of the richest 20 percent and the poorest 20 percent of the population) of the high-performing Asian economies with the average and medium income of their income groups (You 1998). The tight labor legislation in attracting foreign capital and developing export-oriented sectors has kept real wages lagging behind GDP growth. The exploitation of labor is especially evident in the treatment of women workers. The feminization of poverty in Southeast Asia is not uncommon. In Indonesia, for example, women sewing sneakers for Reebok work more than 60 hours per week while earning only US\$80 a month, approximately the price of one pair of shoes (Schmidt 1997). Global economic restructuring and relocation of production to developing countries with cheap labor as part of

the globalization process have also induced high levels of national unemployment and significantly reduced the earnings of urban workers and farmers (Chossudovsky 1998).

Table 12.3. *FDI Inflows as a Share of Gross Fixed Capital Formation, 1971–93*
(percent)

Country	Annual average				
	1971–75	1976–80	1981–85	1986–90	1991–93
China	—	—	0.9	2.1	10.37
Hong Kong	5.9	4.2	6.9	12.9	5.70
Indonesia	4.6	2.4	0.9	2.1	4.50
Korea, Rep. of	1.9	0.4	0.5	1.2	0.60
Malaysia	15.2	11.9	10.8	11.7	24.57
Singapore	15.0	16.6	17.4	35.0	37.40
Taiwan (China)	1.4	1.2	1.5	3.7	2.60
Thailand	3.0	1.5	3.0	6.5	4.70

— Not available.

Note: FDI inflows comprise equity capital, reinvested earnings, and intracompany loans.

Source: Amsden (1997).

At the microeconomic level, the concentration of FDI in Bangkok has, paradoxically, exacerbated poverty. Urban poverty in Bangkok increased steadily from 25.8 percent in 1980 to 28.6 percent in 1988 (Daniere 1996, p. 381). One explanation for this phenomenon is that globalization and fast-paced technological progress have both created and destroyed jobs. In general, the growth of jobs has been fastest for professionals and technicians, but the number of jobs for production-related workers, including both skilled and semi-skilled workers, has grown slowly or even decreased. This gives rise to increased polarization of the labor market. To attract FDI and promote export-oriented industrialization, government officials and the business elite have collectively promoted free trade, but kept labor costs in check. This is only possible in an unregulated environment that breeds uneven development and social inequality. Lax rules and regulations governing the labor market and human rights allow the erosion of real wages and widespread labor abuse. In 1997, just prior to the financial crisis, misplaced labor policies and structural adjustment problems led to massive job losses, increasing unemployment, and labor protests in some countries in Pacific Asia. Indonesia, the Philippines, and Thailand experienced the largest workers' protests since the early 1970s (Schmidt 1998).

In the face of a deteriorating social climate, the need for infrastructure and human capital investment in cities in the region, especially in the large cities foreign investors prefer, cannot be overemphasized. With regard to infrastructure, world cities in the region have spared no expense in improving their competitiveness by investing heavily in large projects to prepare for the increased trade and growth anticipated in the future. In a process that may be described as world city formation, cities from Seoul to Jakarta have been investing in airports, superhighways, skyscrapers, and shopping malls to better equip themselves as participants in the global economy (Yeung and Lo 1998). Despite some unevenness, table 12.4 shows that countries in the region have generally increased public spending on social services. Note that health expenditures are lower than education expenditures in Japan and Korea, because government accounts do not fund their healthcare programs and are therefore not recorded as part of government expenditure. Overall, public expenditures on social services in the region pale in comparison with the public expenditures of Western countries, because of the emphasis on economic policies, lower revenues from taxes and transfers, and the traditional reliance on the family to provide minimum protection (Kwon 1997).

Table 12.4. *Expenditure on Social Services, East and Southeast Asian Countries, Selected Years*

Country	Government expenditure (percentage of total expenditure)		Public expenditure (percentage of GDP)	
	1988	1996	1980	1995
<i>China</i>				
Total social services	—	2.26 ^a	—	—
Education	—	1.83 ^a	2.5	2.3
Health	—	0.26 ^a	—	2.1
Social security and welfare	—	0.14 ^a	—	—
Housing and community services	—	0.03 ^a	—	—
<i>Indonesia</i>				
Total social services	—	36.14 ^a	—	—
Education	9.93	9.77 ^a	1.7	—
Health	1.74	3.25 ^a	—	0.7
Social security and welfare	—	5.27 ^a	—	—
Housing and community services	1.70	17.85 ^a	—	—
<i>Malaysia</i>				
Total social services	35.33	38.56	—	—
Education	20.15	22.12	6.0	5.3
Health	4.89	5.99	—	1.4
Social security and welfare	4.17	8.28	—	—
Housing and community services	6.12	2.17	—	—
<i>Philippines</i>				
Total social services	23.37	23.89 ^b	—	—
Education	17.09	15.87 ^b	1.7	2.2
Health	4.32	3.04 ^b	—	1.3
Social security and welfare	1.50	3.06 ^b	—	—
Housing and community services	0.46	1.92 ^b	—	—
<i>Thailand</i>				
Total social services	30.94	38.40 ^c	—	—
Education	19.23	22.0 ^c	3.4	4.2
Health	6.26	7.93 ^c	—	1.4
Social security and welfare	3.45	3.74 ^c	—	—
Housing and community services	2.00	4.73 ^c	—	—
<i>Singapore</i>				
Total social services	38.00	39.40 ^a	—	—
Education	19.00	22.64 ^a	2.8	3.0
Health	5.18	7.30 ^a	—	1.3
Social security and welfare	2.01	2.86 ^a	—	—
Housing and community services	11.81	6.60 ^a	—	—
<i>Korea, Rep. of</i>				
Total social services	29.75	33.63	—	—
Education	19.02	21.10	3.7	3.7
Health	2.21	0.55	—	1.8
Social security and welfare	7.43	10.52	—	—
Housing and community services	1.09	1.46	—	—
<i>Japan</i>				
Total social services	—	58.19 ^b	—	—
Education	—	6.03 ^b	5.8	3.8
Health	—	1.60 ^b	—	5.7
Social security and welfare	27.62	36.80 ^b	—	—
Housing and community services	—	13.76 ^b	—	—

— Not available.

a. 1994 data.

b. 1993 data.

c. 1995 data.

Source: IMF (1995, 1996); World Bank (1998 tables 6 and 7).

The call for increased democratization under globalization and the growing dissatisfaction of urban poor people has pushed governments toward political reforms and more generous social spending in the region. Investing in education is widely viewed as a vehicle for raising labor productivity and increasing incomes. The push toward research and high technology in Japan and the NIEs reflects official thinking in this direction. The first two policy addresses under the government of the Hong Kong Special Administrative Region have given additional impetus to develop human capital formation to allow the community to maintain its competitive edge. Nevertheless, the social landscape remains highly uneven. In Thailand, for example, compulsory education is restricted to only six years of primary education, with limited government involvement and investment at the secondary and tertiary levels. The absence of a full-scale public commitment to tertiary education will hamper both Thailand's ability to sustain rapid economic growth into the next century and its ability to reduce poverty (Daniere 1996).

Social Polarization in Hong Kong

The global city social polarization hypothesis, postulated by Sassen (1991) and Friedmann and Wolff (1982), has found empirical support, although polarization outcomes differ among different cities (Baum 1997). To extend this discourse, this section provides some preliminary data to show where Hong Kong stands with respect to the hypothesis. In particular, this section attempts to uncover the links among globalization, economic growth, and poverty alleviation in one of the fastest-growing global cities. The scope of the preliminary data this section is based on covers more than a decade prior to the onset of Asia's financial crisis in 1997, which was also the year of Hong Kong's return to China.

In reviewing the literature on social polarization in global cities, three pertinent factors may be noted (Baum 1997). The first relates to the economic changes that accompany globalization. For example, the occupation structure in global cities becomes increasingly polarized as jobs are concentrated in the high-skill/high-status and low-skill/low status sectors (Sassen-Koob 1984). The concentration of jobs at the high and low ends of the labor force leads to a thinning of the middle ranks. Thus, a shift takes place in the income structure of the labor force from a normal distribution of income, characteristically egg-shaped, to a structure with an hourglass shape (Marcuse 1989). Data on income distribution in Hong Kong since the early 1980s have revealed the marked decrease in the middle ranks and the sharp increase of income among higher-income groups (see table 12.5). More specifically, out of households classified by decile distribution, the share of middle-income families has dropped from 36.1 percent in 1981 to 33.6 percent in 1996. Furthermore, because the financial crisis induced firms to shed a large number of middle managers, the gap has not only widened between the rich and the poor, but also between middle- and high-income families.

Table 12.5. Income Distribution, Hong Kong, 1981–96

<i>Household group</i>	<i>1981 (percent)</i>	<i>1986 (percent)</i>	<i>1991 (percent)</i>	<i>1996 (percent)</i>	<i>Monthly household income level in 1996 (HK\$)</i>
Lower-income (decile groups: 1–6)	28.7	28.8	26.8	24.6	Less than 22,000
Middle-income (decile groups: 7–9)	36.1	35.7	35.9	33.6	22,000–56,000
Higher-income (decile group: 10)	35.2	35.5	37.3	41.8	More than 56,000

Source: Hong Kong Economic Times, 12 February 1997.

The social polarization in Hong Kong stemmed from globalization forces that began to influence the former British colony in the mid-1980s. Hong Kong witnessed a rapid and spectacular transformation of its economy from being based on manufacturing to being dominated by services. China was a key factor in this transition. The portion of Hong Kong's work force that was employed in manufacturing plunged from a

peak of 46 percent in 1980 to 15.3 percent in 1995. In addition, the proportion of GDP generated in the manufacturing industry fell sharply from 24 percent in 1980 to 9.2 percent in 1996 (Berger and Lester 1997, p. 24). According to one estimate, by 1995, 79 percent of the work force of 3.1 million was employed in the service industries (China Hongkong Business 1998). The process of economic transformation and industrial restructuring has created new groups of labor aristocracy, consisting of those with the requisite skills and knowledge, while reducing others to deprived or even impoverished positions of marginalization and “deskilling,” notably industrial workers (Wilding and Mok 1997, p. 156). Unemployment figures rose to historical highs in 1997 and 1998, highlighting the pains of economic restructuring that were exacerbated by the regional financial turmoil. In the prosperous 1980s, unemployment averaged merely 2 percent. However, it rose to 3.5 percent in 1995 and to 5.8 percent in December 1998.

A second factor relating to social polarization in a global city concerns the welfare regime, where the availability of social provision influences the extent and pattern of polarization. In Hong Kong, two cardinal principles governing the overall level of public expenditure constrain social spending. First, in 1976, policymakers in Hong Kong determined that the size of public sector expenditure should not exceed 20 percent of GDP. Second, in 1987 they proclaimed that growth in public expenditure should not exceed the rate of growth of GDP. Even with these guidelines, Hong Kong’s expenditure on social security assistance has been growing at high double-digit rates every year since 1991, registering, for example, a 73 percent increase in 1993–94. A potential crisis in Hong Kong’s social security system is looming as increasing numbers of recipients originate from an aging population and mounting unemployment and underemployment. Demands to increase allowance levels will also put pressure on the social security system. Lui (1997) estimates that in December 1996 some 640,000 people lived in abject poverty, defined at HK\$600 per person per month in 1994–95.

The third factor involved in social polarization in global cities is migration. Migrants tend to be concentrated in low-paying jobs (Sassen 1991). Even with selection mechanisms, lack of recognition of formal qualifications forces many migrants to accept low-status, low-grade, and low-income jobs (Baum 1997). In certain societies in Pacific Asia, an increasing number of professional families with two income earners require domestic servants; migrant women meet this need. These women earn wages that are lower than what can be earned in the formal economy, hence a polarization in terms of employment and in ethnicity is the outcome (Burgers 1996). In Hong Kong in particular, the migration factor has added to social polarization. On one end of the social spectrum are highly paid expatriate employees from Australia, Europe, and North America who swamped Hong Kong prior to 1997. During 1995, some 19,030 professionals and others with technical, administrative, or managerial skills from more than 60 countries were admitted for employment (China Hongkong Business 1998). On the other end of the spectrum are low-paid female domestic helpers, mainly from the Philippines, who contribute significantly to the increase in total measured inequality. Above all, Hong Kong accepts 150 Chinese legal immigrants daily, or 54,750 per year. These immigrants continuously affect the distribution of income. Some researchers have suggested that if the new immigrants from Mainland China were removed from the population, less income dispersion would exist. In addition, researchers found a third of the increase in measured inequality to be attributable to the different types of immigration noted earlier (Lam and Liu 1998).

During the past two decades, Hong Kong has experienced impressive economic growth. One indicator that this growth has been externally driven is the sharp rise in the number of regional headquarters and regional offices from 1,846 in 1994 to a peak of 2,514 in 1997; in 1998 this number decreased marginally to 2,449 (Industry Department 1998). Hong Kong’s status as a financial center and a global metropolis is affirmed in a recent study (Meyer 2000). Hong Kong has acted as an effective conduit for FDI and other economic activity to fuel China’s modernization and development. This globally driven economic growth, while partially targeted at China, has generated enormous wealth within Hong Kong. At the same time, social polarization has deepened, as measured by income distribution, Gini coefficients, and rising numbers of social welfare recipients. This trend has been particularly apparent since Hong Kong’s return to China, but the regional financial crisis has naturally clouded the relationship.

Nevertheless, the evidence supports the hypothesis that social polarization will increase as economic growth powered by globalization continues to race ahead in Hong Kong.

A Policy Framework

Poverty is the outcome of a process of human impoverishment that combines absolute deprivation and unequal access to the political, economic, and social assets of society. In the urban areas of Pacific Asia a pattern of uneven development prevails because of the increasing concentration of population into megacities and world cities and rapid economic growth based on export-led manufacturing that result from the twin processes of urbanization and globalization. As the region increasingly becomes economically well integrated, workers are placed under pressures of global competitiveness, and an enlightened policy framework becomes necessary to relieve the plight of the urban poor. Globalization is a double-edged sword; it brings new wealth and opportunity to some countries and individuals, but marginalizes others. Surging economic impulses have lifted many countries and individuals during the past two decades. However, in the new urbanizing and globalizing environment central governments must devise policies that can target the increasingly marginalized urban poor who will not be able to break free from the vicious cycle of poverty on their own. This policy framework should be based on development experience of the recent past.

First, the *World Development Report 1990* stresses the merit of a dual approach to reducing poverty that combines efficient, labor-intensive growth with adequate provision of social services (World Bank 1990). The policy statements of both the World Bank and the United Nations Development Programme ushering in a new decade in 1991 stressed the promotion of the urban labor force and small manufacturing enterprises to expand production (UNDP 1991, pp. 46–47). Improved productivity can be achieved by increasing labor intensity and the human capital of the poor by investing in education, health, and nutrition (World Bank 1991, p. 45). In addition, poverty-reducing growth should be promoted by increasing urban employment, improving access, and providing subsidies.

