

SECTION IV

*Conclusion: lessons
from experience*

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chapter

Lessons from experience: reshaping economic geography in East Asia

Yukon Huang and Alessandro Magnoli Bocchi

This chapter provides an overview of the development of East Asia over the last few decades, as seen through the lenses of economic geography (WDR 2009). The main message is that the region's impressive economic performance can be understood within the context of—and, in turn, was shaped by—the dynamics of spatial economics. As discussed in a recent study (Gill and Kharas 2007), East Asia is the fastest-growing region in the world, with many countries achieving impressive gross domestic product (GDP) growth (see table 20.1). The major driving force for this performance was regionalism, as East Asian economies took advantage of globalization by rapidly expanding trade, especially with each other. This was facilitated by the remarkable growth of China and the prominent role that it played in regional production-sharing networks.

Context: the rise of regionalism and the role of production- sharing networks

As Hamaguchi discusses in chapter 1, economic geography—through the opposing forces of concentration and the dispersion of economic activity across countries—has played a key role in shaping these trends. To begin with, East Asian countries lowered their international transaction costs through trade policies facilitating imports of intermediate goods, favorable treatment of foreign direct investment (FDI), and the development of infrastructure. This encouraged a proliferation of free trade agreements,

both bilateral and multilateral. Transport costs between countries fell, allowing for greater specialization and, because trade in intermediate goods is especially sensitive to transport costs, radically altered trade patterns. Trade with neighbors became more important than trade with others outside the region. Intra-regional trade now accounts for between 55 and 60 percent of all imports and exports in East Asia, approaching that in the European Union (EU) and the North American Free Trade Agreement (NAFTA). The driving force has been growth in the trade of intermediate goods, which accounted for about 60 percent of total intraregional trade in 2005. Driven by booming intraregional trade of manufactured goods, industrialization spread across East Asia. Productive activities became geographically concentrated in each country, reinforcing the leading role of industrial agglomeration in the development process.

Today, the pattern of East Asian trade is complex and multidirectional, with the transformation revealing the importance of scale economies. The reduction of transportation and communication costs has enabled firms to cut production processes into “pieces of tasks” and to allocate each “piece” to the most suitable location given factor price differences, a process dubbed “fragmentation.” This has lowered costs and, with the shift to more efficient production centers, allowed firms to benefit from economies of scale. Thus “fragmentation” in East Asia explains much of the rise of production-sharing networks.

Table 20.1 Key indicators for growth, urbanization, and income distribution in East Asia, by country, various years

Country	Gross national income per capita, 2006 ^a	GDP growth (average annual percent)		Urban population (percent of total)			Theil index	
		1960–80	1981–2006	1960	1980	2006	1990	2002
Lao PDR	1,740	—	5.9	7.9	12.4	21.0	19.8	23.1
Vietnam	2,310	—	6.8	14.7	19.2	26.9	22.4	25.4
Indonesia	3,310	6.0	5.3	14.6	22.1	49.2	20.6	23.8
Philippines	3,430	5.4	2.9	30.3	37.5	63.4	30.1	36.8
Thailand	7,440	7.5	6.0	19.7	26.8	32.6	39.2	34.2
China	4,660	5.5	9.9	16.0	19.6	41.3	21.1	35.8
Korea, Rep. of	22,990	7.8	6.8	27.7	56.7	81.0	17.0	17.5

Source: World Bank (2008).

For the Theil index, see Gill and Kharas (2007).

— Not available.

a. Purchasing power parity, current international \$ (a hypothetical unit of currency that has the same purchasing power that the U.S. dollar had in the United States at a given point in time).

Accompanied by increasing disparities

Everywhere in the world, economic development is uneven across space. Some countries grow rich, while others stay poor, and when countries grow, prosperity does not come to every place at the same time. People and firms concentrate in prosperous areas, cities quickly pull ahead of the countryside, and the quality of life—in terms of consumption levels—improves in some provinces and lags in others. Higher premiums are paid to skilled labor and to knowledge-intensive products.

East Asia is no exception. A compelling feature of the East Asian growth experience over the last two decades has been the uneven spread of economic benefits, especially within countries. The same forces that contributed to rapid growth have also shaped its unevenness. In almost all countries, growth has been accompanied by the widening, or at least the persistence, of disparities and inequalities across space, sectors, groups, and, ultimately, individuals. As a result, there are growing concerns about the equity and social cohesion of the development process. Governments uniformly face increasing pressures to deal with distributional issues, which often have a spatial character; examples are the focus on narrowing urban-rural differences and on implementing targeted regional programs for lagging areas.

In East Asia, the distributional or equity implications differ depending on whether

the results are viewed from a regional or a national perspective. On a regional basis, during the period of 1990–2005, each economy made progress toward catching up with Japan, although the progress was speedier in some countries than in others: Singapore among the upper-income countries, China among the lower middle-income countries, and Vietnam among the low-income countries (Hamaguchi in chapter 1). Over time, the region has become more diverse and less reliant on Japan, given the rise of agglomeration economies in many countries. Within each country, however, despite regional convergence, income disparities have become more serious. Between 1990 and 2005, inequality appears to have increased in six of the seven countries studied in this book, the only exception being Thailand. Increases have been especially pronounced in China, but to a lesser degree also in Indonesia, Lao PDR, the Philippines, and Vietnam (table 20.1).¹

The new economic geography

Until recently, the traditional trade theory, based on differing comparative advantages as reflected in varying resource endowments, relative factor prices, and technological advantages, could explain these trends in production and distribution rather easily. The first attempt to model the shifting location of production in East Asia was put forward in the famous “flying geese” pattern of catch-up industrialization, with Japan

as the lead economy successively shedding industries over time to less-developed economies, first to the newly industrializing economies (NIEs) such as Hong Kong, China; Singapore, Republic of Korea; and Taiwan, China, then to lower-income Association of South East Asian Nation (ASEAN) countries such as Indonesia, Malaysia, the Philippines, and Thailand, and then to China. But one drawback of this model is that, although it focuses on interindustry relocation and trade, it does not explain intraindustry trade or why some industries move to low-wage countries, while others do not. Indeed, the model suggests a predetermined homogeneous trajectory and a minimal role for policy. In contrast, the “new economy geography” allows for less determinism. There is more potential for multiple *equilibria*, and small changes in initial conditions may have large effects. History and luck also play a role in determining which cities or countries are selected as the location of firms. And given the presence of unexhausted economies of scale, the selected areas will have a persistent advantage into the future.

East Asia’s success is evident in the concentration of industrial agglomeration in large urban areas in each country, exemplified by the core economic regions in Japan and in major production centers throughout the region. The transformation is from a one-dimensional flying geese pattern to a more complex pattern that encompasses multiple technological centers built on concentrations of industrial and service activities that foster economies of scale. In this model, high transport costs can affect the location of activities and prevent agglomeration economies from being realized.

In contrast to previous studies on East Asia, this volume takes a country-specific approach, focusing more on what is happening within each country rather than what is happening across countries regarding the impact of spatial factors.

As indicated in the preface to this book, the body of thought encompassed in the new economic geography constitutes the analytical framework of this volume, explaining how spatial factors affect the course of a country’s development by influencing its

public policies, the location of production, and, in turn, trade and growth patterns. Everything starts with the desire of firms to concentrate production in one location so as to enjoy plant-level economies of scale and to be near customers and suppliers to reduce transport costs. Once a market has reached a certain scale, other firms locate there to take advantage of market size, thereby giving rise to “agglomeration economies.” The existence of a large manufacturing sector represents an incentive for others to come, reinforcing the original advantages. Factors of production, however, and especially labor, are not mobile across countries in the same way they are mobile within countries; thus cost structures may drive firms from larger, higher-wage areas to smaller, lower-wage areas both within and across countries. The lower the transport costs firms face, the less likely they are to congregate in one major center.

In this volume, the three spatial dimensions of development proposed in the *World Development Report 2009* (WDR 2009; World Bank)—*density*, *distance*, and *divisions*—provide a conceptual framework for the geographic transformation of East Asia.²

For policy makers, the challenge is getting density right by fostering the appropriate concentration of economic activities to realize the potential benefits of agglomeration economies. If this is done well, economic growth will be driven by geographically concentrated clusters, and living standards between lagging and leading areas and between urban and rural areas will converge over time. But the distance between concentrated activities is also an important factor, which can be addressed both by favoring the mobility of labor and by reducing transport costs with infrastructure investment. In the process, any artificial or politically driven divisions—due to jurisdictional boundaries, ethnicity, language, or religion—can divide people, hamper economic activities, impede growth, and exacerbate social development.

The country studies collected in this volume illustrate how the role of economic geography in shaping outcomes depends largely on the stage of a country’s development as

well as on the nature of government policies. For this purpose, our discussion categorizes countries into four groups, which reflect different developmental stages:

1. Vietnam and Lao PDR, low-income economies on a path of rapid growth;
2. Indonesia, the Philippines, and Thailand, middle-income countries with a variety of growth experiences;
3. China, the most populous middle-income country, which is transforming very rapidly into a world economic power; and
4. Republic of Korea, unique in moving from low- to high-income status in less than 50 years.

Vietnam and Lao PDR: emerging spatial patterns at low income levels

Much of Vietnam's economic history since World War II is a tale of internal conflicts, wars, and the legacies of central planning. By the mid-1980s, a very poor and largely agrarian-based economy was impatient for change. The market-oriented reforms initiated in the mid-1980s revitalized agriculture and gave a new emphasis to industrialization. GDP growth took off, averaging 7 percent a year over 1980–2006. As Son describes in chapter 7, a significant portion of this success was due to an increase in agricultural productivity, but the largest share came from growth in services and industry.

These outcomes indicate the increasing role being played by agglomeration effects associated with rising density in economic activities. In Vietnam, this is illustrated by the gradual rise of the urbanization rate, which started from a low of 19 percent in 1980, began to increase in the 1990s, and is now at about 27 percent. This is also confirmed by the share of the labor force in agriculture, which accounted for about two-thirds of the total labor force up to 1990 but since then has declined to about 50 percent. Increasing density has been facilitated by large-scale labor migration from rural areas, with the bulk of the movement going to the southeast region, drawn by the growing commercial and industrial activity around Ho Chi Minh City. This pattern is

consistent with that of a rapidly transforming economy, with growth increasingly evident in more urbanized areas that benefit from industrial expansion. This process was supported by government policies, which allocated more fiscal resources for the more rapidly growing provinces, thus providing further incentives for industrial development. Today, the agglomeration process is being facilitated by Vietnam's active participation in regional production-sharing networks. FDI is also becoming significant, with more than half going to areas around Ho Chi Minh City in the southeast and another quarter going to Hanoi (and the surrounding Red River delta).

At this stage of income, Vietnam's quality of infrastructure is still relatively underdeveloped. Reducing distances through investment in transport and communications is thus receiving high priority. Areas that are along the coast or are more accessible to international markets are being favored, as is the expansion of the internal road network connecting the north and the south. As highlighted in Son's chapter, the highest priority at this stage is to strengthen access to resources and services. Thus he recommends improving connectivity by eliminating barriers and providing the necessary infrastructure to link rural with urban areas, labor-supplying regions with labor-demanding ones, and national with international markets. Internal divisions in terms of provincial boundaries or restrictions on labor mobility are not seen as significant barriers to the agglomeration process. However, Vietnam's geographic contours, specifically the concentration of the poor in the mountainous areas in the northeast, northwest, and central highlands (many of whom are ethnic minorities), pose significant challenges to developing workable solutions to reduce disparities in living standards across space.

The concentration of higher-productivity activities in urban areas, in combination with the problems of remote lagging regions with poor resource endowments, is becoming evident in the measures of social and income disparities. These disparities are widening between the urban and the rural population, between the plains and

the mountainous areas, and among ethnic groups. However, by international standards, inequality in Vietnam is still relatively low, and budget allocations for social programs have a significant redistributive impact. Given the experience of other countries, disparities may increase before eventually moderating.

Lao PDR shares some of the same history as Vietnam: suffering from conflict and dealing with a legacy of centrally planned policies. In chapter 3, Ohno cites how a low-income land-locked country such as Lao PDR can deal with distance and divisions, illustrating the case of remote villages that are dependent on traditional hand-weaving activities. Although clustered in proximity to each other, weavers may not have products that are specialized enough to find a niche in global markets. This presents a formidable barrier to facilitating spatial connectivity. To achieve agglomeration benefits from density, these villages must deal with their isolation. Ohno documents the very high transaction costs for these isolated producers, which essentially condemn them to low returns. At this stage of development, he argues that “culture brokers” who can both inspire informal, trust-based mechanisms at the community level and assess the demands in external markets can provide the necessary connectivity to narrow the vast distances involved. Reducing distances in this case is not just an issue of developing transport links, which may not be financially feasible in such circumstances, but also an issue of linking isolated clusters of rural producers to the preferences of more sophisticated buyers overseas.

Indonesia, the Philippines, and Thailand: diverse settings and varied outcomes in three middle-income ASEAN countries

As relatively large and geographically diversified countries, the ASEAN-3—Indonesia, the Philippines, and Thailand—share a number of characteristics as middle-income economies. Over the past quarter century, their average GDP growth rates have been in the range of 3–6 percent, with Philippines at the lower end and Thailand at the upper. All three economies are dominated by their

capitals: Jakarta, Manila, and Bangkok. And all three show wide spatial variations in the level of economic activity, resource endowments, and population settlements, including the presence of ethnic minorities. Indonesia and the Philippines are the two largest archipelagic economies, and this appears to be a major factor in how their geography has been influencing economic trends. For Thailand, the mountainous borders that it shares with other countries and the diversity of its local communities may have played a similar role.

For all three countries, a strong urbanization process has been under way, contributing to rising density, more so in the Philippines and Indonesia than in Thailand. The extent to which this has fostered agglomeration benefits is less clear, perhaps due to the lack of disaggregated regional data on the location and nature of economic activity needed to assess such relationships.

Indonesia

In Indonesia, economic agglomeration is hampered by the geographic setting of the country. With its 13,000 islands, Indonesia is the world’s largest archipelagic state and one of the most spatially diverse nations. In the last two decades, there has been no significant change in the concentration of economic activity across the major island groupings. Economic activity has continued to cluster around some key regional economies. With only 6 percent of the land area, Java has remained dominant, accounting for 60 percent of the population and 52 percent of GDP.

Over the course of several decades, the group of top-performing regions has been quite diverse, as to location, size, and socio-economic characteristics (as described by Hill, Resosudarmo, and Vidyattama in chapter 8). There has been no significant shift in the concentration of economic activity across the major island groupings, although how the mining sector is treated affects results. In general, the poorest regions have performed about as well as the national average. The better-performing regions are typically those that are the most connected to the global economy. Jakarta stands out as a special case, growing richer than the

rest of the country over time and accounting for the clear shift in economic activity toward Java. Although two of the strongest performers are resource-rich regions, the performance of this group of provinces has varied considerably, and there is no clear natural resource story. Conflict is particularly harmful to economic development, as illustrated in the case of Maluku since 1997 and to a lesser extent Aceh.