Second, based on the Asian experience in urban poverty alleviation, a recent study has outlined four major ingredients of an effective approach. These are broadly based economic growth, outward-looking development strategies, flexible labor market policies, and support to the urban informal sector (Mathur 1996). Government assistance for the last can be crucial. Governments can provide incentives by changing regulations and providing adequate infrastructure services to increase the productivity of informal sector enterprises. A more collaborative approach that is accommodating to the informal sector has the potential of further enlarging the sector's employment generation ability. Recommending outward-looking development strategies does not contradict some of the warnings against the negative aspects of FDI mentioned earlier as long as governments take steps to protect local workers.

Third, political support for the institutions that are favorable to the poor and to market and growth reform must be enhanced. Those who gain from policy reforms are usually unorganized, spatially dispersed, poorly educated, and politically weak, even though there may be many of them. Advocates of reform policies, including academics and social action groups, are seldom sufficiently influential by themselves to bring about reforms, but they have performed a vital civic duty in championing the cause of the urban poor (Pernia 1994, pp. 35–36).

Fourth, governments need to nurture enabling environments by being prepared to empower credible community groups and people and working in partnership with them to improve the lives of the urban poor. This necessitates democratic decentralization of authority, an attitudinal change, and new funding mechanisms to channel resources to poor communities and families. This is the essence of the search for evolving, effective urban governance models, which have become increasingly important. Urban institutions born in a former era are not equal to the challenges that have emerged in an age of globalization. New ones must be created that can more effectively resonate with and respond to the ever-changing problems and needs of the people.

Finally, access of the poor to political, social, and economic assets of society must be improved. Target programs, special funding, and subsidies are some of the strategies that can be used to assist the poorest of the poor. The demographics of Pacific Asia suggest that the number of elderly, infirm, disabled, and so on is likely to increase in the future.

The *Human Development Report 1997* discusses the theme of poverty as the critical issue of our time (UNDP 1997). While the 20th century witnessed unprecedented progress in reducing poverty, eradicating abject poverty worldwide in the 21st century is not only a moral imperative, but also an achievable goal. Indeed, 117 heads of state at the World Summit for Social Development in Copenhagen in 1995 committed themselves to the goal of eradicating poverty in the world. In the developing world, Pacific Asia is a good place to start the eradication of urban poverty. Regional financial turmoil derailed many national development plans. However, this should not deter the region from achieving its ultimate and long-term goals.

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Financing of Subnational Public Investment in India

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As a large federal country, India has a complex system of fund devolution to subnational entities such as states and cities. Since its independence, the country has followed a central planning approach to the allocation of public investment resources at different levels. India's constitution governs the allocation of responsibilities between the central and state governments. Recent constitutional amendments in the 1990s have also served to delineate better the responsibilities of local governments in both urban and rural areas. This complex system of raising and allocating resources between different levels has increasingly come under stress in recent years. Meanwhile, with higher growth in the gross national product and resulting increases in household incomes, the demand for public services has also been rising accordingly. The experience of the last few years suggests that unless appropriate changes are made to the existing system of public investment in India, particularly at the state and local levels, the country will find it difficult to make appropriate investments in both physical and social infrastructure in the future.

This chapter documents briefly the structure of the existing system of fund devolution from the central to state governments and from state governments to local governments. Providing this description is important, because understanding the complexity of the system before making any suggestions for changes in it is essential. The increasing fiscal stress faced by state governments is documented in some detail in this chapter to quantify the serious difficulties they now face.

Similarly, at the city level the current structure of fund devolution is clearly inadequate for meeting the rising infrastructure investment demands created by ever-increasing urbanization. The existing system in which local governments finance investments is described, and its deficiencies are documented. This chapter also makes a case for further decentralization of responsibilities to the local level, which would include corresponding enhancement of incentives and powers to raise resources for investment at the local level.

The existing fiscal system in India was designed to centralize to a great degree financial decisionmaking in the country. Apart from the centralizing imperatives generated in the planning process, a clear intention to enforce appropriate fiscal responsibility through such centralized control also existed. The results have clearly shown that this administrative mechanism for enforcing fiscal responsibility has not been successful. Consequently, the resources available to states and cities for investment in public goods have been decreasing in recent years.

This chapter proposes a new approach to the financing of public investments by advocating greater decentralization of responsibilities. A possible root cause of rising financial irresponsibility is the absence of a direct connection between the investing entities and the ultimate sources of funds: the lending institutions. The central government essentially acts as a giant financial intermediary for raising the funds that other lower-level entities will spend. This system induces irresponsibility at the lower levels because fund allocation is not related to performance. Greater fiscal responsibility may be induced when local and state governments and their agencies are subject to credit ratings and need to generate resources directly from the market, because their ability to raise resources then depends more directly on their own performance. The market, rather than administrative coaxing from the center, is more likely to force them to perform responsibly.

State Government Financing of Investment

The Republic of India is a federation of states and union territories where the constitution governs the revenue powers and expenditure functions of the states and the central government. Until recently, levels of government below the state level, that is, local governments in both urban and rural areas, were not mentioned in the constitution. Thus, state governments created local governments according to specific legislative enactments in each state and at the local government level. Recently, the constitution was amended (73rd and 74th amendments) to explicitly recommend the existence of local governments in both rural and urban areas. Only as a result of these amendments have the functions of local government now become better recognized in the constitution. The constitution has laid down the specific taxing powers and expenditure responsibilities for each level of government (Bagchi, Bajaj, and Byrd 1992; Wallich 1982).

Since independence, almost all infrastructure investment has been made in the public sector. As will be detailed later, the central and state governments have different responsibilities for different sectors within infrastructure. Both central and state governments have devised a variety of means to accomplish these infrastructure investments. At the central level, services such as railways and telecommunications are provided within a government department framework. In the delivery of other services, such as power, the government set up nondepartmental public sector enterprises. In other services, such as ports, yet another form of delivery was designed to go through entities known as port trusts. In the case of departmental activities, the accounts are not separated from government accounts. In addition, no corporate equity structure exists, nor does separate borrowing. Nondepartmental public sector enterprises are usually structured as companies with equity ownership by the government and they maintain separate debt accounts. The accounts of these enterprises are kept in the same way that the accounts of other commercial companies are. They receive equity injections from the government budget and can take loans both from the government and from the open market. Finally, the port trusts are semiautonomous agencies of the government that can receive subventions from the government budget and can take loans from financial institutions or the government. A parallel structure exists at the state government level, where some activities, such as the building and maintenance of roads and irrigation, are carried out within a departmental framework. Other services are delivered by special public sector enterprises. State governments have also created various semiautonomous authorities such as urban development authorities, state electricity boards, and similar bodies that are responsible for other infrastructure services.

In the planning system used in India since 1951, almost all the investment programs of government departments, public sector enterprises, and other public authorities are covered within the five-year plan framework. Budgetary allocations are made for direct investment as budgetary capital expenditures for government departments, as equity and loan injections to public sector enterprises, and as government budgetary subventions and loans to other authorities. All such expenditures are captured in Indian budget documents.

State investment financing is therefore done both through subventions as grants and loans from the central government and through other borrowing methods. Only in the last few years have states moved toward private investment in infrastructure services and greater market exposure of public sector entities. Because of the existence of the documentary system described previously, tracing the financing of state government investments is possible.

For a variety of reasons that relate to the efficiency and ease of tax collection, the constitution assigns a number of important tax resources to the central government and a limited amount of tax resources to the states. In contrast, the states have more expenditure functions than they can finance through their own revenue resources. The relationship between state governments and local authorities also exhibits a similar imbalance between access to revenue resources and expenditure responsibilities. This vertical imbalance between the central government and the states on the one hand and between the states and local governments on the other has given rise to a complex fiscal system in India.

To address these imbalances, the constitution provides for the setting up of a finance commission every five years to administer the system of tax devolution between the center and the states. Successive finance commissions have set the parameters for the system of tax sharing and grants in aid to the states. In addition to the statutory awards the quinquennial finance commissions make, the constitution also empowered the central government to provide additional grants in aid to the states for any public purpose. Under this provision the central government created the Planning Commission through a resolution of Parliament in 1950 to set up a procedure for channeling plan expenditure. Thus two main bodies exist to channel resources from the center to the states:

- The Finance Commission is a statutory body appointed by the central government every five years that essentially makes recommendations for the devolution of resources for nonplan revenue expenditure.
- The Planning Commission is a nonstatutory body that is responsible for making five-year plans that determine the pattern of assistance for state plan expenditures. These may include both revenue and capital expenditures.

Before discussing the details of the patterns of investment financing of subnational governments, understanding the classification of expenditures in India may be useful. Three types of classification are used in Indian public finance accounts. First, all expenditures are divided between revenue expenditure and capital expenditure. Within these categories, expenditure is further divided between nondevelopment expenditure and development expenditure. Finally, all expenditure is divided between plan expenditure and nonplan expenditure. These three classification systems are used for different purposes and overlap in different ways. The revenue and capital accounts are dealt with as might be conventionally expected. Development expenditure covers expenditure on social services such as education, health, water supply and sanitation, housing and urban development, and other welfare services. In addition, development expenditure includes economic services covering expenditure on agriculture and rural development; irrigation; energy, industry, and minerals; transport and communication; science, technology, and environment; area development; and general economic services. Nondevelopment expenditure covers all expenditure on state organizations, fiscal services, interest payments, administrative services, pensions, and the like. Plan expenditures are essentially those generated by the five-year plans. Whereas most plan schemes involve capital expenditure for investment purposes, they also include revenue expenditures involving items such as the wages and salaries required for the administration of these schemes during the five-year plan period. Once the schemes are completed, such recurrent expenditure subsequently becomes nonplan revenue expenditure. Plan expenditure on nondevelopment activities includes, for example, investments in buildings for activities such as administration and police services.

The Finance Commission helps states allocate funds for their nonplan revenue accounts. These accounts include both development and nondevelopment expenditure. The Planning Commission assists states with all expenditures required for designated plan outlay whether capital or recurrent or development or nondevelopment in nature.

Assignment of Tax and Responsibilities

The constitution uses three classifications to assign expenditure responsibilities between central and state governments. These are known as the union list, the state list, and the concurrent list. Under the union list, the central government is solely responsible for 84 categories of activities such as defense, foreign affairs, international economic relations, atomic energy, aviation, shipping, post and telegraph, communications, national highways, banking and insurance, oil, petroleum and petroleum products, and other activities. The constitution assigns states exclusive responsibility for areas such as public order, police, administration of justice, public health, education, roads and bridges, agriculture, water supply

and irrigation, industries other than those assigned to central jurisdiction, trade and commerce within the states, and so on. The concurrent list includes 47 items covering certain areas of criminal law and criminal procedures, economic and social planning, forests, electricity, education, labor, and so on.

The constitution also specifies the respective taxation powers of central and state governments. Among the 13 types of taxes vested with the central government, the most important are taxes on income excluding income from agriculture, corporate income tax, custom duties, and excise duties on most goods. State governments control 19 taxes including direct taxes on land and agriculture income, excise duties on alcohol and other specified goods, taxes on goods, mineral rights, vehicles, the sale of electricity, luxury taxes, and others.

Note that the main taxes, that is, personal and corporate income taxes, and excise taxes, such as customs duties and indirect taxes at the production level, are assigned to the central government. Consequently, state taxation powers are inadequate in relation to their expenditure responsibilities.

Functions of the Finance and Planning Commissions

As stated earlier, the Finance Commission is appointed every five years, and it makes recommendations to the central government on the pattern of tax devolution and grants in aid to state governments. While these recommendations are not formally binding on the central government, the practice has so far been largely accepted. Although the constitution does not limit Finance Commission awards to state needs on the revenue account only, in practice, the Planning Commission has so far largely looked after the capital expenditure of the states. In fact, until the end of the second five-year plan, a good deal of overlap existed between the Finance and Planning commissions. Since then, the terms of reference of the Finance Commission have been confined to the nonplan requirements of the states.

The Finance Commission attempts to estimate the total resources available to the center and to each state government and also the expenditure needs of the two levels of government. It then recommends a pattern of tax sharing, taking into account the resource positions of the center and the states and their respective expenditure patterns. The Finance Commission determines the total share of central taxes to be devolved to the states and then distributes the award among the states. The horizontal award between the states takes into account factors such as states' populations, per capita income, and state-level tax efforts. Until now, customs duties and corporate income tax were not to be shared with the states. As a result, the finance commissions have been restricted mainly to deciding on the proportion of excise duties and personal income tax to share with the states. Only now has the 10th Finance Commission recommended a move to include all central government taxes for the purpose of devolving resources to the states. With the passage of the 74th Amendment to the constitution, the 10th and 11th Finance Commissions have also been asked to account for state devolutions to local bodies.

Until 1969, central assistance to the states was essentially granted on a project-by-project basis, giving the center considerable control over state plans and their implementation. Starting with the 4th plan, plan assistance to the states has been governed on the basis of an accepted formula, which provides for unconditional bloc assistance from the center for state plan expenditures. This is known as the Gadgil formula, named after the then deputy chairman of the Planning Commission. According to this formula, bloc assistance for such plans has been distributed on the following basis:

- 60 percent on the basis of state populations
- 10 percent for states whose per capita income is less than the average of all of India
- 10 percent for states' tax efforts in relation to per capita income
- 10 percent in proportion to the outlook for major irrigation and power projects in the states
- 10 percent in discretionary assistance for special problems.

This overall formula has been amended from time to time at the margin. The assistance given to the states under this arrangement is distributed on a 70 percent loan and 30 percent grant basis.

Certain states, mostly the hilly region states in the north and northeast, have been designated special category states. These receive a lump sum payment fixed by the Planning Commission that is not subject to the Gadgil formula. These states receive these funds 90 percent as grants and only 10 percent as loans.

In addition to the resources provided to the states under the Gadgil formula, the Planning commission also provides resources under various centrally sponsored plan schemes that usually involve matching contributions from state governments. Additional resources are also available to states from foreign sources. Earlier, only 70 percent of these additional resources were used for the specified foreign-aided state projects and the remaining 30 percent was redistributed to all other states under the Gadgil formula. The rationale for this system was that all foreign assistance was taken into account as part of central government resources before working out the states' shares according to the Gadgil formula. This system has been changed so that states now receive 100 percent of the additional resources generated by foreign-aid-funded projects in their states.

Resources for State Plans

The planning process has governed the system for investment activities in India. The Planning Commission undertakes extensive consultation before arriving at the broad contours of a five-year plan. The Planning Commission carries out a parallel technical process that determines which projects and policies to implement and lays out the resulting investment program for the plan. These consultation processes involve discussions with all the central government ministries on the one hand and state governments on the other. For each area of investment, a parallel process of technical discussion takes place. The results of this massive exercise are sectoral investment programs for the central and state governments on the one hand and statewide investment programs on the other. For both the central government and the state governments, the Planning Commission attempts to devise a financing program for the whole plan investment program.

The Indian financial sector has largely been in the central government's hands since the late 1960s. As a result, the financing program for plan investments has included the parallel exercise of allocating a large proportion of financial savings in the country. A variety of sources financing the central government's fiscal deficit includes the following:

- Balance from current revenues
- Contributions of public sector enterprises
- Bonds issued by public sector enterprises
- Market loans
- Small savings (retail savings made in assured return schemes administered by the post office)
- Provident funds
- Capital receipts from previous lending operations.