Income disparities using national indicators have increased steadily, but not substantially, over the past decade and a half, but the picture is complicated by a large increase up to 1999 and a gradual decline since then. However, at the subnational level, the growth pattern is more mixed, with disparities among provinces declining steadily over time and disparities among districts within provinces being more varied (see McCulloch and Sjahrir 2008). Analysis of growth trends shows some evidence of convergence, with poorer districts growing faster than better-off ones, but this may have been the result of the financial crisis affecting the richer districts relatively more than a structural change in growth dynamics. However, Hill, Resosudarmo, and Vidyattama conclude that disparities are either declining or stable, depending on the production series used, and that convergence either was not taking place or was relatively weak, depending on the indicators chosen.

Looking at firm-level production trends for Indonesian manufacturing, in chapter 10 Kuncoro describes how density of industrial activity evolved as the economy developed. Liberalization of the economy brought economic activities to concentrate in a few places, but also fostered unintended negative externalities associated with agglomeration. By improving roads in rural areas, the government made it possible for firms to reconcentrate in smaller, less expensive cities, including those in low-income or lagging regions in Java. Based on empirical exercises conducted on Indonesia's four most important industries, Kuncoro finds that the nature of externalities and agglomerations favored industrial spillovers—that is, localization was stronger than urbanization effects. The deconcentration process is evident in nonmetallic minerals and machinery

industries, but less evident in textiles and chemicals, because their externalities are dynamic (firms are less willing to move to locations without a prior history of the industry and hence no accumulated stock of knowledge). If externalities are localized, smaller cities are more likely to specialize in just one industry or in closely connected industries. However, if the externalities happen to be urban in nature, an industry will have to find a location in a diverse, large urban environment. Kuncoro suggests that government policies should not interfere with the decisions formed by private incentives but that the most important intervention is to improve the quality of roads and cut travel costs between factory sites and markets or ports. Thus a policy of (a) mixing infrastructure development in lagging regions to reduce distance and (b) using private investment incentives to reconcentrate industries (density) in smaller cities in lagging regions could meet the twin objectives of efficiency and more balanced growth.

At the national level, especially for smaller cities and localities adjacent to major cities, connectivity to more dynamic commercial areas is the most likely path out of poverty. However, improved spatial connectivity that reduces distances can also affect local activities in rural areas. In chapter 4, Yamauchi, Muto, Dewina, and Sumaryanto explore this issue, examining how investments in local roads can affect allocative efficiency in Indonesia. Going beyond other studies on the distance factor, they assess the interactions involving choices among investments in “local” roads connecting villages with “trunk” roads that lead to economic centers. Their study also examines how investment in household education affects such decisions. The results show that investments to improve the quality of local roads have a positive impact on income growth as well as the transition to nonagricultural activities. The extent depends on the distance to economic centers and the degree of post-primary household education. Thus investments in education and in local infrastructure are complementary in promoting growth and are not competing choices.

Given the diversity of needs across the major island groupings, the Indonesian

government launched an ambitious decentralization initiative in 2001, as analyzed by Arze del Granado in chapter 9. This initiative could potentially have a major impact on the pattern of urbanization, industrial agglomeration, and welfare objectives. His findings suggest that more-urbanized areas tend to attract migration from less-urbanized areas but that, where urbanization is the most advanced, congestion costs tend to push the inhabitants to neighboring areas. Thus the forces that promote concentration tend to go only so far before reversing. In addition, the degree of public expenditures on social services and infrastructure influences the pattern of migration. The higher these expenditure levels, the lower the outflows of population toward larger districts—that is, residents will move to districts with better services or employment opportunities. Employment growth is inversely related to the distance between a district and its nearest higher-order urban center, and thus investments that reduce distance matter. But the impact of decentralization on industrial expansion is more ambiguous. There is no evidence that expenditures on social services will encourage more industrial concentration in that area. This suggests that natural advantages and production externalities affect firm-level decisions more than the impact of government expenditures. Nor are special tax incentives to attract industries likely to provide sustainable solutions. Empirical tests on the importance of localization and urbanization externalities are inconclusive. This may be due to a lack of more disaggregated data, but it could also mean that the full impact of agglomeration effects has not yet been felt in Indonesia; that is, at this stage of development, the structure of industries may not have evolved enough to secure all of the benefits that can accrue to specialization.

The Philippines

The Philippines, with more than 7,000 islands, is the second-largest archipelagic state in the world. For most of the past 25 years, economic growth barely exceeded the population growth rate, which continued to expand rapidly at 2.3 percent a year. Growth has quickened in the present

decade, but questions linger regarding its sustainability. Economic activity has been highly uneven and concentrated particularly in Metro Manila. Together with the two adjacent regions, Metro Manila produces about 55 percent of the country's GDP. Thus building more density is not seen as a desirable objective. Instead, the pattern of uneven development, coupled with a disappointing performance in poverty reduction, has focused the policy debate on whether a more balanced approach is needed regarding the allocation of resources to address *disparities* (as discussed by Balisacan, Hill, and Piza in chapter 11). Inequality in the Philippines is seen as a more serious problem than in other East Asian countries, with inequality due largely to disparities within regions rather than among regions. Relative income differentials also drive migration, with the bulk of movement going to the region around and including Manila and, to a lesser extent, a few other prosperous areas such as Cebu City.

In recent years some regions have done quite well in attaining high per capita income growth and poverty reduction, while others have experienced a decline in their average per capita income and an increase in poverty. On average, most of the poor regions grew more slowly than the national average from 1985 to 2003, and there is no firm evidence that incomes are converging across provinces.³

The poor performance in economic growth and poverty reduction is related to the large disparities in access to infrastructure and social services across regions and island groups and between urban and rural areas. A widely held view is that development efforts have favored Luzon, particularly the national capital region (Metro Manila), and discriminated against the Visayas and, especially, Mindanao. This development pattern is seen as having led to substantial spatial differences in access to economic opportunities, in rates of poverty reduction, and in the incidence of armed conflict. Similar to Indonesia, it is also worth pondering whether the divisions inherent in being a nation of islands create the same kinds of inefficiencies that result from international borders.⁴

The government's allocation of infrastructure funds has had implications for regional development patterns. Following the dismantling of the old import substitution growth regime, the new driver of spatial development patterns has been decisions regarding the location of export zones. In the last two decades, the Philippine government (and donors) has been more inclined to invest in internationally oriented infrastructure (ports, harbors, and associated facilities) than in domestic transport networks and corridors. The effect has been to reinforce the internationally connected enclaves at the expense of a denser set of domestic connections, a factor exacerbated by the regulatory barriers erected between firms inside and outside the export zones.

Balisacan, Hill, and Piza stress that spatial disparities need not reduce growth if they arise from efficiencies associated with agglomeration. If so, the strategy to prevent unreasonable spatial disparities during the development process would be to improve market links between leading and lagging regions through greater factor mobility, particularly of labor. This would need to be supported by improved social services that, given the fiscal constraints, need to be targeted more efficiently. Infrastructure, however, is seen as the glue that unifies the national economy and the single most important instrument of regional policy. But where the infrastructure should be located can have ramifications in balancing the desirability of fostering links with international markets or strengthening ties with the lagging hinterland. Overall, the Philippines is seen as being deficient in the quality of its infrastructure, especially in its road network, and this has held back efficient regional economic integration.⁵ The consequence is that the country has made little progress in national market integration, as evidenced by the widening variations in regional prices over the past decade and half.

Thailand

In Thailand, growth in density or economic concentration and poverty reduction went hand in hand. The structure of the Thai economy began to change in the early

1980s, during which the Thai government promoted industrialization and shifted the policy emphasis from import substitution to export promotion. Supported by major infrastructure investments, the manufacturing sector grew rapidly from 27 to 38 percent of GDP from 1980 to 2005. The share of agriculture fell from 23 to 13 percent over this period. Services remain the largest sector, contributing half of the country's GDP in 2005. Overall, GDP grew at a rate of 6 percent a year for more than 25 years, despite the impact of the Asian financial crisis. As a consequence, the proportion of people living below the poverty line declined from 38 percent in 1990 to less than 10 percent in 2007.

As discussed by Wisawaisuan in chapter 12, despite this impressive growth and poverty performance, there are strong feelings about the extent of spatial disparities and an ongoing debate about the role that market forces or policies play in shaping outcomes. Special emphasis is placed on urban-rural as well as regional differences, with a particular attempt to determine whether the growth-promoting policies as well as public finances have alleviated or aggravated spatial disparities in Thailand. There is no clear evidence that spatial disparities have become better or worse at the national level—the Gini and Theil indexes show little change and possibly some improvement—but perceptions persist about increasing disparities across regions and between rural and urban areas as well as within sectors and regions.

Over the past decade and a half, growth in regional GDP of Bangkok has been slightly lower than the national average, and some areas like the eastern and central regions have been doing much better. These regions have benefited from a more active industrialization process brought on by globalization and designation of some special export-processing zones. This has made these regions a magnet for labor migration from other lagging areas. Thailand has benefited from the globalization process more than Indonesia and the Philippines, as indicated by the increase in the ratio of trade to GDP, which rose from 90 percent in 1990 to nearly 150 percent in 2005.

However, the consequence may have been an inevitable deterioration in income distribution; the poorest regions have tended to grow slower than the national average, leading to a sense that disparities are increasing. Those regions, especially the south, are highly dependent on agriculture, which makes it difficult for them to catch up. This suggests that Thailand is still in the stage of development where agglomeration economies are strong and structural shifts in production may still lead to increasing regional disparities.

China: agglomeration, rapid growth, and major spatial consequences

China, the most populous and arguably the most geographically diverse country in the world, reshaped its economic geography to reverse half a century of economic decline. History tells us that recent successes represent a marked shift from failed policies in the pre-1980 “centralized planning era,” which supported “balanced” growth and even the spread of industrial capacity across regions (as discussed by Yao in chapter 14). Over much of this period, China shifted back and forth from centralized and decentralized fiscal policies in response to major economic and political events, with the consequence that, by 1980, China was a very poor but egalitarian society, with one of the lowest Gini coefficients in the world.

During the post-1980 reform era, preferential policies were sequenced to work with, rather than against, differences in natural endowments and comparative advantages; in the process, they fundamentally reshaped China’s economic geography. These policies had two distinct consequences: (a) they reshaped the spatial dimensions of development by increasing the density of industrial activity and ratcheting up the urbanization process, and (b) in reducing distances and breaking down divisions, they broke the gridlock in the mobility of factors and goods both internally between provinces and urban and rural areas and externally between China and the rest of the world.

How was density encouraged? According to Yao, leadership was critical as exemplified

by Deng Xiaoping’s signal not just to allow but to encourage industrial expansion in the major commercial centers along the coast. The most notable policy manifestation was the establishment of special economic zones (SEZs) in four cities along the southern coast, which then spread to the other coastal areas and eventually to all the capitals (Chen and Lu in chapter 15). These SEZs laid the basis for a massive inflow of FDI, which even today is concentrated largely in the coastal provinces. These incentive policies were complemented by fiscal reforms that gave preferential treatment to the coastal provinces of Fujian and Guangdong and ensured that these areas would receive an increasing share of public investment relative to the inner provinces. With the requisite resources and supportive incentive policies, these coastal areas were then well positioned to benefit from the globalization process that has characterized East Asia’s recent successes.

Rising density brought forth agglomeration economies, which uplifted the productivity of Chinese industrial enterprises concentrated in the major commercial centers along the coast. Although the coastal areas grew much faster than the inland provinces, the inland provinces also performed much better than before; together with sustained growth in agriculture, this resulted in near double-digit GDP growth for more than a quarter of a century.

The pattern of industrial growth in this process is broadly consistent with the tenets of the new economic geography. According to He in chapter 16, as market integration deepened, provincial industrial structures initially became more diversified, but by the late 1990s the agglomeration process began to take hold, with the effect of nurturing more specialization. The relationship between regional specialization and per capita GDP is U shaped. Driven by market forces, both the very poor and very rich regions are now more specialized, with the more service-oriented or higher-technology industries concentrated in the coastal urban areas and the more heavily protected and resource-intensive industries remaining relatively more dispersed within provincial boundaries. Industries with less local protection and government intervention typically are more exposed to external

competition. Eventually, as agglomeration effects have taken hold, these industries have become more regionally specialized as well as more productive. Over time, returns to capital across provinces have converged, although returns remain greater in the coast than in the west. This lends support to the view that the agglomeration process has not become wasteful over time; rather, market forces have been encouraging the more efficient allocation of resources (Bai and Lin in chapter 17).

China's urbanization process was both a consequence of and a factor contributing to the agglomeration process (Yeung and Shen in chapter 18). Rapid urbanization and specialization drew their impetus from the coastal areas. China's urbanization rates, which rose from around 25 percent two decades ago to nearly 50 percent today, accelerated with the introduction of township-and-village enterprises, which drew workers out of farm production and inspired large-scale migration. Over time, this spawned a huge cohort of migrant workers,⁶ which now totals an estimated 140 million to 150 million, heavily concentrated in the major commercial centers along the coast. As reforms deepened, administrative constraints on labor mobility were progressively alleviated. Although access to housing and social services remained unequal for migrants without urban residency status (*hukou*), they became less prohibitive over time. The main lesson here is that the forces of agglomeration are very powerful: despite fairly stringent barriers discouraging migration, many have, in fact, chosen to move.

Over time, national market integration facilitated labor and capital mobility across provinces and greater concentration of resources. This process allowed many Chinese companies to exploit economies of scale (Chen and Lu in chapter 15; He in chapter 16) As the coastal cities became more linked to the global economy, the benefits became obvious, as exemplified by rapid employment creation, competitive pressures on enterprises to restructure, and a much improved domestic and external financial position (Yeung and Shen in chapter 18).

How did China reduce distances? On the one hand, massive migration of labor to the

major commercial centers along the coast effectively reduced distances, and, on the other, China embarked on an infrastructure-led investment program that was unprecedented in its scale. While labor migration arose spontaneously, China's success in dealing with the distance factor came from a concerted strategy to improve connectivity through investments in transport and communications. Initially, priority was given to the coastal provinces, but starting in the late 1990s, the central and western regions began to receive increasing attention. Over the past decade, considering both highway and railway investments, China spent more than 5 percent of GDP annually on transport investments amounting to more than US\$100 billion in 2006, which is roughly twice as much as in other comparable countries.

Reducing distances would not have had such a positive impact, given China's size and decentralized administrative system, without major efforts to eliminate internal divisions. During much of the reform period, China was better integrated externally than internally. This was due largely to the priority given to trade and globalization. Prior to 1990, internal divisions in the form of provincial boundaries essentially made each province a separate fiefdom, effectively locking in resources (labor and capital), creating protective markets for producers, and limiting the choices for consumers. Empirical studies for that period showed widely divergent availability of goods and huge regional price differentials. Subsequent price liberalization reforms and reductions in provincial barriers governing the movement of goods and factors of production have done much to bring down internal divisions, but more work is needed to create a unified national market (Huang and Luo in chapter 13).

Despite the surge in per capita incomes over the past several decades, spatial indicators measuring income inequality—between coastal and inland regions and between rural and urban areas—deteriorated. But China shows that there are “good” and “bad” manifestations of inequality. The dynamics of spatial disparities across subnational areas have taken the form of a “race to the top.” Disparities are not the result of stagnant income growth among certain segments

of society or regions but rather the consequence of unusually high and sustained growth of coastal and urban areas fostered by agglomeration economies. But growth in the inland provinces was not low by global standards, averaging around 8 percent annually. Yet this paled in comparison with growth in the coastal provinces, which averaged an impressive 12 percent during this decade (Huang and Luo in chapter 13).