Market loans include funds from the Life Insurance Corporation of India and SLR bonds mandated for compulsory investments by commercial banks.

Deficit financing also financed a portion of the gross fiscal deficit until recently. Mandating lower than market rates for the SLR bond contributions that commercial banks made once kept the cost of financing of government borrowing low. In recent years, progress has been made in removing such distortions so that most government borrowing is now at market-related rates.

The five-year plan program is not a budget program. It can essentially be described as an indicative plan investment program. The applicable budgetary program is formulated on an annual basis and is coordinated with the nonplan budget. Policymakers naturally make an attempt to guide the annual budgetary allocations so that they remain consistent with the five-year plan program. As might be expected, at the end of any five-year plan, substantial differences are observed between the original five-year plan and the results of the annual allocation exercise.

The following resources are available for financing state plans:

- Balance of current revenues
- Contribution of state public enterprises
- Domestic borrowings by the states, for example, market borrowing including that by public sector enterprises, proceeds from small savings and provident funds, and term loans from financial institutions
- Central assistance for state plans.

Thus, apart from the balance of current revenues and the contributions of public sector enterprises, different kinds of loans finance a substantial portion of state plans because the majority of central assistance comes as loans from the central government. In fact, the central government has consistently accounted for about 70 percent of total outstanding state government debt over the last 20 years or more.

State governments are allowed to borrow from the central government under Article 293 of the Constitution. This article empowers the central government to provide loan assistance to the states subject to the following guidelines:

- State governments can borrow internally within India using the consolidated funds of the state as security and within the limits fixed by the state legislature.
- The government of India can make loans to any state and can provide guarantees with respect to loans raised by any state, within the limits or guidelines devised by Parliament.
- A state may not raise any loan without the consent of the government of India if any repayments are still outstanding on loans or guarantees that the government of India has previously given.

The planning system, which has resulted in the central government lending substantial funds to states for financing state plans, has meant that states are not likely to be able to fully repay their debt to the central government. Consequently, the central government has effectively controlled the ability of states to borrow. In the current system, this situation is likely to continue for the foreseeable future. In this system, the central government allocates the amounts that different state governments may borrow from the market annually. These market-borrowing limits are set by a working committee composed of the Planning Commission, the Ministry of Finance, and the Reserve Bank of India. The Reserve Bank of India functions as banker to the states and conducts all public borrowing on their behalf. In this system, all state governments receive the same rate of interest regardless of the credit quality of any state. Some attempts are now being made to inject some flexibility into this system by allowing state governments to raise a portion of their borrowing directly (Reddy 1998).

Deteriorating Situation of State Finances

State finances have significantly deteriorated since the early 1980s. This has resulted in slowed growth in state plan expenditures relative to the center's expenditure. This is illustrated in table 13.1, which shows the share of states in total plan outlays. From the mid-1950s to the late 1970s, the share of states stayed relatively stable at around half of total expenditures. This has since deteriorated to about 40 percent or less in the late 1990s. The consequence is that the ability of state governments to invest in both social and physical infrastructure has declined considerably, because unlike the central government, subnational governments, such as states, cannot indulge in deficit financing. As a result, the states suffered reduced public investment in the 1980s, while the central government was able to accelerate central plan expenditures that were financed by rising fiscal deficits, including deficit financing, right through the late 1980s. This process culminated in the fiscal crisis of 1991.

Table 13.1. *Share of States in Plan Outlays, 1951–2002*
(percent)

<i>Plan</i>	<i>Center</i>	<i>States</i>
First five-year plan (1951–56)	36	64
Second five-year plan (1956–61)	54	46
Third five-year plan (1961–66)	49	51
Annual five-year plan (1966–69)	51	49
Fourth five-year plan (1969–74)	50	50
Fifth five-year plan (1974–79)	48	52
Annual five-year plan (1979–80)	46	54
Sixth five-year plan (1980–85)	53	47
Seventh five-year plan (1985–90)	59	41
Eighth five-year plan (1992–97) ^a	62	38
Ninth five-year plan (1997–2002) ^b	58	42

a. Estimated.

b. Projected.

Source: Bagchi and others (1992b); Planning Commission (1998).

The existing planning system has essentially resulted in the central government acting as a giant financial intermediary, borrowing from the public in different ways to finance plan expenditures at both the central and state levels. In this system no connection exists between the viability of projects and their financing costs. Since the introduction of the Gadgil formula for bloc plan assistance to the states, which results in loans being given to states up to 70 percent of total transferred resources regardless of the end use of expenditures, the nexus between resources for financing and end uses has been completely broken. Different finance commissions have remarked on the untenability of this system, which does not distinguish between financing of public goods and private goods by state governments. The consequence has been that returns from these investments have been consistently low. In principle, investments in public goods should result in higher tax revenues, and investment in private goods should result in higher tax revenues through the imposition of user charges for public services. The majority of public expenditures at the state level have gone into financing power generation, transmission, and distribution through state electricity boards; state road transport corporations; urban development authorities for investing in urban infrastructure services; irrigation; housing; and the like. Public sector enterprises of different varieties carry out most of these activities (except irrigation). If these enterprises were able to impose appropriate economic pricing of their services they could have provided returns to state governments as dividends and could have been able to service their debt fully. In reality, these enterprises have not been able to provide appropriate dividends to state governments' budgets, nor have they been able to meet their own debt service payments. In addition, they have not been able to generate net positive internal resources to invest in expanding their services.

Table 13.2 illustrates this situation with the financing pattern of state plans for the sixth, seventh, and eighth five-year plans. The contribution of the balance of current revenue to the financing of state plans, which was as high as 40 percent of the total in the sixth five-year plan, declined to less than zero in the eighth five-year plan. Similarly, the contribution of public sector enterprises has been consistently negative throughout the whole period. Consequently, the share of borrowing by state governments has been increasing consistently from about 35 percent of total resources for the state plan during the sixth plan to more than 50 percent in the eighth plan. Correspondingly, the share of central assistance also increased from 37 percent in the sixth plan to more than 50 percent in the eighth plan. Thus, in the current situation nearly all plan expenditure is now being financed by borrowing of one kind or another. Within the pattern of borrowing, the share of market borrowing has also increased consistently.

Table 13.2. *Financing Pattern of State Plans*

<i>Sources of finances</i>	<i>Sixth plan, 1980–85 (1979–80 prices)</i>		<i>Seventh Plan, 1985–90 (1984–85 prices)</i>		<i>Eighth plan, 1992–97 (1991–92 prices)</i>	
	<i>R\$ crore</i>	<i>Percentage of total</i>	<i>R\$ crore</i>	<i>Percentage of total</i>	<i>R\$ crore</i>	<i>Percentage of total</i>
1. Balance of current revenue	14,826	41	17,368	23	-2,009	-1.4
2. Contribution of public sector enterprises	-4,620	-13	-3,757	-5	-2,723	-1.9
3. Total borrowing	12,679	35	27,644	37	75,750	52
a) Net borrowing	3406	9	9242	12		
b) Small savings	5901	16	19070	26		—
c) Term loans from foreign investors	1,887	5	4,445	6		
d) Miscellaneous capital receipts	-2,012	-6	-5,113	-7		
e) Budget deficit	3,497	10	-			
Total state resources	22,885	63	41,255	55	70,335	48
Central assistance	13,690	37	33,264	45	75,750	52
Total resources	36,575	100	74,519	100	146,085	100

— Not available.

a. Actuals.

b. Estimated.

Source: Bagchi and Sen (1992); Planning Commission (1998).

Table 13.3 shows the difference between what was projected and what actually happened in the financing of state plans in the sixth, seventh, and eighth five-year plans. First, a consistent shortfall has occurred between what was projected and what was actually accomplished in terms of plan expenditures and resources. The balance from current revenues during the sixth and seventh five-year plan turned out to be about 60 percent of what was expected initially. In the eighth five-year plan, even though the contribution from the balance of current revenues had been scaled down considerably, plan resources actually went to marginally finance current revenue expenditure rather than to finance plans. Similarly, the contributions of public sector enterprises have been consistently negative and higher than had been projected in each case. Whereas borrowing compensated for the shortfalls in the sixth and seventh five-year plans, this could not be done in the eighth five-year plan. Generally, central assistance has been greater than the projected levels in each of the plans. This record suggests that the borrowing abilities of state governments have declined in recent years and their difficulties in financing investment expenditures will now increase. This is a cumulative result of low returns to proposed investments, which have made states' credit quality worse and worse. The fact that interest payments have been rising consistently since the early 1980s from about 10 percent of revenue expenditures to more than 16 percent illustrates this declining credit-worthiness. The lack of return from state enterprises has also reduced the buoyancy of nontax revenues.

That the overall worsening fiscal situation of state governments is relevant to the financing of investment expenditures is illustrated in table 13.4. Capital outlays as a proportion of gross fiscal deficits fell from about 62 percent in the late 1980s to less than 50 percent in 1998. In contrast, revenue deficit has risen as a proportion of the gross fiscal deficit from about 8 percent in the late 1980s to more than 35 percent in 1998. Consequently, borrowing by state governments is now increasingly devoted to financing revenue expenditures rather than capital expenditures. This can only lead to a further deterioration of the fiscal situation in coming years. The resources available for investment will decrease continually in the foreseeable future unless a change in the system takes place.

Table 13.3. Shortfalls in Projected Financing of State Plans, 1980–97

<i>Sources of finances</i>	<i>Sixth plan (1980–85)^a</i> <i>(1979–80 Prices)</i>			<i>Seventh plan (1985–90)^a</i> <i>(1984–85 prices)</i>			<i>Eighth plan (1992–97)^b</i> <i>(1991–92 prices)</i>		
	<i>Projected</i> <i>(R\$ crore)</i>	<i>Actual</i> <i>(R\$ crore)</i>	<i>Actual/ projected</i> <i>(percent)</i>	<i>Projected</i> <i>(R\$ crore)</i>	<i>Actual</i> <i>(R\$ crore)</i>	<i>Actual/ projected</i> <i>(percent)</i>	<i>Projected</i> <i>(R\$ crore)</i>	<i>Actual</i> <i>(R\$ crore)</i>	<i>Actual/ projected</i> <i>(percent)</i>
Balance from current revenue	22,312	14,826	66	28,974	17,368	60	12,985	-2,009	
Contribution of public sector enterprises	-516	-4,620		-1,969	-3,757		4,000	-2,723	
Borrowing	11,454	12,679	111	23,956	27,644	115	84,500	75,060	89
Total state resources	33,250	22,885	69	50,961	41,255	81	179,985	146,085	81
Central assistance	15,350	13,690	89	29,737	33,264	112	78,500	75,750	96
Total resources for state plans	48,600	36,575	75	80,698	74,519	92	179,985	146,085	81

a. Actuals.

b. Estimated.

Source: Bagchi and Sen (1992); Planning Commission (1998).

Table 13.4. *Selected Fiscal Ratios for State Governments, 1985–98*
(percent)

<i>Year</i>	<i>Capital outlay gross fiscal deficit</i>	<i>Interest payments revenue expenditure</i>	<i>Revenue deficit gross fiscal deficit</i>
1985–90	62.4	10.8	7.7
1990–95	55.3	13.6	24.6
1996–98	47.5	15.8	35.8

Source: Reserve Bank of India (1998).

Key Issues

The current system for the financing of investments by subnational governments clearly cannot be sustained. The problem has essentially arisen as a result of the lack of a nexus between borrowing and the end use of expenditures in capital investment. This is ironic because the existing system was designed to preserve the fiscal health of the state governments through appropriate central government control. Because state governments are not allowed to run deficit-financing activities, they should therefore be constrained from fiscal excess. However, the opposite has occurred.

In view of the limits placed on state governments' borrowings and because of recent demands for expenditures, state governments have increasingly resorted to public borrowing through public sector enterprises. The issue of state government guarantees for their public sector entities has increased, which enables them to borrow directly from the market. However, the capital market institutions are now beginning to question the quality of these guarantees. Thus, a movement now exists to collate information on the volume of existing guarantees so that the existing liabilities of state governments can be made more transparent.

The problem of state financing of investments suggests that action must be taken on both ends of the system. Spending on investments to provide private goods must be related more directly to the generation of returns through the levy of appropriate user charges. The current problem is based on the lack of nexus between borrowing ability and returns to the activity; because of this the levy of user charges is essentially done politically. However, once the ability to raise resources depends on the financial health of state entities, this will effect political thinking on the appropriate levy of user charges.

To raise resources to invest in the provision of public goods, subjecting state governments to credit ratings may be desirable so that their ability to borrow depends on their fiscal health. A system that provides appropriate signals to policymakers might be more successful in ensuring the fiscal health of state governments in the future. Clearly, the existing system has failed in this objective.

Financing of Investment by Local Governments

The 1991 census showed that 53 cities in India had populations of more than half a million each, and 300 cities had populations of more than 100,000 each. Even with modest rates of urban population growth, these numbers will continue to increase in the foreseeable future. Therefore, investments in urban infrastructure, such as drainage, sewerage, water supply, roads, electricity, and transportation, are increasingly needed. The implications for both financial and physical resources, though not well quantified, are likely to be serious. The essential problem is that such infrastructure yields benefits in the long term, but investments have to be made now (Datta 1992; Edadan and Mathur 1998).

So far, local governments have not had the financial or human resources to make adequate urban infrastructure investments. As discussed earlier, local governments in India are essentially state government creations that are subject to the provision of state legislation. Consequently, local governments are not integrated with national planning efforts, and no direct plan allocations for

investment by local authorities exist. Whatever plan allocations are made for urban development have to be routed through state governments. This system has resulted in a severe lack of information on investment expenditures made by local governments. As a result, no consolidated data are available on local-level investment expenditures.

Over a long period stretching from the 1960s to the 1980s, the functioning of local bodies has tended increasingly to erode. For various reasons, the majority of city municipal corporations had been suspended by state governments and were being administered by them. The same also occurred with many municipalities. In cities where major development programs were undertaken (for example, Calcutta, Delhi, Kanpur, and Madras), separate urban development authorities were established that had few connections with the existing municipal corporations. These investment programs were largely externally funded with international, national, and state resources, and bore little relation to their local fiscal viability. This was partially unavoidable because long neglect of such investments in these cities had made investment vitally necessary. Remarkably, the major investments in sewerage in some of India's biggest cities were made almost 100 years ago, and little has been done since then. A result of the relatively large investments that were made in the last two or three decades is these cities' lack of financial resources to maintain these new assets. This has occurred because adequate attention was not paid to the institutional reforms that should have accompanied these investments.

In effect, state governments meet a significant proportion of the financial needs of local bodies via shared tax revenues, capital grants, and loans. In general, local governments have not been able to raise loans themselves for investment purposes. Under the current system, just as state governments cannot borrow from the market without central government approval, local governments are not able to borrow without state government approval. Moreover, lending institutions usually require local governments to obtain state government guarantees. Whatever funds local governments have been able to borrow in recent years have come from the Housing and Urban Development Corporation or from the Life Insurance Corporation. Allocations of credit from the latter depend on the investment according to guidelines laid down by the central government.