Although regional disparity is widely considered as the key determinant in China, the rural-urban divide is the more important factor in shaping overall inequality. Changes in the Gini, which rose from 30 to 45 over the past 25 years, are closely associated with changes in the urban-to-rural income ratio and the coastal-to-inland per capita GDP ratio. The challenge in reducing income inequality, however, is that as impressive as growth in rural incomes has been (4 percent annually for several decades), it is still much lower than growth in urban incomes, which for some periods was twice as high. Thus the ratio of urban to rural incomes has been rising steadily since the mid-1980s. Because urban-rural differences are greater in the poorer inland provinces than along the coast, this drives regional differences, especially because urbanization rates are about 65 percent higher along the coast than in the western region.

Within provinces, inequality within rural and urban areas has accounted for a larger share of total inequality over time. With the structural transformation of the economy, individual circumstances have gradually played a more important role in determining income, including the high premium accorded to education. This suggests that increasing income inequality is, to some extent, a consequence of the stage of China's development: the growth process unleashed competitive pressures and created greater rewards for skilled workers.

But if not addressed, rising disparities—whatever their source—can lead to social and political pressures. China's policy makers have been sensitive to these concerns. At the national level, this awareness is reflected in the recognition given to achieving more uniform and equitable social outcomes across regions and

between urban and rural areas. However, the gap in social welfare achievements by region, especially for health compared with education, while narrowing over time, remains large, as indicated in government policy statements.

The principal instrument with which to address spatial disparities in living standards is to give more priority to the poorer inland provinces in the provision of social and infrastructure services through the public expenditure program. China's capacity to use public finances for redistribution purposes, characterized by distinct inter-governmental layers of responsibility for the collection of revenue and the provision of services, has been hindered by several factors. The most critical has been the steady decline in the ratio of revenues to expenditures, from more than 25 percent in 1980 to 12 percent in 1995.⁷ With this near collapse in revenues, the country's capacity to redistribute resources through the budget in favor of the poorer regions was limited. Beginning in the mid-1990s, an improved revenue position led to a shift in the share of resources going to the inland provinces. While the trend in recent years has been in the right direction, most observers feel that more needs to be done (Huang and Luo in chapter 13; Yao in chapter 14; Chen and Lu in chapter 15).

Aside from shifts in the public expenditure program designed to ameliorate regional differences in social welfare, incentives were also geared to provide a more balanced approach in development objectives. These concerns underpin several regionally targeted development programs, the first of which was focused on developing the western regions in the late 1990s, later the northeast, and more recently the central region (Yao in chapter 14). What characterizes these targeted initiatives is the pragmatic approach to crafting strategies that reflect geographically differentiated needs as well as political pressures. For the western region, government policies focused on developing more sustainable agricultural production systems that would preserve natural forests and invest in irrigation systems suitable for dry land farming. These were combined with stepped-up efforts to facilitate labor migration by improving access to social

services. These policies were complemented by a ratcheting up in funding for infrastructure—roads and rails—that improved connectivity to the rest of the country. For the northeast, the major challenge was to deal with an outdated industrial structure based on state-owned heavy industries and underlying geographic conditions (low population density and inappropriate positioning to tap national and global markets). The strategy that has emerged encompasses two general concerns. One is to strengthen social protection systems to deal with unemployment, pension, and retraining needs, including facilitating labor migration as needed. The other takes more of a spatial perspective by looking at the three affected provinces in a broader regional context to see how existing industrial activities could be reshaped to complement national and globally linked production-sharing networks. This approach includes recognition that the northeast is well placed to connect China with external markets in Japan and Korea. The strategy also includes recognition that some traditional agricultural areas could prosper with more support to realize their resource-based advantages. Work on strategies for the central region is just beginning. As future growth dynamics are likely to be driven more by domestic consumption than by exports, the region has significant locational advantages as a centralized hub serving the surrounding, heavily populated provinces. This should provide a rationale for investments designed to improve connectivity with the surrounding regions.

Korea: from developing to developed status and eventual equalization in living standards

Much has been written about the Korean success story. The Republic of Korea is unique in having gone from an income of less than US\$100 per capita in 1960 to US\$20,000 in 2007 in the aftermath of the devastating Korean War. Such a remarkable achievement in such a short time (by the standards of economic history) is the consequence of an impressive export-oriented and sector-specific industrial development strategy, which Park characterizes in chap-

ter 19 as “compressed economic growth.” This approach has concentrated industry and population in the capital region and achieved a major spatial transformation.

This process was broadly characterized by the building of density to achieve the associated agglomeration effects. The share of industry in production increased from 19 percent in 1960 to 41 percent by 1980 and has since stabilized around that level. Since 1980, the changes lie more in the nature of the industrial structure, with a steady decline in the share of labor-intensive industries in favor of the production of more technology-intensive parts and components for assembly and capital-intensive goods. In the early stages of industrialization, there was a bipolar concentration of industries separating the capital region from the rest of the country. Over time, this disparity was considerably reduced by forces that linked provincial cities and rural areas with the more dynamic centers and by the rapid dissemination of information and communications technology (ICT) services. This shift is mirrored by a steady decline in the role of agriculture: from 40 percent of GDP in 1960 to 3 percent today. However, it is also worth noting that industrial restructuring in response to globalization pressures was not an easy process; it required major shifts in the nature and location of activities; for some product lines, it entailed relocation to lower-cost centers abroad, such as China. This process is now being nurtured by a persistent pressure to build new innovation systems (Park in chapter 19).

These trends are reflected in the sharp increase in the urbanization rate, which rose from 27 percent in 1960 to 57 percent by 1980 and to 81 percent by 2006. In the process, the economic geography of Korea changed dramatically. At the beginning, when agriculture was the major activity, the western part of Korea was relatively affluent due to the fertility in the plains. However, the rapid industrial expansion in the capital and southeastern region, supported by the Seoul-Busan highway, created a disparity between the axis formed by Seoul and Busan relative to the axis formed by the southwestern and northeastern corners of Korea.

Seoul continues to play a dominant role in the economy and continues to be

a magnet for attracting skilled labor and resources; however, its share of the population peaked more than a decade ago. Today, the migration to the capital region flows mainly to Seoul's surrounding areas, such as Incheon and Kyunggi, nurtured by the spillover of economic activities, due to the attractiveness of lower-cost settings.

These industrial spillover effects are now being felt in other regions, notably the southeast, which has benefited from being highly specialized in assembly-related production and its position as a major port connecting key markets in China and Japan. The middle region has also benefited in taking up a large share of high-technology-intensive industries from the capital region. The southwest region is more specialized in resource-based industries. Over time, the structure of industrial organizations has also evolved, with the concentration of headquarters and research activities of major firms in Seoul but the decentralization of production functions to non-capital regions. In the earlier stages of development, the distance factor largely related to improving connectivity through improved transport networks but, as Park stresses in chapter 19, the current challenge is to develop ICT to improve the operations of networks, as firms fragment and locate functions across different regions and increasingly rely on the transferability of services to be competitive in a knowledge-based economy.

The consequence of these shifts in industrial specialization and location over the past several decades has been a marked decline in disparities due to the natural spreading out of economic activities supported by major infrastructure investments, improved ICT, and stronger social services, notably education. Particularly striking is that the gap between per capita GDP for the capital region, which is the highest nationally, and that for the lowest region—the southwest—dropped from about 40 percent in 1985 to about 10 percent by the late 1990s (Park in chapter 19). More disaggregated data for subnational administrative units indicate that per capita GDP in the poorer areas is typically no more than 20–25 percent below the national average. Other indicators such as the Theil coefficients also illustrate that the Korean development experience has

been remarkable in terms of its equity implications (table 20.1).

Lessons learned

The WDR 2009 concludes that spatial transformations—rising density, falling distance, and dissipating divisions—will remain essential prerequisites for economic success in the foreseeable future.⁸ Do these same three principles apply to East Asia?

As argued in the WDR 2009, economic growth is seldom balanced, and efforts to spread it out prematurely may jeopardize sustainable progress. Centuries of economic development in other parts of the world show that spatial disparities in income and production are inevitable. However, as countries develop, a series of policies are enacted to make basic living standards more even across space.

The East Asian experience conforms to these stylized facts. Plants have become big to exploit economies of scale, but places do not have to be big to generate those economies. The function of cities matters, not their size. The medium-size cities are often large enough for “localization” economies. As a city grows, localization economies become less important, giving way to “urbanization” economies, which tend to generate, especially in large cities, knowledge spillovers. Human capital moves to where it is abundant, not scant. Falling transport costs make specialization possible and increase trade not only with neighboring countries but also across internal provinces. The move to density is quick at the local level, manifested in a rapid rural-urban migration that accompanies the sectoral shift from agriculture to industry. Over time, this leaves an uneven landscape, with people and production concentrated in some places and not in others. Migration, trade, taxes, and transfers influence the pace of convergence. As incomes rise, living standards converge between places where economic mass has concentrated and places where it has not. The challenge for governments is to allow—even encourage—“unbalanced” economic growth and yet to ensure “balanced” development in terms of quality of life and consumption levels. As suggested by the WDR 2009, East Asia can do this through economic integration:

by building density, reducing distance, and eliminating divisions.

Density and scale economies

The studies in this volume show that, as a country grows richer, location becomes more important for economic production. Put another way, as countries develop, production becomes more concentrated spatially, and location matters less for families but more for firms. In the early stages of development, such as in Vietnam, this means a gradual movement of labor out of agriculture and into industry and services and the beginnings of migration to the major production centers such as Ho Chi Minh City and along the coast. The ASEAN-3 exemplify an agglomeration process that is well advanced, as indicated by the dominance of their three major capitals, which account for as much as half of national GDP. The same process has now taken place in China, but over a much shorter time horizon in terms of the concentration of activity along the coastal provinces.

As illustrated for Indonesia (Kuncoro in chapter 10), China (He in chapter 16), and Korea (Park in chapter 19), as density rises and agglomeration economies become more dominant, industrial structures evolve. Regions, and areas within provinces, show a distinct pattern in the structure of their industries, moving from a more diversified base at lower income levels to a more specialized structure at more advanced stages, given the interplay of localization and urbanization externalities. Cities eventually become more specialized, with some focusing on capital-intensive production, others focusing on more technology-intensive production, and yet others shaped by the availability of resources and the proximity to consumer markets. In the process there is a role for both large diversified cities and smaller specialized cities.

As discussed earlier, agglomeration economies, exemplified by the concentration of production along coastal areas and in the major capitals of East Asia, have been nurtured by the forces of globalization, as indicated by the rapid growth in trade of intermediate goods and the development of regional production-sharing networks (Hamaguchi in chapter 1). Those countries

and those areas within countries that have been participating more actively in this process also have benefited the most in terms of growth and employment generation.

Broadly speaking, rising density allows a country to realize the externalities of bringing producers together and linking production to dense consumer markets. Economic development thus brings with it the conditions of even greater prosperity, creating a virtuous circle. Neighborhoods also matter. A prosperous city like Seoul or Shanghai seldom leaves its periphery mired in poverty. A province's prosperity is sooner or later shared with those nearby. Thus the evidence shows that, over time, spillover effects occur, nurtured in part by the higher congestion costs of large cities.

How these clusters form and whether they become innovative enough to spur growth can determine why countries prosper or lag behind, as Otsuka and Sonobe discuss in chapter 2. They point out that the formation of industrial clusters is vital for information spillovers and lowers transaction costs among enterprises and traders. As innovation possibilities are enlarged, sustainable growth of industries becomes possible. Their case studies show that such clusters have spurred industrial development in a number of East Asian countries, such as China, Japan, the Philippines, and Vietnam.

Overall, the impact of density is illustrated by rising urbanization, which correlates well but not strictly with a country's stage of development and pattern of growth. For low-income countries like Lao PDR and Vietnam, urbanization rates cluster around 20–25 percent. The rate rises to around 40–60 percent for the middle-income countries in ASEAN and China and then to as high as 80 percent for Korea. Thus a distinguishing aspect of the East Asian success story and the role of economic geography is the rapid pace of urbanization.

Distance and factor mobility

Location is the most important correlate of a person's welfare, and choice of location—proximity to markets and other producers—will often determine whether a firm succeeds

or fails. Reducing distances has been fundamental to East Asia's economic success over the past several decades. The impact has been felt at three levels: regional, national, and local. At the regional level, declining transport costs and improved logistics gave rise to the production-sharing networks that underpin the region's explosive growth in the trade in parts and components (Hama-guchi in chapter 1). This has made possible the attainment of economies of scale even for small enterprises and facilitated industrial expansion across a broader range of technology-rich products not only in China but also in the middle-income economies of Southeast Asia and now even in low-income economies like Vietnam.

At the national level, improved transport links have influenced the location of firms and promoted more diversification and specialization in industrial structures. As Huang and Luo discuss in chapter 13, China's impressive performance in expanding trade and restructuring its industries was greatly facilitated by a massive investment program that upgraded its transport network. This partly explains why China is ranked so highly in terms of its competitiveness. In contrast, as Balisacan, Hill, and Piza note in chapter 11, the disappointing economic performance of the Philippines may be partly due to its very low rankings in terms of the quality of its infrastructure.

Over time, the reduction of distance will reshape the industrial composition of production and its location in major cities, as industries that are less dependent on "national" versus "local" agglomeration economies move to lower-cost centers. Also, industries relocate to gain better access to external markets or natural resources. This pattern is especially true for China (He in chapter 16; Yueng and Shen in chapter 18), but it is also exemplified by the experiences of Indonesia, the Philippines, Thailand, and Korea (Hill, Resosudarmo, and Vidyattama in chapter 8; Kuncoro in chapter 10; Balisacan, Hill, and Piza in chapter 11; Wisaweisuan in chapter 12; Park in chapter 19). Yet the impact of reducing distances is not just a force that shapes industrial expansion; it can also be vital at the local level in linking rural markets (Yamauchi and others in

chapter 4) and essential for low-income, landlocked countries (as indicated by Ohno in chapter 3 on Lao PDR).

Divisions

How significant are the divisions that separate nations for reducing economic efficiency? The WDR 2009 elaborates on these issues: differing incentive regimes in the form of divergent tariffs, tax, and investment systems often distort the spatial location of firms and their access to markets. These distortions lie behind the global efforts to achieve more integration through bilateral and multilateral trade agreements and more comprehensive arrangements such as the European Community and ASEAN. In this volume, however, the focus is largely on internal divisions such as provincial boundaries and the barriers that differing ethnic, religious, and geographic circumstances create.

For the large and more diversified countries such as China, Indonesia, the Philippines, and Thailand, internal administrative boundaries (for example, provincial and district borders) can matter as much as the existence of mountains, deserts, and islands. Internal administrative boundaries can lead to the same kinds of inefficiencies that occur with international borders, if they lead to differential access to resources or impede the flow of factors of production. Geographic formations can have a similar effect in terms of discouraging factor mobility and creating protective barriers for local industries. As described in previous chapters, these situations appear to have played a significant role in shaping developments in countries like China, Indonesia, the Philippines, and Thailand. The case of large archipelagic nations like Indonesia and the Philippines may present special challenges, encouraging more self-sufficient industrial structures for each of the major islands, but in the process making it more difficult to achieve agglomeration economies and the benefits of specialization. Rigidities in the movement of labor can also be a problem, as illustrated by the unique *hukou* system in China. The solution lies partly in eliminating artificial barriers to the movement of goods and factors of production and

partly in improving connectivity through infrastructure investments.