The 74th amendment to the Constitution now provides constitutional recognition of the existence of local governments. Under this amendment, local governments will now be provided with greater fiscal authority to both raise revenues and manage their expenditures. The changes envisaged by this amendment will take some time to be implemented because a number of institutional changes will have to take place to strengthen local governments. Just as the fiscal relations between central and state governments are governed by the awards of the statutory Finance Commission, the states are now supposed to set up state finance commissions on a regular basis to provide transparency and regularity in the fiscal devolution systems between state and local governments. As these state finance commissions become a regular feature of the fiscal scene, local governments are likely to be strengthened and to start exercising the powers designated to them. (See the annex for the provisions made under the 74th constitutional amendment in 1992.)

The current state of urban development management covers a wide variety of experiences. Some large cities still have no organized management worthy of note, while others might well be excessively managed. Generally, municipal corporations or municipal boards govern most cities, but, as already mentioned, many of these bodies were, until recently, suspended for varying lengths of time. As a result, state-appointed officers administered the cities. Because the 74th amendment requires new elections within six months of any suspension, most municipal corporations are now being resurrected. In cities where major urban investment programs exist, urban development authorities usually operate directly under the state government rather than under the local authority. Essentially, two reasons explain this. First, local authorities have long been regarded as inefficient, ineffective, corrupt, and too susceptible to local pressures. Second, the financing of urban development has been such that the funds have come from the central or state levels, hence, entrusting the execution of works to an agency under direct state control was considered prudent. The idea was to make the urban development authority responsible for

capital investment works, while the municipal corporation was relegated to maintenance tasks. In some cases, the demarcation of responsibilities between the corporation and the urban development authorities is not entirely clear, leading to avoidable disputes. This often causes difficulties, because no connection has typically existed between investments and local financing capabilities. Hence, local authorities are often unable to raise resources adequate to the task of maintaining the new infrastructure.

Over the last two or three decades, the functions, powers, and prestige of local governments have tended to erode. As a result, the prognosis for their regeneration was not optimistic until the 74th constitutional amendment for devolution of powers to local bodies was passed. However, few choices appear to be available. Indeed, the rehabilitation of local authorities from the present state of neglect would need major shifts in the national and international techniques of financing urban development. Local authorities need not be seen as unnecessary stumbling blocks in program formulation and execution. Urban development authorities could be subsidiaries of local authorities, rather than of state governments. With appropriate checks and balances, the local authorities can indeed be held responsible, the funds placed at their disposal, and the execution of programs planned. The resources would be related to the availability of financial resources whether they are borrowed from the state, the center, or raised locally or nationally in the capital market. Such a procedure would improve financial discipline, as would the formulation of investments that are more in line with a city's paying capacity. Infrastructure investments would be made within the corporation's fiscal resources and tax capabilities.

Local Financial Resources

The main revenue sources of urban areas are property taxes and octroi duties (taxes levied on the entry of goods into a city). General agreement appears to exist that urban local finances have not been as buoyant as might have been expected or as is desirable. However, according to a study conducted by the National Council of Applied Economic Research (1980), the situation has not always been as bad as is sometimes suggested. While state and national taxes increased an average of 17 percent per year in 1970–71 and 1977–78 (in current prices), local taxes increased about 15 percent per year. In principle, local taxes should increase faster than national and state taxes because of increasing urbanization and industrialization. Property taxes and octroi are the main revenue sources for local bodies; both these sources should be buoyant. When more housing is constructed and existing properties are constantly appreciating in value, property taxes should be expected to lead the growth in revenues. Similarly, with increased urban activity, octroi can be expected to increase faster than other state and national revenues.

Octroi duties have generally been found to be more buoyant than property taxes. However, general agreement exists that from the national point of view, eliminating octroi duties is desirable to facilitate movement of goods across the country so that a truly common market can form. While few rational economic arguments are made against the abolition of octroi, another local revenue source must replace octroi that reflects the level of economic activity in the city. Ad hoc arrangements or revenue sharing from state taxes have not been appropriate substitutes because they are unpredictable. The devolution of state revenues must take place according to a set formula as the devolution of central taxes to states does. Because the demand for local services is likely to depend on the level of economic activity, the principle of local taxation reflecting that activity should be recognized. The campaign against octroi has met with some success, and many states have indeed abolished it. However, an adequately buoyant replacement has not been implemented, leading to further impoverishment and weakening of local bodies in the 1980s. Octroi have generally been replaced with some means of devolution of state-level taxes, but the fiscal pressures on state governments have meant that these arrangements have been largely unsatisfactory.

The other main source of local revenue is the property tax. In principle, the assessment of property taxes should respond to the increasing value of properties. In a situation of rapid urban growth, the tax base and property values should increase continually. In fact, the property tax collections have been

relatively inelastic. This has been partly due to inefficient assessments and administration, but also to legal impediments, which may be related to the former. The key legal impediment is the operation of outmoded rent control laws. While ensuring the protection of tenants from capricious eviction and from unreasonable rent increases is essential, the rent control laws as they currently operate are essentially counterproductive. They have a twofold effect on property taxes. First, because housing investment is inhibited as a result of rent control laws, the quantity of housing investment is lower than it would be otherwise. Therefore, the total value of properties does not increase as much as it otherwise might do. Second, because properties can only be assessed at standard rents, assessments are bound by law to be lower than existing actual rents. Lifting all rent control laws suddenly would be difficult and undesirable. A phased approach could be adopted that exempts new properties from rent controls, while older properties are subject to continual annual increases in value linked to a determinate price index. This would ensure tenant protection while encouraging future housing investment and establishing a built-in measure to inject buoyancy into property tax revenues.

Wide-ranging discussions have taken place concerning amendments in recent control legislation at political, bureaucratic, and academic levels. Much of this discussion has been motivated by the desire to improve property tax collection, rather than using it as a measure for removing distortions in the housing market. Over the last decade, the weight of opinion—political, bureaucratic, and academic—has clearly shifted toward substantial amendment or abolition of rent control legislation. As a pacesetter, Delhi's Rent Control Law has already been amended substantially, although perhaps not adequately. However, owing to strong political pressure by vested interests, such as rich, commercial tenants who expect rent hikes, the amended law has yet to be implemented by the government.

If rent control laws were suitably amended to enable regular property regulation, increases in property values resulting from investments in public infrastructure would then be captured in the tax net. The resulting revenues would help with maintenance expenditures and with servicing of the capital expenditure debt incurred. At the same time, the provision of services such as water supply, garbage collection, transportation, and the like, whose consumption can be identified by household, should be based on the levy of user charges as far as possible. To help the poor, such charges could subsume a system of cross-subsidies.

Financing of Urban Development

The essential problem of urban infrastructure investment is that such infrastructure yields benefits in the long term, but investments have to be made in the present. Given national priorities and the serious fiscal constraints in the foreseeable future, seeing a radical increase in the allocation of budgetary resources for urban infrastructure investment is difficult. Yet demand for these investments will be difficult to resist, and therefore they will have to be made. Making urban infrastructure largely self-financing is important. Systems must be designed in such a way that their long-term viability is ensured. This would involve appropriate pricing of the facilities and services offered and reforms in the local tax structures, because not all urban public services can be based on user charges. A number of related fiscal, administrative, and legal measures are needed in connection with the financing of urban development.

Urban infrastructure investments are characteristically long-term investments in the sense that benefits accrue over many years. Thus sewerage, drainage, water supply systems, and roads constructed today are expected to yield benefits for at least 50 years. Because of this characteristic the finance needed for such investments should be long-term finance. However, the lack of long-term sources of funds has been a key constraint in the financing of urban development. As a result, these investments have been neglected until absolutely unavoidable, and then policymakers have resorted to central funds supported by external financing, often from the World Bank. This is not a new problem, nor is it specific to India. Rapidly urbanizing countries have often had to resort to large magnitudes of external financing for urban infrastructure investments (Lewis 1978). The problem arises because urbanization is accompanied by or

caused by increasing levels of industrialization. The demand for using savings to finance what are usually termed productive investments with quicker pay-off periods is also high. Therefore, finding the long-term finances necessary for the financing of urban infrastructure investment is usually difficult.

The 74th amendment to the constitution provides for devolving greater fiscal authority to local governments to raise revenue and manage expenditure. In this context, the issue of municipal debt is likely to assume greater importance at the local level. So far most capital investment at the local level has been made directly or indirectly through state government funding. Just as subventions from the central government to state governments have been made through both grants and loans, investments at the local level have been financed by combination of grants and loans from state governments. In instances of large capital investment, states have given approval for market borrowing by municipal corporations.

The existing legislative enactment governing borrowing by local authorities is the Local Authorities Loan Act 1914. Under this act, municipal authorities are allowed to raise loans up to Rs 500,000 from the open market. Loans greater than Rs 2.5 million or with maturity of more than 30 years require central government approval.

Compared with municipalities, municipal corporations in India have greater freedom to borrow from the market, but are usually limited by the state governments. The limits to borrowing powers set by the states are guided by

- Total annual ratable value of property tax within municipal corporations
- The value of the municipal corporations' own property and assets
- The corporations' own domestic revenue
- Savings made by the municipal corporation over a period of time.

Municipal corporations are permitted to borrow from the market through instruments such as debentures and bonds. However, the requirement for state government approvals or government guarantee conditions make it difficult for local bodies to borrow directly from the market. In principle, market borrowing by states covers the loan requirements of municipal corporations and urban development authorities. Therefore, the level of independent market borrowing made by municipalities has not been significant. The Reserve Bank of India appears to regard municipal borrowing as private borrowing and is therefore not inclined to regulate it. It is, however, concerned with the guarantee liability of state governments should they issue guarantees for municipal corporations' borrowing. In practice, the central government limits state government borrowing and local government borrowing through credit limits.

When municipal corporations do get permission from state governments to borrow, they usually borrow from institutions such as the Life Insurance Corporation of India, commercial banks, the Housing and Urban Development Corporation, and similar bodies. In many cases, these agencies require state government guarantees before they lend to the municipal corporations, thus their borrowing is once again subject to central government and Reserve Bank control of state government borrowing and guarantees.

In conclusion, the borrowing powers of municipal corporations, even when not limited by local provisions in state governments' legislative enactments or their own statutes, are effectively restricted by the demands of lending agencies. In view of this situation, considerable work is now going on in India to promote new methods of financing for municipal government investments.

Different countries have solved the problem of urban infrastructure financing in different ways. In the United States, the standard method of financing is through municipal bonds. The resource cost of raising funds through municipal bonds is reduced for local bodies by making the interest on them free of income tax. Interest paid on them can therefore be lower than on other bonds. This is effectively a subsidy from the federal government to city governments. The well-developed financial market in the United States does the rest. Ratings of bonds floated by different authorities account for the different degrees of

risk associated with bonds for different cities. Conversely, city authorities have an incentive to keep their fiscal house in order to get and retain favorable ratings.

In principle, developing a similar system in India is feasible. The first steps have already been taken, and the first Indian municipal bond was issued recently by the Ahmedabad Municipal Corporation. Another municipal corporation bond is in the process of being issued by the Pune Municipal Corporation. A few other municipal corporations are also preparing to move in the same direction. However, many problems remain, and municipal corporations that issue bonds will remain exceptions to the rule for some time to come.

In this context, discussion of the strengthening of local bodies, both organizationally and financially, assumes great importance. Only if local bodies can be held financially viable and responsible can a system of long-term finance be instituted for providing resources to local authorities. As an intermediate measure, higher-level institutions with better credit quality should be able to raise long-term funds by issuing long-term bonds. These could then be marketable just like any other public sector bond. Similarly, if these bonds were made tax free, the interest rate given could be lower, and hence the cost of funds kept within prudent limits. Such funds can be passed down directly to local bodies or through state-level financing bodies in some of the larger states. An important function of such institutions would be to provide technical assistance in the design of urban infrastructure programs, to help local bodies become fiscally responsible, and so on. Project evaluation would help ensure that funds are lent to only those local bodies that have viable investment programs. Moreover, such a system should promote the recovery of costs through appropriate user charges.

Once such a system has been in place for some time, it will have helped to induce autonomous fiscal responsibility in local bodies. At that point, permitting some of the larger municipal authorities to raise their own public resources by directly floating municipal bonds will be possible. The ability of local bodies to raise funds—directly and indirectly through financial institutions—depends on their fiscal position and their capability to invest these funds in resource-raising investments. Municipal bodies must be held accountable for the investments they make. For this reason, separating investment responsibilities from maintenance responsibilities, as has been done in many cities by founding urban development authorities, is a bad idea. Completed investments are typically transferred to municipal bodies for maintenance, while little is done to raise the resources needed to undertake maintenance responsibilities. If, however, such a system enforces better fiscal discipline, and local authorities do pay back the borrowed funds according to schedule, the efficient utilization of resources would increase overall.

Clearly, integrating local management and financial responsibilities in India in the interest of healthy urban development is urgently needed. Some of the problems of urban growth that were encountered in the 1970s, 1980s, and 1990s have undoubtedly arisen from the lack of accountability in the system. No one is really responsible for urban development. The central government is too remote from the concerns of specific cities and, moreover, lacks viable instruments. State governments are also beset with state-level problems. Local governments do not really exist or are weak. As a result, India is encountering problems in healthy urban growth and has even witnessed a deceleration in the 1980s.

A New Approach to Financing Public Investment

India successfully ascended to a higher growth path in the 1980s—to an average gross domestic product (GDP) growth of 5 to 5.5 percent per year from the average of 3 to 3.5 percent in the previous 30 years. Evidence already exists that an average of 6.5 percent per year is now being achieved despite the recent slowdown. A growth rate of 7 to 7.5 percent per year should be considered within reach over the next 10 years.

However, this will require accelerated investment in infrastructure at different levels by both the public and private sectors. As has been shown, past fiscal devolution practices have resulted in considerable erosion of public finances, which leads to a reduction in public investments at all levels. To

reverse this trend, a change must take place in the whole system of public investment and financing practices. If radical changes are not made in the current system, stepping up both public and private sector investments in infrastructure at all levels will not be possible.

Roles of Planning and the Planning Commission

The share of public investment in total investment is falling—from almost 50 percent in the past to a projected 30 to 33 percent by 2002, which is the end of the current five-year plan period. This implies that available public resources must be used more selectively in the areas that supply public goods, or as promotional or seed capital in other areas with the objective of crowding in investment.

Similarly, with the increasing importance of state governments and the consequences of the 73rd and 74th amendments to the Constitution, which empower both urban and rural local governments, decisionmaking and expenditure allocated for different sectors and schemes should become much more decentralized.

Accordingly, India should restructure the Planning Commission so that it functions productively in alignment with the needs of the 21st century. The Planning Commission should

- Set national goals as signposts for all to follow, including states, private sector, local bodies, and so on
- Act as a policy coordinator between different wings of the central government and state governments, particularly to attain stated goals in the infrastructure and social sectors
- Promote and coordinate social and infrastructure investment in both the public and private sectors through
 - Facilitation
 - Monitoring
 - Resource raising
 - Project identification
 - Project programming
- Act continually as a conveyor of future-oriented thinking in different sectors as different needs arise and not just at the time of plan preparation.

These functions require considerable changes in the current structure and functioning of the Planning Commission, which has become excessively bureaucratic and devoid of technical expertise. As the country has developed, expertise has become much more widespread than before. Bringing this expertise together from different sources such as public and private companies, research and other domestic institutions, and from abroad, will require much more openness and expertise on the part of the Planning Commission.

New Approach to Public Investment

In the absence of a positive balance of current revenue, the fact that public investments are funded with resources the government borrows from the market must guide all public investment activity. These resources are not freely available and must be allocated in such a way that they generate appropriate returns. Whereas obtaining clear returns that are identifiable from investments in public goods is not possible, obtaining returns from other investments through user charges is. In such cases, as far as possible, investment should be made through accountable entities that can see the connection between investments and economic returns and act accordingly. So far, the government, particularly the central government, has acted as a giant financial intermediary, borrowing funds from the market and then onlending them to other entities, such as state governments, development authorities, public sector enterprises, and the like. However, in this system little accountability exists. In effect, no sanctions are

levied against lower-level entities that do not pay back their loans. In addition, poor performance in the past does not endanger the possibility of obtaining new resources. In fact, new loans effectively help service the older loans.

Reducing the role of the government as a financial intermediary would therefore be preferable. For those activities related to the provision of public goods, providing outright grants would be better. For other activities, particularly in the area of infrastructure, budgetary funds should be used to provide equity to enterprises, which would then help such entities to crowd in other resources, either as additional equity or as debt.

State governments, state government corporations, urban development authorities, municipal bodies, and so on should all be allowed to borrow freely in the market. Such a change in the system would naturally take some time to implement, and a great amount of technical assistance would be required to make most of these entities creditworthy. These bodies would then be expected to float state bonds, municipal bonds, and so on. These bonds could take the form of revenue bonds connected to the revenue-raising ability of these entities, or they could be related to specific projects and programs. These organizations' ability to borrow would be governed by their credit rating, which would encourage both state governments and local bodies to maintain viable fiscal conditions. For smaller local authorities unable to access the market directly, setting up bond banks or financial intermediaries that borrow on their behalf and then on-lend on the basis of adequate credit and project assessments is possible. However, this is a major change and its implementation would require a constitutional amendment.

In view of the severe constraint on public resources, the available resources must be used to help in raising other resources as far as possible. In principle, this can be done by using public resources as equity-like resources. Different sectors exhibit different degrees of commercial viability. For example, sectors such as power and telecommunications can be fully viable on a commercial basis, and they should be able to service both debt and equity resources. However, other sectors such as urban water supply and sewerage may not exhibit commercial rates of return for some time. In such sectors, the government can provide equity like resources on a concessional basis with stipulations on rates of return expected being lower than would be expected commercially. Such arrangements would enable project entities to raise other equity and debt resources on a fully commercial basis, thus enabling greater investment than would otherwise be possible. To illustrate, if the government provides equity resources for a water project with no dividend expectation for 15 years based on a 2:1 debt-equity ratio, and if debt can be raised commercially at, for example, 15 percent, the project is then considered commercially viable and credit rated as such, at a 10 percent overall rate of return. User charges can then be set at affordable rates. Such a procedure can be used in many sectors and projects to effectively use public resources to leverage other resources to invest in preferred investment activities for social and physical infrastructure.

This procedure can also be effective in providing much greater autonomy to public sector entities. Public scrutiny of resource allocation would then apply only to the equity allocations and not to the debt raised by these entities. Within the stipulated dividend expectations, public sector entities would then be much freer to make their own decisions.

To further decentralize decisionmaking and to introduce greater accountability, resources for equity investments could be placed in separate, perhaps sectoral, equity funds, which would then allocate the funds on the basis of project viability and any other guidelines. Fund allocation could then become much more demand oriented and subject to greater accountability. National priority setting can be reflected in allocation of these equity funds between sectors and, perhaps, between regions. Through such a procedure, subsidies can coexist with commercial viability and accountability in public investment.

Generation of Savings or Resources for Investment

Gross domestic savings have already reached 24 to 26 percent, depending on whether measurement is based on current or constant prices. The aim should now be to reach a gross domestic investment level of

about 30 percent of GDP by 2002 and an associated gross domestic savings rate of about 27.5 percent, implying the use of external savings (current account deficit) of about 2.5 percent. How can the rate of gross domestic savings be raised by about 2.5 to 3.0 percent?

PUBLIC SECTOR SAVINGS. The key requirement is to restore the rate of public sector savings to the levels existing in the early 1980s, when they were in excess of 3.5 percent of GDP. Subsidies, both explicit and implicit, greatly erode public sector savings in the provision of services, such as power, water, public transport, irrigation, and the like. Consensus must be achieved on the use of user charges in the delivery of these services. An explicit program or policy to raise user charges to economically viable levels on a phased basis in five years must be implemented.

Apart from raising the level of public sector savings, the levy of user charges is essential if private investment is to flow into infrastructure. Levying user charges will also be effective for crowding in private infrastructure investment. The power sector provides the best illustration of this point. Private investors will find it difficult to invest in the sector unless the state electricity boards become financially viable, which can only happen if average power tariffs are raised. Thus the levy of economic user charges not only enables higher public savings, and therefore investment, but also crowds in private investment.

However, policymakers must take care to build equity concerns into the levy of user charges. One approach involves lowering the economic level of user charges through budgetary allocation of equity to service providers without expectation of return. Another approach is to look for self-administering means tests. For example, in the case of water, the policy could be to levy a full user charge on households with independent taps within the house, while providing free water to all those who obtain their water from community facilities such as public stand posts. Many innovative variations will have to be tried to ensure equitable user charges. If most borrowed resources of investing agencies either come directly from the market or from financial institutions, this discipline will emerge automatically.

PRIVATE SAVINGS. Among the many significant effects of economic reforms has been the consistent increase in private corporate sector savings. Of equal significance is the fact that household financial savings have been on the rise, despite some hiccups in total household savings in the post-reform period. This indicates that households could mobilize more financial savings if safe savings investments and savings institutions were more widely available. According to the 1991 census, more than 300 cities now have more than 100,000 people and more than 50 cities have more than half a million people. Yet only in the largest cities are savings mobilized for intermediation in the capital market. More savings could be mobilized if investment were easier in insurance funds, pension funds, provident funds, and the like. Similarly, households could invest directly in capital market instruments such as stocks and bonds, if a safer network of retail brokers with good corporate backing was available.

Opening the insurance, pension, and provident funds market so that people get much better access to these savings instruments is of the utmost importance. Policymakers have taken the first steps to open the insurance sector to new players. Similar steps should now be taken to allow people to invest in private pension and provident funds. Unorganized sector workers do not at present have access to pensions. With increasing urbanization and breaking up of joint families, old-age pensions are becoming a social necessity. Thus, opening of the pension fund market is essential, but it must take place on a fully-funded basis. The areas of insurance and pension funds require strong regulatory authorities that maintain strict prudential control so that people's hard-earned savings remain safe.

The largest and most widespread network of savings is that of the post office savings system. This system needs to be put on a more commercial footing so that some of the services mentioned can be provided through this network, as has been the practice in Japan.

Public-Private Partnerships in Infrastructure

The public sector has made most infrastructure investment in the country. However, given constraints on the availability of public resources and the increased requirement for infrastructure investment, the tendency to give up responsibility for infrastructure investment is high. Thus, the current trend is to hope for private sector investment from areas where it has not previously been forthcoming. The fact of the matter is that, because of the lumpy nature of investment, including high risks, low pay-back possibilities, projects with long gestation periods, and so on, private investors will find it difficult to invest in many infrastructure sectors without additional comfort levels. The method of “free” government equity has already been suggested as a means of crowding in private sector investment. However, other methods of public-private partnerships must be explored. The objective must be to use scarce public resources to leverage greater private resources. Many possibilities for joint sector projects exist, for example, through providing government guarantees, securing past government debt, privatizing initial government equity after initial risks are overcome, and so on.

A specific example of this kind of joint investment involves government guarantees, which can be backed up by setting up a contingent valuation fund. Thus, through such funds, government guarantees can be valued and insured. This would reduce the potential risk to the government of issuing these guarantees and would also provide credible backing to investors. In addition, this would obviate the need for the central government or the Reserve Bank of India to administer controls on subnational borrowing.

Annex A.13.1. Extracts from the 74th Constitutional Amendment, 1992¹

A. Twelfth Schedule (Article 243)

1. Urban Planning including town planning.
2. Regulation of land-use and construction of building
3. Planning for economic and social development
4. Roads and bridges
5. Water supply for domestic, industrial and commercial purposes.
6. Public health, sanitation conservancy and solid waste management.
7. Fire services
8. Urban forestry, protection of the environment and promotion of ecological aspects
9. Safeguarding the interest of weaker sections of society, including the handicapped and mentally retarded.
10. Slum improvement and upgradation
11. Urban poverty alleviation
12. Provision of urban amenities and facilities such as parks, gardens, playgrounds.
13. Promotion of cultural, educational and aesthetic aspects.
14. Burials and burial grounds: cremations, cremation grounds and electric crematoriums
15. Cattle pounds; prevention of cruelty to animals.
16. Vital statistics including registration of births and deaths
17. Public amenities including street lighting, parking lots, bus stops and public conveniences
18. Regulation of slaughterhouses and tanneries.

243Y. (1) The State Finance Commission constituted under Article 243-I shall also review the financial position of the municipalities and make recommendations to the Governor as to:

- (a) the principles which should govern

¹ Taken from Edadan and Mathur (1998).

- (i) the distribution between the state and the municipalities of the net proceeds of the taxes, duties tolls and fees leviable by the State, which may be divided between them under the Part and the allocation between the municipalities at all levels of their respective shares of such proceeds;
 - (ii) the determination of the taxes, duties, tolls and fees which may be assigned to or appropriated by, the municipalities;
 - (iii) the grants-in-aid to the municipalities from the Consolidated fund of the state;
- (b) the measures needed to improve the financial position of the municipalities;
- (c) any other matter referred to the Finance Commission by the governor in the interest of sound finance of the municipalities
2. The Governor shall cause every recommendation made by the commission under this article together with an explanatory memorandum as to the action taken thereon to be laid before the legislature of the State.

243Z. The legislature of a state may by law make provisions with respect to the maintenance of accounts by the municipalities and the audit of such accounts.

243ZE. (1) There shall be constituted in every metropolitan area a Metropolitan Planning Committee to prepare a draft development plan for the metropolitan area as a whole

(2) The legislature of a state may, by law, make provision with respect to-

- (a) The composition of the Metropolitan Planning Commission
- (b) The manner in which the seats in such Committee shall be filled;

Provided that not less than two-thirds of the members of such Committee shall be elected by and from amongst, the elected members of the municipalities and chairpersons of the panchayats in the metropolitan area in proportion to the ratio between the population of the municipalities and of the panchayats in that area;

- (c) the representation in such committees of the Government of India and the Government of State and of such organisations and institutions as may be deemed necessary for carrying out of functions assigned to such committees;
- (d) the functions relating to planning and co-ordination for the metropolitan area which may be assigned to such committees;
- (e) the manner in which the chairpersons of such committees shall be chosen

3. Every Metropolitan Planning Committee shall, in preparing the draft development plan-

(a) have regard to-

- (i) the plans prepared by the municipalities and the panchayats in the Metropolitan area;
- (ii) matters of common interest between the municipalities and the panchayats, including co-ordinated spatial planning of the area, sharing of water and other

- physical and natural resources, the integrated development of infrastructure and environmental conservation;
- (ii) the overall objectives and priorities set by the Government of India and the Government of the State;
- (iii) the extent and nature of investments likely to be made in metropolitan areas by agencies of the Government of India and of the Government of the State and other available resources whether financial or otherwise;

(b) consult such institutions and organisations as the Governor may, by order, specify

(4) The chairperson of every Metropolitan Planning Committee shall forward the development plan, as recommended by such committee, to the Government of the State.

243ZF. Notwithstanding anything in this Part, any provision of any law relating to municipalities in force in a state immediately before the commencement of the Constitution (Seventy-fourth Amendment) Act, 1992, which is inconsistent with the provisions of this Part, shall continue to be in force until amended or repealed by a competent legislature or other competent authority or until the expiration of one year from such commencement, whichever is earlier:

Provided that all the municipalities existing immediately such commencement shall continue till the expiration of duration, unless sooner dissolved by a resolution passed to that effect by the Legislative Assembly of that state or in the case of a state having a Legislative Council by each House of the legislative of that state.

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14

Analysis of Spatial Organization and Transportation Demand in an Expanding Urban Area: Sendai, Japan, 1972–92

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The enormous expansion of global urbanization and the emergence of huge agglomerations in the latter half of the 20th century are expected to continue, especially in developing countries (Jones 1992). As urbanization has taken place, it has brought about numerous problems such as urban sprawl, water shortages, and industrial air pollution. However, cities are also the driving force behind economic growth, and as globalization has progressed, competition among cities to attract both foreign and domestic investment has become more serious. Therefore, accommodating suitable living and business environments by developing urban infrastructure is essential.

As localization has taken place in many countries of the world, the role of local governments in urban infrastructure provision has increased significantly. In this regard, establishing a legal and institutional framework of city planning and infrastructure financing within which the local government can initiate implementation of planning activities is important. Improving interjurisdictional coordination between local and central governments and strengthening partnerships with the private sector and civil societies, such as nongovernmental organizations, are also crucial issues.

Facilitating safe, clean, efficient, and well-planned urban transportation while securing financial resources is critical for urban development, because it has not only accommodated a vast increase in demand, which causes congestion, air pollution, and traffic accidents, but has also interacted with urban space and contributed to shaping cities. However, recent literature suggests that we still know little about how transportation demand increases as urban areas disperse over time or how transport facilities contribute to changing urban spatial organization (Kitamura 1996; Steiner 1994; Transportation Research Board 1995, pp. 3–4). We also need to analyze how effectively the local and central governments have dealt with urban spatial change and the increase in transportation demand in terms of policies and planning.

This study first investigates the crucial relationship between urban spatial distribution and transportation demand. The derived demand for intra-urban transportation is determined by the interaction of two distributions: the population distribution, which represents where people reside, and the activity distribution, which represents where they engage in activities. In this chapter we hypothesize that, as these two distributions disperse, people travel greater distances to engage in activities. As a result, assuming a constant trip rate per person, total transportation demand, in terms of accumulated trip distance, increases more than proportionally to population growth.

This study also analyzes how local governments in Japan provide transportation infrastructure within the framework established by the central government and how a city can begin to deal with globalization and the localization trend. The role of city planning and interjurisdictional coordination is also discussed. Following these two sets of analyses, several policy recommendations relevant to cities in developing countries are presented.

The area studied was the city of Sendai in Miyagi Prefecture, Japan. Sendai is the largest city in the Tohoku district and is its economic growth center. Sendai was chosen because it is a typical regional center city in Japan, is a manageable size, and has data available for three points in time.