Cross-border divisions are even more important. Two special cases are addressed in this volume. Bhaskaran, in chapter 5, analyzes the potential benefits that could be gained from greater cooperation and cross-border flows of resources between Malaysia and Singapore. Both countries have done well over the past several decades, but both would benefit greatly from a policy of more seamless collaboration. This would create a much larger and diversified market and greater economies of scale. Given their differing endowments of land, capital, and service-related skills, both would be able to realize efficiencies and more rapid growth, while avoiding duplication of costly infrastructure and wasteful competitive investments. However, while the economic benefits are obvious, the politics of collaboration may result in an insurmountable barrier.

As Rigg and Wittayapak discuss in chapter 6, the subregion with the most significant cross-border spillover of poverty is the Greater Mekong subregion, which includes Cambodia, Lao PDR, Thailand, Vietnam, and Yunnan province in China. Given the major logistical challenges presented by the numerous hills and rivers and the presence of numerous ethnic communities, the concerned governments have launched a comprehensive program to promote collaboration and ensure that the development of vital resources with cross-border consequences such as water and energy is in keeping with the interests of everyone. At the heart of this initiative is the effort to promote more connectivity in the form of a network of highways and improved border logistics so that cross-border trade and related production are encouraged. These benefits can be substantial, but, as the authors point out, there are also costs involving those whose situation might be made worse by the integration process.

What to do: the role of government policies

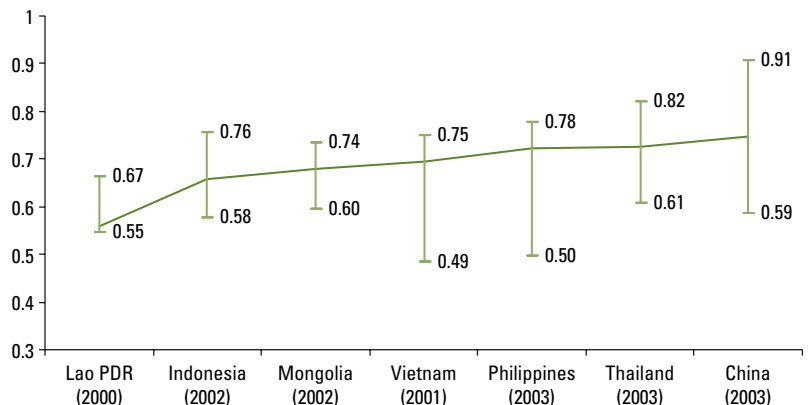
The key message of the WDR 2009 is that policy makers should aim to build density, reduce distance, and eliminate divisions. The consequence will be uneven growth, but, with

appropriate policies, more inclusive development will come, sooner rather than later.

However, as seen throughout all the papers in this volume, governments are under enormous pressures to deal with perceptions—real or imagined—about increasing disparities, which in most cases have a spatial dimension. At the national level this is exemplified by indicators like the Gini and Theil coefficient (table 20.1) and by wide spatial variations in welfare indicators (see figure 20.1). Disparities increase most rapidly in the earlier stages of development, typically below per capita incomes of US\$3,500, when the forces leading to concentration in production are the greatest (WDR 2009). By the time countries reach the upper middle-income levels of around US\$10,000, they tend to moderate.

Most disparities are in some sense undesirable from a social perspective. If unchecked, they can lead to pressures that ultimately could jeopardize otherwise successful development processes, but there are so-called “good” and “bad” disparities. In a successful transformation from developing to developed status, inequality almost always surfaces, as the population moves from lower-productivity agriculture to higher-productivity urban activities. There is then a lengthy period of rising inequality overall, as the share of higher-paid urban workers increases relative to the less-well-off rural population. Ultimately, however, with labor migration and industrial spillover effects to

Figure 20.1 Provincial disparities: human development indexes in East Asia



Source: Gill and Kharas (2007).

Note: The connected line shows the highest and lowest national values of the human development index for each country.

peri-urban and rural areas, disparities begin to decline. As documented in the WDR 2009, this has been the experience of developed countries. Also, the more successful a country is, the shorter is the compression of this transition, as illustrated by the case of Korea. If this is the nature of “good” disparities, then “bad” disparities emanate from situations where growth stagnates for long periods of time or policies tend to restrict access to opportunities and resources to a select few. The solution is a more inclusive development process, to reach a broader range of society.

For most countries, significant regional or locational aspects characterize disparities. As discussed in nearly all of the chapters, governments often feel the need to give priority in the allocation of resources to rural areas or lagging regions. In some cases, ethnicity is a factor. The special needs of relatively poor ethnic communities that inhabit isolated and often mountainous areas are exemplified by the situation in the hills and mountains of Vietnam, Thailand, Lao PDR, and the western region of China and in communities spread among the many islands in Indonesia and the Philippines.

What is the message, then, about dealing with the pressures for more “balanced” social outcomes given the benefits of an agglomeration process that contains the promise of more rapid growth? The solution is to promote economic integration while also nurturing more inclusive social development in the process. The market forces of agglomeration, migration, and specialization can, if combined with progressive policies, yield both a concentration of economic activity and a convergence in living standards.

Governments typically have a range of instruments with which to achieve this objective. These broadly fall into two categories: promoting connectivity by linking markets and improving factor mobility and ensuring that all families, regardless of their location, are provided with roughly equal access to social and public services. In these country studies, two instruments stand out in terms of how governments have been dealing with spatial factors: (a) fiscal programs that support infrastructure and provide social services and (b) spatially targeted programs.

Fiscal programs

The evidence from both the developed economies and the recent experiences in East Asia show that the most successful countries institute policies that make basic living standards more uniform across space. Because budgetary resources are invariably constrained—and richer regions tend to be better able to collect revenues—the degree to which governments can redistribute in favor of poorer regions varies considerably across countries and over time. Moreover, for the larger countries, decentralization and the role that subnational layers of government play can be instrumental in implementing these objectives.

Throughout East Asia, fiscal decentralization has gained momentum over the past decade. While different structural and political imperatives propelled the process in different countries (ranging from regime changes in Indonesia and the Philippines, to the transition to a market economy in China and Vietnam), the share of subnational government spending has risen to significant, though varying, levels (see figure 20.2).

However, while fiscal decentralization has progressed, subnational fiscal disparities remain persistently large. There are significant differences in revenue capacity across local governments, reflecting the underlying large variations in their economic and resource base. Vertical imbalances between subnational revenues and expenditures are sought to be filled through transfers from the central government, but such transfers have not gone far in addressing horizontal inequality. Transfers from the central government reduce the disparities in per capita revenues, but often not by much (see figure 20.3). As a consequence, there are large disparities in per capita local government spending across lower levels of government in countries like Indonesia (Arze del Granado in chapter 9), the Philippines (Balisacan, Hill, and Piza in chapter 11), Thailand (Wisawesuan in chapter 12), and China (Huang and Luo in chapter 13).

The potential to use fiscal transfers and social expenditures to reduce disparities thus depends partly on a country’s overall fiscal position, the rules that determine how resources are cascaded down to lower levels, and often the politics involved. However,

decentralization can also be misused as an instrument, for example, if resources are directed to encourage industrial expansion in areas that are not suitable (Arze del Granado in chapter 9; Kuncoro in chapter 10).

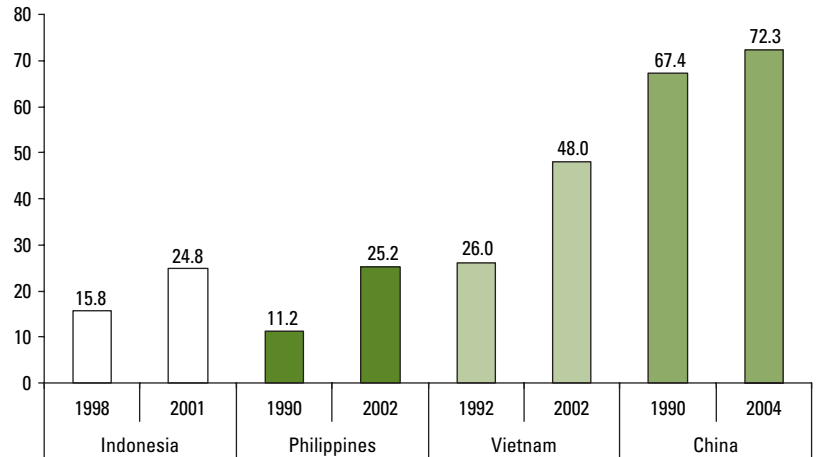
In addressing disparities, the focus is usually on influencing the pattern of social expenditures, such as health, education, and social protection. As indicated in the WDR 2009, such policies should be “spatially blind,” in the sense that the objective is to provide the same level of social services to all, regardless of location or, taking it one step further, to aim for similar social outcomes for all, regardless of location. This may mean providing extra resources to serve hard-to-reach or high-cost areas. Moreover, a spatially blind policy does not necessarily mean that programs are similar in design for all regions. The reality may mean that, in diverse spatial settings, differentiated approaches may be necessary to realize similar outcomes.

Infrastructure investments, particularly those relating to transport, are usually not perceived as a vehicle for addressing disparities, although they are seen as fundamental for reducing distances, promoting density, and bringing down divisional barriers. As such, infrastructure is the basis for promoting national economic integration. Often overlooked, however, is that such expenditures also can be an important factor in reducing poverty and moderating disparities. As exemplified in the case of China, improved connectivity, which facilitated the movement of rural labor to more productive employment opportunities, mostly in urban areas, is an effective way to reduce poverty. However, the impact on poverty and regional disparities can also be more subtle. Transport investments that reduce the logistics costs of traded goods whose prices are established by national or global markets allow wages to be higher for workers who are farther away from consumer markets.

Spatially targeted interventions

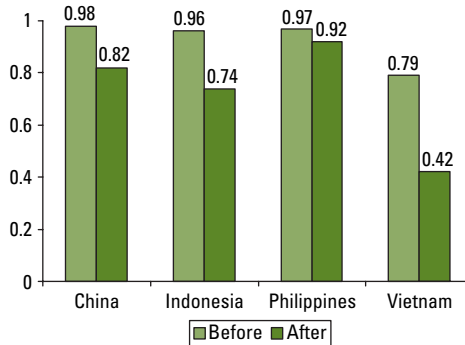
Practically all developing countries have some spatially targeted interventions. The WDR 2009, however, suggests that many of these programs turn out to be ineffective, particularly if they attempt to redirect pro-

Figure 20.2 Share of subnational government expenditure in total government expenditure in East Asia during the 1990s



Source: Gill and Kharas (2007).

Figure 20.3 Coefficient of variation in provincial per capita revenues before and after transfers in select East Asian countries



Source: Hofman and Guerra (2005).

duction to areas where market forces would render such activities uncompetitive or unsustainable. These efforts often include incentives to promote new industrial activities in lagging regions or to concentrate more production in rural areas. But they also can involve special efforts to deal with the problems of slums in mega cities.

In Indonesia, the success of such efforts to encourage industries to relocate to less-congested areas or lagging regions has been mixed. Similar efforts have been tried in other countries, including China and the Philippines. Firms that depend on localization externalities might find it attractive to move from high-cost centers in major urban areas

to smaller, specialized cities, but in some cases incentives are not enough to overcome their reluctance to relocate (Otsuka and Sonobe in chapter 2; Arze del Granado in chapter 9; Kuncoro in chapter 10; He in chapter 16; Bai and Lin in chapter 17).

Spatially targeted programs in many East Asian countries are often designed to provide special support for rural areas and may be warranted if there are biases favoring major urban centers (Balisacan, Hill, and Piza in chapter 11; Wisawaisuan in chapter 12). For low-income countries such as Vietnam, the potential for increasing agricultural productivity is often substantial, and thus programs to tap this potential are attractive. At the same time, as the country develops, labor will gradually move out of agriculture, and, as Son suggests in chapter 7, efforts to strengthen connectivity between rural and urban areas and to link factor and goods markets are attractive options. In middle-income countries where crop yields are already relatively high and land resources are scarce, the strategy should be to encourage more off-farm employment and, if the employment opportunities exist, migration to urban areas.

Spatially targeted interventions may also be needed to equalize opportunities to access education and health services. The benefits of such programs are enhanced by the fact that a healthier and more skilled labor force produces benefits that are “portable”; that is, they move with the person and thus do not carry the same risks as investments in fixed assets.

More controversial are targeted development programs for lagging regions, which often are designed to concentrate more production mass in those areas. The experience with such programs is often not satisfactory, especially if they run counter to market forces and the limitations brought on by geographic endowments. But if programs are designed to reflect the realities of the situation in lagging areas and, as in the case of China, custom tailored because of differing regional needs, they can be a sensible complement to other policies, which continue to promote growth-enhancing agglomeration effects (Huang and Luo in chapter 13; Yao in chapter 14).

Future trends in spatial disparities and links with development

Sustained growth eventually will raise all incomes regardless of location and, in time, will provide access to social services and equitable living standards. But the process can be lengthy and often disruptive. In the case of China, simulations suggest that, with good policies and continued rapid growth, income inequalities may begin to decline in a decade or so but, with less successful policies and outcomes, may take several decades (Huang and Luo in chapter 13). The reasons lie in the complexities of the growth process: the interplay between the structure and spatial location of production, the implications for labor mobility, and differential earnings of workers by industry and location.

Thus spatial disparities in production appear to be inevitable and, within countries, even desirable, but policy makers in East Asia can do better in moderating the rising disparities in living standards that accompany the growth process. Doing so means that they need to overcome the many challenges in making their fiscal systems and institutions more effective in providing basic services for a broader spectrum of society, especially in disadvantaged areas, while also improving connectivity between leading and lagging regions.

In most of developing East Asia, income inequality will likely continue to increase in the future, although the rate of deterioration appears to be moderating in the middle-income countries. As economies develop, such disparities will diminish, but only slowly and never completely. This concentration should be viewed with patience, because it brings spatial efficiency. But with more inclusive public expenditure programs and stronger institutions—which reinforce the forces of agglomeration, migration, and integration—countries can be both spatially efficient and equitable.

Notes

1. For many countries, the key period for widening inequalities was from 1960 to 1990, as they moved from low- to middle-income status. However, comparable data across countries are not readily available for that period.

2. See the editors' preface to this book for a more detailed discussion of these concepts.

3. In their analysis of growth determinants and impact on poverty, Balisacan, Hill, and Piza find that the low growth rates largely explain the poor performance in poverty reduction, but even the growth achieved did not have as much of an impact on poverty reduction in the Philippines as it did in other countries, suggesting that how the targeted programs are formulated may need to be reconsidered.

4. As noted in the literature, the mere existence of borders separating countries creates inefficiencies, as exemplified in the studies on the implications for Canada and the United States.

5. The Philippines ranks 89 out of 102 countries regarding the quality of its infrastructure performance in the *Global Competitiveness Report* (World Economic Forum various years).

6. Officially, these workers must retain their official residency in their home province and, in most cases, leave their family behind. Normally, they return to their home province for major holidays and as needed.

7. This was typical of the problems that transition economies faced in moving to a more market-based economy, with revenues depending on taxes rather than surpluses of state-owned enterprises. In the interim, the revenue base of most centrally planned economies typically collapsed.

8. This section draws extensively on the editors' preface in this volume.

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