Analysis of Spatial Organization and Transportation Demand in the City of Sendai

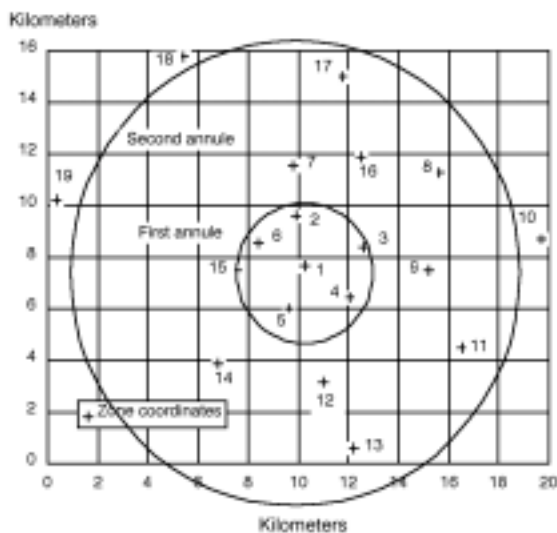
To investigate the relationship between urban spatial distribution and transportation demand and to test the hypothesis, this study extensively employed spatial descriptive statistical methods, such as density gradient analyses and centographic methods. For a brief description of spatial statistical methods, see appendix 14.1.

Data

Repeated person trip survey data by zone in the Sendai Metropolitan Area for 1972, 1982, and 1992 were obtained from the Sendai Metropolitan Area Comprehensive Urban Transportation Planning Council. The Sendai Metropolitan Area, which consists of 5 cities, 14 towns, and 1 village, had a population of 1.4 million in 1992. The city of Sendai is the predominant urban area; 65 percent of the total area's population lives there, and the city generates about 70 percent of total trip destinations in the metropolitan area. For ease of analysis, this study focused primarily on movement within the city. Therefore, the cities, towns, and village outside the city of Sendai were excluded. The trip data were subsequently disaggregated by trip purpose, and trip-interchange matrices were constructed.

To capture general trends in changes in spatial organization, the city area was divided into 19 zones and 2 annules.¹ The first annule is the area within a 3-kilometer circumference extending from the city center that covers zones 1–6. The second annule basically covers the area between 3 kilometers and 10 kilometers, includes any boundaries of the city of Sendai that lie more than 10 kilometers from the center, and covers zones 7–19. The schematic representation of zone coordinates and the location of annules are presented in figure 14.1.

Figure 14.1. Zone Coordinates, City of Sendai



Source: Author.

¹ Zone 20 was not included in the study area because it is farther from the center of the city than the other zones and has only a small population (5,000 in 1992).

Change in Population Distribution

Sendai has experienced rapid development since the 1950s. To capture the relationship between population growth, urban space, and transportation demand, the change in population distribution was first analyzed. Table 14.1 shows the population change by zone in the city of Sendai. The total population increased by 30 percent from 1972 to 1982, but the percentage change declined to 15 percent from 1982 to 1992. The population in the first annule, zones 1–6, increased slightly from 1972 to 1982, then declined from 1982 to 1992. The population in zone 1, the city center, declined by 20 percent in the first period, then continued to decline from 1982 to 1992. The population in all zones in the second annule increased in both periods. In addition, the percentage of the total population in the study area within the first annule declined from 51 percent in 1972 to 33 percent in 1992, while the percentage in the second annule increased.

Table 14.1. Population Changes, Sendai, Selected Years

Zone	Population (thousands)			Change (percent)		
	1972	1982	1992	1972–82	1982–92	1972–92
1	19.3	15.5	13.1	-20	-15	-32
2	66.0	66.9	65.3	1	-2	-1
3	76.2	77.2	75.1	1	-3	-1
4	79.8	80.0	79.6	0	-1	0
5	44.2	48.7	47.1	10	-3	7
6	32.4	31.3	29.0	-3	-7	-10
1–6	317.9	319.6	309.3	1	-3	-3
Percentage of total	51	39	33			
7	33.8	56.0	57.7	66	3	71
8	34.3	46.9	49.0	37	5	43
9	11.5	16.4	20.6	43	26	79
10	18.5	27.6	37.9	49	37	105
11	25.6	43.0	46.3	68	8	81
12	47.4	51.0	61.8	8	21	30
13	20.1	33.4	41.1	66	23	104
14	44.1	71.4	81.2	62	14	84
15	12.5	15.2	17.4	22	14	39
16	20.0	33.3	37.2	67	12	86
17	15.8	49.7	65.0	215	31	311
18	8.8	26.2	68.9	198	163	683
19	16.9	25.6	42.9	51	68	154
7–19	309.0	495.8	627.1	60	26	103
Percentage of total	49	61	67			
Total	627	815.3	936.4	30	15	49

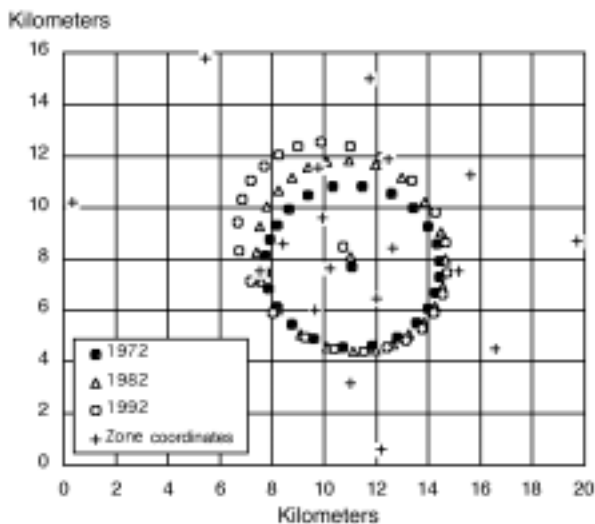
Note: Figures may not add due to rounding.

Source: Author.

To look at these demographic changes graphically, a centographic analysis was applied. Figure 14.2 shows the change in the population density ellipse, which represents the direction and dispersion of the distribution over the period. Recognizable changes took place in centographic measures. First, the

location of the center of population moved to the northwest in both periods: 0.4 kilometers west and 0.8 kilometers north. This is attributable to the rapid population increase in the northwestern part of the city, where large-scale residential development took place in the last two decades, such as in zones 17 and 18. As a result, the population in those zones increased significantly. Second, the standard radius and average radius increased significantly, showing substantial dispersion. Third, the coefficient of circularity became less circular and more elliptical toward the northwest. These results show clearly that, as the population increased in the city of Sendai in 1972–92, suburbanization and spatial dispersion took place. The results also imply that the distribution of residential building areas also dispersed over the period.

Figure 14.2. Change in Population Density Ellipse, Sendai, Selected Years



Source: Author calculations.

Change in Employment Distribution

Next, we examined employment distribution. Employment constitutes a major portion of activities in the city. Table 14.2 shows employment change by zone in Sendai between 1972 and 1992. Total employment, which includes the work of both people who live and work in the city and those who work in the city but live outside it, increased by 48 percent in the first period and by 22 percent in the second period. Unlike the population in the first annule, employment continued to grow, but some zones lost employment in the second period. In the second annule, employment increased even more rapidly than in the first annule. As a result, the share of employment in the first annule declined from 69 percent in 1972 to 56 percent in 1992. Employment in zone 9, where wholesale centers are located, increased dramatically, from 26,400 people in 1972 to 59,000 in 1982. As a result, it became the second largest employment center in the city.

Figure 14.3 shows changes in the ellipse of employment density over the period. The center of employment moved 0.3 kilometers east and 0.4 kilometers north. Compared with the shift in the center of population, the direction is somewhat skewed to the east, especially in the first period. As noted already, the rapid increase in employment in the eastern part of the city, such as in zone 9, contributed to this change in the spatial distribution of employment. Although the standard radius and average radius for the employment distribution increased over the period, they remained smaller than those of the

population distribution. These results imply that employment was more densely distributed than was population over the period.

Table 14.2. *Employment Changes, Sendai, Selected Years*

Zone	Employment (thousands)			Change (percent)		
	1972	1982	1992	1972–82	1982–92	1972–92
1	87.3	117.8	152.1	35	29	74
2	22.3	28.9	30.6	30	6	37
3	27.0	31.2	28.6	16	-8	6
4	27.4	32.9	36.5	20	11	33
5	19.1	23.5	22.7	23	-3	19
6	15.1	19.3	17.1	28	-11	13
1-6	198.1	253.7	287.6	28	13	45
Percentage of total	69	60	56			
7	3.0	5.8	8.2	93	41	173
8	3.8	7.5	9.3	97	24	145
9	26.4	59.0	72.3	123	23	174
10	4.7	11.4	18.1	143	59	285
11	6.5	11.1	14.7	71	32	126
12	16.9	19.9	24.5	18	23	45
13	4.1	7.8	8.5	90	9	107
14	5.9	10.7	12.9	81	21	119
15	4.0	7.6	6.0	90	-22	50
16	2.6	5.2	7.5	100	46	188
17	3.0	9.3	17.5	210	88	483
18	2.7	6.4	16.7	137	161	519
19	5.0	7.6	11.3	52	49	129
7–19	88.6	169.4	227.5	91	34	157
Percentage of total	31	40	44			
Total	286.7	423.1	515.1	48	22	80

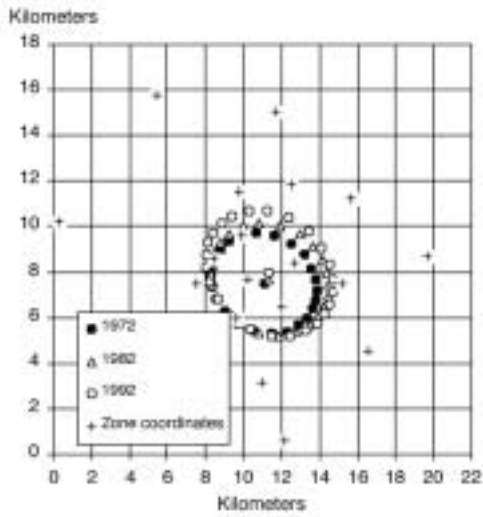
Note: Figures may not add due to rounding.

Source: Author.

Change in Activity Distribution

Since people travel not only for work, but also for other purposes, such as school and shopping, capturing the distribution of all these activities is important. For this reason, the return-to-home trip was identified as a useful category. Return-to-home trips are journeys that are made by people who reside in a destination zone and engage in activities in an origin zone. The accumulated trip origin distributions of return-to-home trips over all zones can be close to the activity distribution for the entire area of the city. Furthermore, the number of return-to-home trips terminated at each destination zone is determined by the zone population; thus, the number of return-to-home trip destinations can represent the zone population. In this respect, the return-to-home trip can bridge both the population and activity place distributions. A shortcoming of using this type of trip is that only the last activity of the day will be taken into account. However, to a large extent, the trip origin distribution for return-to-home trips can represent the locations of activity fairly well.

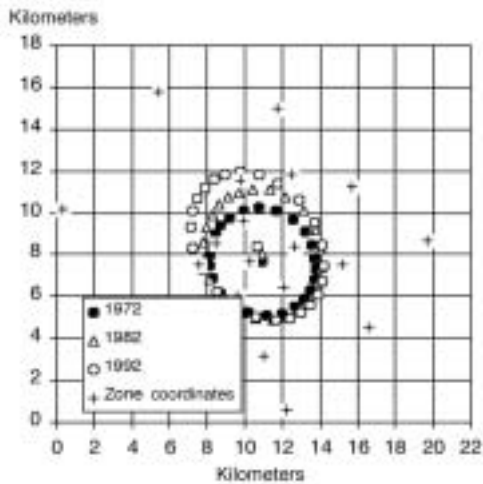
Figure 14.3. *Change in Employment Density Ellipse, Sendai, Selected Years*



Source: Author.

The pattern of change in the ellipse of density for the trip origin distribution of return-to-home trips shown in figure 14.4 is similar to that of the population distribution shown in figure 14.2, although the shape in figure 14.4 is slightly smaller. These results suggest that the distribution of cumulative activity is relatively close to that of population distribution.

Figure 14.4. *Change in Return-to-Home Trip Density Ellipse, Sendai, Selected Years*



Source: Author.

General Trends in Transportation Demand Growth

Next, general trends of changes in transportation demand in the city of Sendai were examined. The return-to-home trips represent the total trips taken in this case. Several indicators of return-to-home trips are listed in table 14.3. The total number of trips generated and terminated in the city increased proportionally to the population, by 55 percent from 1972 to 1992. The average number of trips per person, which is around 0.9, has not significantly changed in 20 years. Total trip distance, which was calculated using the distance matrix, increased by more than 100 percent, a greater increase than that seen for the population. The average distance per trip increased by about 30 percent.

Table 14.3. *Average Trip Distance and Centographic Measures: Return-to-Home Trip, Sendai, Selected Years*

Category	Year			Change (percent)		
	1972	1982	1992	1972–82	1982–92	1972–92
Population (thousands)	627.0	815.3	936.4	30	15	49
Number of trips (thousands)	539.4	720.4	838.6	34	16	55
Trip rate ^a	0.86	0.88	0.90	3	1	4
Total trip distance (km thousands)	1,562	2,332	3,185	49	37	104
Average trip distance (km)	2.9	3.2	3.8	10	19	31
Standard radius (km)	4.6	5.2	5.7	13	10	24
Average radius (km)	3.9	4.5	5.0	15	11	28

a. The trip rate was calculated by dividing the number of trips by population.

Source: Author.

Thus, it can be said that as the population increased, the total number of trips increased linearly, and the total trip distance increased faster than the population. Because total trip distance is a measure of total transportation demand in an urban area, this is evidence to support the hypothesis that as the population increases, demand for urban transportation increases at an even greater rate.

Furthermore, the average trip distance was compared with the changes in the standard radius and average radius. Table 14.3 demonstrates that the percentage change in the standard radius between 1972 and 1992 was 24 percent, while that in the average radius was 28 percent. Both are close to the percentage change in the average trip distance, 31 percent. These results imply that as the population disperses and these centographic measures increase, the average trip distance increases accordingly.

Because the data in table 14.3 are highly aggregated, in the next step, the average trip distances for return-to-home trips, which represent activity distribution, were calculated zone by zone. The average trip distance in the second annule was significantly greater than that in the first annule over the period. This is shown in table 14.4. These results mean that people in the second annule traveled a greater distance than people in the first annule did. Furthermore, the percentage increase in average distance for the city overall was significantly higher than that for each zone. This is attributable to the rapid increase in population of the second annule, and to this population's longer average travel distances.

Table 14.4. Average Trip Distance of Return-to-Home Trips by Destination Zone, Sendai, Selected Years

Zone	Average trip distance (km)			Change in population (percent)		
	1972	1982	1992	1972–82	1982–92	1972–92
1–6	1.9	2.1	2.3	11	10	21
7–19	3.9	4.0	4.6	3	15	18
Average	2.9	3.2	3.8	10	19	31

Note: Figures are weighted averages of respective zones.

Source: Author.

Disaggregated Data Analysis by Transportation Mode

To look at the travel patterns on a more disaggregated level, the data for return-to-home trips were broken down by transportation mode, specifically are railway, bus, car, and walking-bicycling-motorcycling. Tables 14.5 and 14.6 show the number and total trip distances of return-to-home trips by mode. Trips by car and railway contributed to the increase in the total number of trips.

Table 14.5. Number of Return-to-Home Trips by Mode, Sendai, Selected Years

Category	Total	Rail	Bus	Auto	WBM
<i>Number of trips (thousands)</i>					
1972	539.4	9.3	122.5	112.7	294.3
Percentage of total	100	2	23	21	55
1982	720.4	11.1	113.7	190.5	405.1
Percentage of total	100	2	16	26	56
1992	838.6	73.2	75.5	301.7	388.1
Percentage of total	100	9	9	36	46
<i>Percent change</i>					
1972–82	34	19	–7	69	38
1982–92	16	562	–34	58	–4
1972–92	55	686	–38	168	32
<i>Percent change in share</i>					
1972–82	—	0	–7	6	2
1982–92	—	7	–7	10	–10
1972–92	—	7	–14	15	–8

WBM Walking-Bicycling-Motorcycling.

Source: Author.

Car ownership in the Sendai Metropolitan Area more than doubled, from 0.18 per capita in 1972 to 0.48 per capita in 1992. This implies that the increase in automobile ownership was much greater than the increase in population. This trend brought about a significant increase in the number of trips by automobiles, up from 21 percent of the total number of trips in 1972 to 36 percent in 1992, and also in the total trip distance, up from 28 to 46 percent of the total trip distance.

Table 14.6. Total Trip Distance of Return-to-Home Trips by Mode, Sendai, Selected Years

Category	Total	Rail	Bus	Auto	WBM
<i>Total trip distance (thousands)</i>					
1972	1,562	60	493	444	563
Percent of total	100	4	32	28	36
1982	2,332	80	501	860	891
Percent of total	100	3	21	37	38
1992	3,185	457	325	1,452	951
Percent of total	100	14	10	46	30
<i>Percent change</i>					
1972–82	49	33	2	94	58
1982–92	37	471	–35	69	7
1972–92	104	661	–34	227	69
<i>Percent change in share</i>					
1972–82		0	–10	8	2
1982–92		11	–11	9	–8
1972–92		11	–21	17	–6

WBM Walking-Bicycling-Motorcycling.
Source: Author.

Special attention was given to the number of trips by rail, which increased more than five times between 1982 and 1992. The introduction of the subway system in 1987, which connects the northern and southern parts of the city through the city center, has contributed to this significant increase. In contrast, the number of trips by bus and walking-bicycling-motorcycling declined by 14 and 8 percent from 1972 to 1992, respectively.² The percentage share of these two modes also declined significantly both in the number of trips and in trip distance. These figures imply that the introduction of subway transport may not contribute to reducing car trips. In fact, one recent urban transportation problem in Sendai concerns the high population growth that has been seen in areas isolated from public transport stations. This trend has caused society to become even more dependent upon automobiles. In addition, traffic congestion at peak hours is still an obstacle of the city that is partly due to the untimely construction of road networks.

Policy Issues in City Planning and Urban Transportation Infrastructure Provision

As described in the previous section, the city of Sendai has grown significantly in the last two decades. The population increased and dispersed toward the periphery of the city. In the same period, employment and activity distributions also increased and dispersed toward the periphery of the city. As the population and number of activities increased and dispersed, the number of trips increased linearly with the population, and the average trip distance increased significantly. As a result, the total demand for urban transportation has increased more rapidly than the population has. Increases in car ownership and expansion of urbanized areas have contributed to this increase.

This section describes how the city of Sendai has provided urban transportation infrastructure to deal with the rapidly increasing transportation demand. Focal points are relevant national and local policies

² A trip rate might consist of several transportation modes and the mode of the trip is determined based on a priority list. Because subways are superior to buses, trips that are designated subway trips may include a considerable number of walk-bus-subway type trips.

and institutional systems, such as city planning laws and budgetary systems. The impact of globalization and localization are also described.

Urban Development History

After the Meiji Revolution, the new government established a highly centralized administrative system such that the central government controls administrative authority and revenue sources. Reflecting this characteristic of the state, city planning in Japan can be described as city planning by the state. (Watanabe 1998) This trend continued even in the 1990s.

EARLY STAGES OF DEVELOPMENT. To deal with the rapidly expanding urban sprawl in large cities such as Kyoto, Osaka, and Tokyo in the course of early industrial and urban development, the Old City Planning Law was established in 1919 as the first city planning law in Japan. The Old City Planning Law was equipped with several innovative techniques, such as land readjustment, and was implemented by the Home Ministry, the most powerful ministry in that period. The city of Sendai, which was designated a city in 1889, spontaneously prepared to be covered under this law.³ Finally, the central government did apply it to Sendai in 1923. As a result, an urban planning area of 52.8 square kilometers, which contained 38 major urban roads, was established in 1925. However, it was never fully implemented because Japan subsequently entered a period of war.

POSTWAR PERIOD. During World War II, as a result of U.S. bombing, many Japanese cities lost their built-up areas. After the war, in 1946, the Special City Planning Law was enacted. This law was applied to more than 120 cities with an aggregate damaged area of 630 square kilometers by a special administrative office in the central government. In actual figures, 102 cities with 280 square kilometers were rebuilt under the law. In the case of Sendai, which lost 5 square kilometers of built-up area, the municipal government widened major avenues and built new parks based on the law. In addition, the city center was transformed from an old castle town into a modern central business district.

PERIOD OF RAPID ECONOMIC GROWTH. In the late 1950s and 1960s, the major agenda of Japan was rapid economic growth through industrial development. The Income Doubling Plan was formulated in the 1950s, and based on that, the First Integrated National Physical Development Plan 1960–70 was set up and approved in 1962. Within this framework, the 1962 Law for the Promotion of the Construction of New Industrial Cities was introduced. Under this law, the central government designated new industrial city districts and indicated basic construction guidelines. Prefectural governments prepared basic construction plans, and the central government approved them. Financial treatment was also legislated.

In the first plan, decentralizing the industrial bases was one of the major targets, and Sendai was recognized as a district core center in the Tohoku district. Furthermore, Sendai Bay, which includes the city of Sendai, was officially designated a new industrial city in 1964. A new port was constructed in Sendai under the five-year national port development plan, begun in 1961, and eastern industrial zones were developed.

Japan accomplished significant economic growth, but experienced a number of urban problems, such as urban sprawl, congestion, and pollution. To deal with these problems, the Ministry of Construction drafted the New City Planning Law, which was put into effect in 1969. To prevent urban sprawl and to facilitate urban infrastructure, the new law has introduced a number of planning techniques, such as the designation of urbanization promotion areas and urbanization control areas and the introduction of the land development permission system.

Based on this law, Sendai established a new city planning area, including surrounding administrative areas, of 804 square kilometers in 1970. By that time, many of the central ministries and private firms had

³ In 1889, Sendai had a population of approximately 86,000 and 17.6 square kilometers of urbanized area.

established their bases in the Tohoku district in Sendai, and their presence contributed to a high percentage of tertiary industries. During this period, the population increased from 0.4 million in 1955 to 0.6 million in 1970.

During the 1970s and 1980s, Sendai continued to play its role as the regional center of the Tohoku region, as stated in subsequent integrated national physical development plans. Economic growth of the city continued, and the urban area expanded to the periphery of the city. The bullet train and the Tohoku expressway, which connect to the Tokyo Metropolitan Area, were opened in 1982 and 1986, respectively, reinforcing the link with Tokyo. As the population continued to increase rapidly, both the public and private sectors significantly increased their involvement in real estate development, and several new residential areas, such as Izumi Park Town, located in zone 18, emerged. However, because road construction could not catch up with the rapid increase in both population and the number of automobiles, traffic congestion continued to be the major problem of the city. Incoherent urban development with respect to transportation planning was also observed.

To deal with urban problems in large cities such as Kyoto, Nagoya, and Osaka, the central government introduced the ordinance designated city system in 1956. An ordinance-designated city is a city with a population of roughly 1 million that the Diet has given special status. This status includes functions the prefectures normally perform, such as part of city planning approval and establishment of wards within the city government. This system does not fully satisfy municipal governments, because autonomy from the prefectural governments remains limited, but it still attracts candidate cities in Japan.

The target of the city government of Sendai in the 1980s was to become an ordinance-designated city. To achieve the relevant conditions, in 1987 and 1988 the city annexed the surrounding towns and a city, and its administrative area grew to 788 square kilometers. As a result, the population of the city increased by 172,000 people to approximately 0.9 million in 1988. In 1989, the city of Sendai became the 11th ordinance designated city in Japan⁴.

Sendai's city planning and related policies were implemented within the framework set by the national government. The national government identified the role of the city and also prepared implementation schemes. Japan can be said to have implemented centrally controlled national urban policies, which contributed to the development of regional center cities. Policies promoting decentralization were also observed under the guidance of the central government such as the ordinance designated city system, but this trend was still limited until recently.

Transportation Infrastructure Provision and Financing

As described previously, transportation demand increased rapidly during the high economic growth period in Sendai. To deal with this increase in demand, the city government has taken a series of measures within the framework of city planning. Like the city planning practice, transportation infrastructure planning and financing also take place based on the central governmental system.

COMPREHENSIVE URBAN TRANSPORTATION PLANNING. In Japan, person trip surveys have been conducted in major cities every 10 years. This work has been done by the local Comprehensive Urban Transportation Planning Council under the guidance of the Ministry of Construction since the 1970s. Based on these surveys, metropolitan area comprehensive urban transportation plans are formulated and individual urban transportation projects are identified and prioritized. These plans are eventually designated city planning projects within the framework of the city master plans through the city planning authorization process.

⁴ The 12 ordinance designated cities are Chiba, Fukuoka, Hiroshima, Kawasaki, Kitakyushu, Kobe, Kyoto, Nagoya, Osaka, Sapporo, Sendai, and Yokohama. At least four more cities and regions are seeking to become ordinance designated cities.

The first person trip survey for the Sendai Metropolitan Area was conducted in 1972–74 for a comprehensive urban transportation plan. Based on the survey, Sendai's metropolitan area comprehensive urban transportation plan was formulated. Ten years later, in 1982–84, a second person trip study was conducted, partly to aid in subway construction planning. The third person trip survey was conducted in 1992–94. Based on that study, a new metropolitan area comprehensive urban transportation plan was announced to the public in 1996. The target of this plan is to realize a multinuclear metropolitan area type in which several urban centers are interconnected by transportation networks. To reduce automobile dependency, reinforcement of public transportation and introduction of transportation demand management are parts of the plan. One of the difficulties of implementing this plan is that land use controls are not strict enough to restrict residential development in areas isolated from public transport stations.

URBAN ROAD DEVELOPMENT. Road infrastructure is key to facilitating smooth urban transportation. Road development is included in the city master plan. Major road networks are designated urban facilities within the city planning framework. The first designation of a city planning road network in Sendai took place in 1927. Since then, the road network plan has been revised as the city developed. A major revision was made in 1966, which encompassed 76 planned road projects covering 284 kilometers, of which 11.5 percent was completed. By 1996, the city's planned roads had expanded to 504 kilometers with 140 lines, of which 53 percent (267 kilometers) were completed.

For financing, a national standard applies to Japanese cities. Roads are classified as national and local roads, and both central and local governments use the road development special account and general account for road development. The revenues come from the earmarked gasoline tax, oil and gas taxes, national auto-weight tax, local road transfer tax, oil and gas transfer taxes, light gas transaction tax, and automobile sales tax.

In Sendai, the road-related budget increased from ¥ 10 billion in 1980 to ¥ 60 billion in 1993, then decreased slightly to ¥ 54.6 billion in 1998. This trend reflects the rapid increase in transportation demand, especially in automobile transportation, in Sendai. As in cities of other regions, one of the main problems of urban road construction is the difficulty and high cost of land acquisition. Once the built environment is established, persuading residents along the roads to resettle is difficult, especially those who have commercial activities such as shops. This problem was attributable to the untimely provision of roads in Sendai described previously.

PUBLIC TRANSPORTATION. To mitigate urban congestion and improve the urban environment, introducing a public transportation system is essential. The major issue here is the enormously high construction cost, especially for urban rails.

In Japan, railway operators are largely responsible for funding their own improvement costs. However, because revenues from railways are seldom sufficient to fully cover the high initial costs of major railway infrastructure investments, some additional financial resources are often necessary. These include public subsidies, value capture from nonrailway user beneficiaries, and cross-subsidization of railway operators with revenues from nonrailway services. In addition to these financial resources, the central government provides public subsidies in the form of the subsidy for construction of a public subway, the subsidy for construction of a public new town railway, the subsidy for construction of a railway constructed by the Japan Railway Construction public corporations, low-interest loans from the Japan Development Bank, and other subsidy systems (Overseas Economic Cooperation Fund 1998).

The subsidy for construction of a public subway was first introduced in 1962. Several revisions have been made to increase its level of support, because the construction cost of a subway is extremely high (¥ 20 billion to ¥ 30 billion per kilometer). The current scheme is to subsidize 35 percent of the construction cost (not the entire project cost) through the central government and another 35 percent through the local government's general budget. Equity financing by the local government covers another 20 percent. The

local government can also provide financing by issuing municipality bonds with the approval of the Ministry of Home Affairs.

In Sendai, the city government introduced streetcars in 1926 to facilitate public transportation. The demand for streetcars reached a peak in the early 1950s. With the rapid increase in the number of automobiles, streetcars were finally abandoned in 1976. Bus transportation substituted for streetcars, but ridership of the public bus system has continued to decline. To accommodate the rapid increase in urban transportation demand, the construction of a new 13.6-kilometer south-north subway line was approved in 1981 and completed in 1987. In 1992, the subway was extended to 14.8 kilometers.

The construction cost of the subway was ¥ 235 billion (about US\$2 billion) for the first stage alone, and additional spending was required for the subsequent expansion. The subsidy for construction of a public subway was also applied in this case. In addition, based on local decrees, the city government established the rapid rail transit construction fund in 1980. It was established based on the previous experience of Fukuoka and Kitakyushu. In this scheme, the fund's resources comprise half the excess tax from the corporation tax and half the business establishment tax. The local allocation tax from the central government subsidizes 60 percent of the interest payments and repayment of local government bonds for equity financing, while the rapid rail transit construction fund finances the remaining 40 percent.

Despite such a subsidy system, the subway has operated at a deficit every year, although the number of passengers increased from 50.8 million in fiscal year 1990 to 60.0 million in fiscal year 1996. Annual expenditure is around ¥ 23 billion to ¥ 24 billion, while profit was around ¥ 12 billion to ¥ 13 billion in fiscal years 1991-1996. The deficit is about the same amount of the profit every year. The debt was approximately ¥ 145 billion in the public enterprise account and ¥ 35 billion in the ordinary account at the end of fiscal year 1996. Apparently, the subway is a big financial burden for the city.

As described here, infrastructure financing is also part of the national framework. This system has significantly contributed to transportation infrastructure development in Sendai. However, the local government has less flexibility in such financial arrangements. For example, the subsidy for subway construction only applies to public entities, not to private ones that provide subway construction and services. Given the fact that urban public transportation still needs support from outside, the financing scheme must be more innovative and flexible.

Recent Trend: Impact of Globalization and Localization on Urban Transportation

In the 1990s, Japan transformed its social and economic systems in accordance with globalization and localization. In national urban policy, the New City Planning Law was revised in 1992 to promote more participation by the people. Based on the 1992 revision, a city master plan is required for all municipalities, and public participation and involvement processes are also required in the approval process.

The city of Sendai formulated a comprehensive city plan, the Sendai 21 Plan, in 1998. The plan targets the year 2010 and consists of many policy goals concerning social welfare, environment, education, and urban development, which includes transportation. Interestingly, the city recognizes the globalization and localization trend and identifies itself as not only as the center of the Tohoku region in collaboration with other prefectures and cities, but also as the gateway of the region. The latter vision goes far beyond the historical role of the city, in which it acts as the central branch of the Tohoku region for the central government or the Tokyo Metropolitan Region.

Urban infrastructure plays an important role in supporting the gateway function of the city. The port continues to expand its capacities and Sendai International Airport has also been expanded. Both facilities were designated foreign access zones under the Law on Extraordinary Measures for the Promotion of Imports and Facilitation of Foreign Direct Investment, enacted in 1992. Several facilities, for example a trade center, have been constructed under this scheme. However, this kind of central

government-initiated project seems to not be as effective any more. As yet, no foreign enterprises have planned to locate in the foreign access zone in Sendai.

To improve access to these interurban transportation facilities, several urban transportation projects, such as access roads to the port and access railways, were planned and are partly under construction. In this case, one of the main issues is cost sharing of the projects. For example, the 7.5-kilometer access railway costs approximately ¥38 billion and will be constructed and operated by a third sector company consisting of the Miyagi Prefecture; the cities of Iwanuma, Natori, and Sendai; and the East Japan Railway Company. After intense negotiations, these parties finally agreed to share the financial burden.

Despite these plans and efforts for Sendai, Kidokoro (1998) rightly pointed out that most foreign-affiliated companies are located in the Tokyo Metropolitan Area. Most likely, those companies establish their branch offices in Sendai to cover the Tohoku district, but overall few foreign direct investments were introduced in Sendai. On these terms, the impact of globalization has not been significant to date in Sendai; the situation remains basically the same as 10 years ago. However, as the case of Sendai shows, Japan's local governments recognize the importance of the trends of globalization and localization. For example, Hiroshima's municipal government has made an effort to promote foreign direct investment in Hiroshima's industrial estate.

Regarding localization, several interesting trends have been observed. The comprehensive city plan targets public transportation development together with traffic demand management. The city of Sendai's municipal government announced a proposed new public transportation system, a 14-kilometer east-west line, in 1998. This line would connect the eastern area of the city to the western area, where academic and cultural facilities such as Tohoku University and the zoo are located. The city's municipal government has also considered an underground, linear, motorcar system, but a citizens' group proposed introduction of a light rail transit system so that the line could connect directly with other railway lines in the future. The group has advocated its idea using the Internet. In fact, a dialogue has been ongoing between the city government and the citizens' group. Some financing issues exist. The city purports that, together with land readjustment projects in the eastern area, the line could feasibly be constructed. Based on experience from the north-south line, the new line is not likely to be profitable and would need subsidies from the city. The outcome is a matter of the values of the people of Sendai, and whether they are willing to pay for public transportation or will continue to rely on automobiles.

Conclusion and Policy Implications

This study's results provide strong evidence that urban transportation demand increases more rapidly than the population growth. In addition, this study shows that transportation demand is greater in the periphery of a city than it is in the center area in terms of average trip distance. These findings suggest that in growing cities in developing countries, especially in their urban peripheries, enormously rapid increases in urban transportation demand can be expected as the urban population increases. In cities with rapid economic growth, the overall trends are likely to follow the pattern of Sendai (Kidokoro and Hanh 1993). These expectations have strong policy implications for large cities in developing countries, including large funding requirements, effective and comprehensive planning, and interjurisdictional coordination in the building of urban infrastructure. In the 21st century, however, local governments also need to deal with the impacts of globalization and localization on the spatial organization of cities and urban transportation demand.

Timely Provision of Transportation Infrastructure

As seen in this study, urban spatial distribution continues to disperse. As a result, the average trip distance of people who reside in the city periphery is longer than that of people in the central area. To reduce transportation demand, gasoline consumption, and vehicle emissions, some researchers advocate

creating a high-density city by reurbanizing an existing city or developing multicenter cities (see Steiner 1994 for more detail). However, as the case of Sendai has demonstrated, a policy is unlikely to reverse the dispersion of urban space nor are people who reside in the subcenters likely to travel less than those who reside in the center of the city. Thus, as demand for transportation increases rapidly in cities in developing countries such as Hanoi and Ho Chi Minh City in Vietnam, facilitating road or rail infrastructure to connect the outer link with the center city or link roads in advance is important. The key is to guide urbanization, rather than reverse the trend.

Establishing Effective, Integrated Land Use Transportation Planning

The case of Sendai shows that transportation infrastructure provision such as roads and subways have been unable to keep up with the rapid increase in traffic demand since the 1950s. In central business districts, the road system is well developed as a result of reconstruction. However, bottlenecks exist between the outer link of the city and the city center. These conditions imply that the land use plan and transportation plan were not well coordinated. Actually, land and housing development, mainly by the private sector in the outer link, came first, and road development came later after a long time lag. Sendai's experience demonstrates that during the rapid development of cities, implementing a sound and integrated urban transportation plan is essential, especially when incorporating the urban land use plan with the outer link of the cities or future suburban areas.

The necessity of this type of planning has been recognized for a long time, but has not yet been practiced broadly. Researchers have identified a number of difficulties in developing countries, such as the lack of legislation on land use planning and the pervasiveness of weak and reluctant agencies (Miyamoto and Udomsri 1994). With this in mind, strengthening the planning institutions and the legal framework must also occur. In addition, noting that the effectiveness of such plans depends heavily on the economic and demographic focus is important. If a city has a strong intention to expand, all these factors could affect the economic and demographic focus. Thus, having realistic figures for the near future is essential for appropriate planning.

Securing Financial Resources

Securing financial resources for urban transportation infrastructure provision is essential (World Bank 1994, 1996). Introduction of a pay for use principle, such as that of Japan's Road Development Special Account, might be appropriate for large cities in developing countries. Establishing an urban transit construction fund may also be a way to even the financial burden. Recent research on urban transportation improvement measures in Vietnam shows that Hanoi and Ho Chi Minh City need to make large transportation investments in the next few decades to catch up with rapid motorization. The major issues are insufficient budgets for road development at both the national and city levels, inadequate charges to road users for recovering the cost of road development, and imbalance in the financial assignment of the road budget between the central and city governments. Some of Japan's innovations in this area, such as establishing a national special account for road development, broadening the tax base to include an automobile weight tax for both national and city governments, introducing a city-level development fund, and using an effective intergovernmental transfer system, might also be appropriate for these other cities. In addition, financial arrangements must be flexible and subsidies for private operators considered, so that limiting the operators to public enterprises is not necessary.

National Urban and Regional Policy

Japan has been implementing centrally controlled national urban policies, which have contributed to the development of regional center cities such as Sendai. Local governments have implemented city planning

and related policies within the framework set by the national government. However, the autonomy of local governments is relatively limited in terms of planning and financial systems. During rapid economic development, such a model might be appropriate for developing countries to expand their regional growth centers, so that more concentration in primary cities could be avoided (Jones and Koné 1996). With respect to national urban and regional policies, Japan's integrated national physical development plans provide valuable examples.

Toward Globalization and Localization

In the rapid economic growth period, the central government initiated economic development of Sendai as the regional center of the Tohoku region, which was heavily dependent on the central government or Tokyo Metropolitan Region. The situation today is basically the same. However, as Sendai shows, Japan's local governments now recognize the importance of the trends established in that period. Globalization and localization have taken place simultaneously, and both capital cities and regional centers need to deal with their implications. So far, the actual impact of globalization on Sendai has been small compared with the effects on Tokyo, but in the long run, such regional center cities, even those in the developing countries, will be affected. The role of the central government might be to support local governments to respond spontaneously to these trends.

Appendix 14.1. Spatial Statistical Methods

Some basic literature concerning spatial statistical methods and their applications to urban transportation demand analyses are reviewed here.

Density Gradient Analyses

Clark (1951) examined the current and historical population density patterns of several major cities in different countries. He found that (a) the negative exponential function fits the urban density patterns in those cities quite well, and (b) the slopes of the functions tend to decline over time, while the expected densities at the center of the cities either increase or decrease over time. Clark's negative exponential density gradient function is expressed as:

$$D(u) = A e^{-bu}$$

where u is the distance from the center of the city, $D(u)$ is the density of the residential population, b is the rate of decline of density (which could be called the density gradient parameter), and A is the density at the center (which could be called the central density parameter). A is hypothetical because the center of the city is occupied by business activities and has a less dense residential population, but it is still useful for approximating the population density of inner cities. Figure A14.1 shows the schematic graph of density gradients.

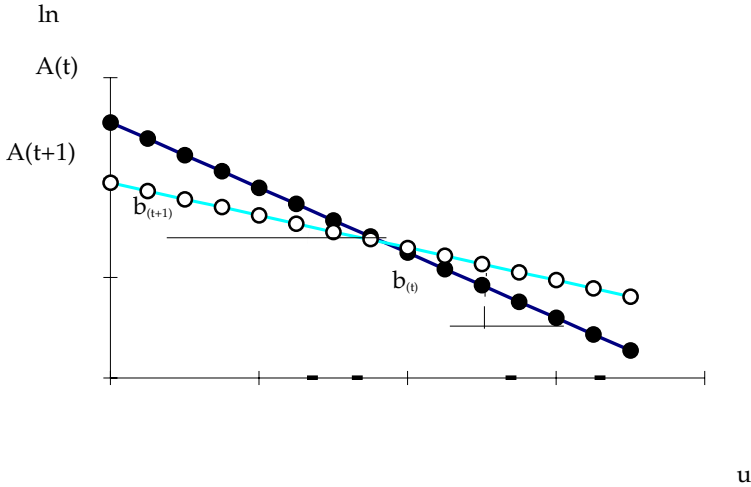
Using data for Wichita-Sedgwick County, Kansas, Jones and others (1987) and Patel (1991) discovered that the density gradients of both residential and nonresidential buildings, in terms of the number of buildings per square mile by annule and the density gradient of surface infrastructure, such as highways and roads, in terms of area per square mile by annule, are similar to that of the population density, both of which conform to the negative exponential function.

Akimoto, Harada, and Ohta (1990, 1992) applied a density gradient function to the commuting flow in the Tokyo Metropolitan Area. The authors created a commuting trip generation density gradient function. Given a commuting trip destination zone j , the commuting trip generation density gradient function is defined as follows:

$$D(u_{ij})=Ae^{-bu_{ij}}$$

where u_{ij} is the straight distance from the commuting trip destination zone j to the respective origin zone i . $D(u_{ij})$ is the commuting trip generation density of zone i given the trip destination zone j ; A is the central commuting trip density parameter; and b is the commuting trip density gradient parameter.

Figure A14.1. Density Gradient Measures



$A(t)$ = density at city center at time t
 $A(t + 1)$ = density at city center at time $t + 1$
 $b(t)$ = density gradient parameter at time t
 $b(t + 1)$ = density gradient parameter at time $t + 1$
 u = distance from city center
 Source: Author.

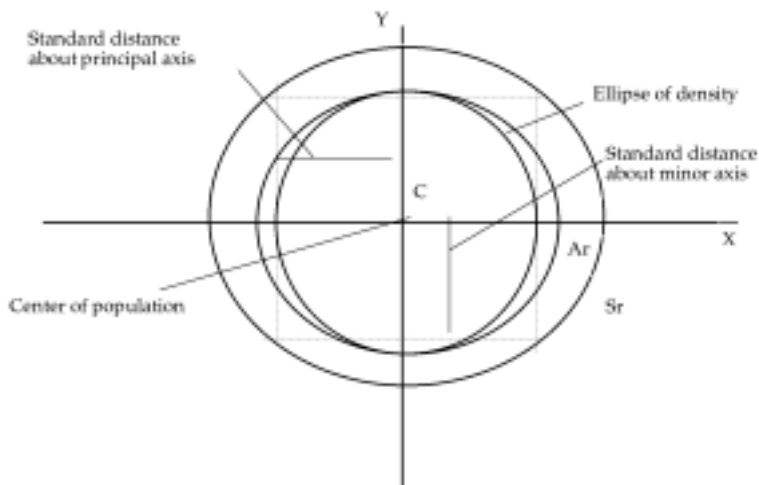
The commuting trip generation density for the origin zone i is obtained by dividing the number of commuting trips to the destination zone by the square kilometer of the origin zone. Akimoto, Harada, and Ohta (1990, 1992) made a number of findings: (a) Clark's density function generally provides a good fit for the commuting trip generation density for zones with a density of more than 500 people per square kilometer, (b) the density function generally explains the trend of where to live, and (c) time distance is statistically superior to straight distance.

Centrographic Methods

In the field of geography and planning, descriptive measures of space are commonly used to study spatial distributions. Among other concepts, centrographic methods, also known as spatial statistics or geostatistics, are extremely useful for observing changes in spatial distributions over time or comparing different distributions. The essential characteristics of spatial distributions—location, dispersion, and shape—can be coherently examined by these measures.

Centrographic measures are graphically shown in figure A14.2. Brief descriptions of each measure follow (Jones 1980).

Figure A14.2. Centrographic Measures



A_r Average distance of observations' distance from the center.

S_r Square root of the mean of the sum of squared distances of the observations

Source: Author.

To measure the location of the spatial distribution, the center of gravity, or center of population, is calculated. To measure concentration or dispersion of distribution, the concept of average radius and standard radius are introduced. Average radius, A_r , is the average distance of the observations from the center of population, while standard radius, S_r , is the square root of the mean of the sum of squared distances of the observations, which is equivalent to the radius of gyration of an area in mechanics.

To measure the shapes of spatial distributions, the concept the density ellipse is introduced. First, the principal axis is obtained in such a way that the root-mean-second-moment, or standard distance, of the distribution is minimized with respect to that axis. The cross axis through the center is called the minor axis. The ellipse with respect to these axes is obtained using the corresponding standard distances. The ellipse of density contains information about the direction and dispersion of the distribution. In addition, the ratio of the standard distances about the principal axis and the minor axis is called the coefficient of circularity. If the coefficient of circularity is equal to 1.0, the shape of the ellipse is circular.

Zahavi (1979) and Zahavi, Beckmann, and Golob (1981) developed the unified mechanism of travel approach as an alternative approach to modeling interactions between travel and urban structure. As part of the analysis, Zahavi introduced the centrographic methods to capture the travel destination distribution. He called it "the travel probability field" and defined it as the area that is covered by the ellipse of density with respect to the center of travel destination distribution. By applying this concept to Nuremberg and Washington, D.C., he found (a) the direction of travel probability fields tends toward the central business district; (b) the centroid distance, which is the distance between the household centroid and the activity site centroid, and the standard distance of destinations tend to increase as both the distance from the central business district and income increase; (c) automobile travel fields tend to be larger and more elongated than transit travel fields; and (d) the direction of the travel field is affected by the available system supply. To date, no other attempt has been made to apply centrographic methods to urban transportation demand analysis.

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