CHAPTER 1

GROWTH, GRAVITY, AND FRICTION

Recent theoretical advances may help explain the causes, consequences, and policy implications of the economic transformation that has made East Asia a predominantly middle-income region.

New Challenges, Fresh Insights

East Asia is a completely different region today compared to the place studied in *The East Asian Miracle* (World Bank 1993). In analyzing the rise of eight high-performing Asian economies, which did not include China, *The East Asian Miracle* pointed to strong fundamentals, international integration, and good government as the key factors of success in East Asia. But three subsequent developments necessitate a reexamination of East Asian growth: the biggest economic crisis of the 1990s, which showed that the governments were anything but infallible; the rise of China, the biggest economic development story of the 1990s; and the expansion of East Asia's cities fueled by the biggest rural-to-urban shift in population during the 1990s. The meteoric rise of China, the growing concentration of trade and investment flows within Asia, the sharp financial crisis of the 1990s, and the rapid growth of cities all reflect a vastly different reality, a richer middle-income region than the one at the beginning of the 1990s (see map 1.1).

This report, like three other World Bank studies since 1993 (see box 1.1), is a contribution to the debate on how development strategies should be adapted in response to such changes. This chapter outlines the changes in the region since 1990 and compares them with what has happened in other parts of the world. It then provides a summary of developments in economic theory that may help in determining the causes, consequences, and—with additional country-specific work—policy implications of these changes.

BOX 1.1 Once Every Four Years: World Bank Regional Studies on East Asia

Since the early 1990s, the World Bank has completed a major study of East Asian growth every four years: *The East Asian Miracle* (World Bank 1993), *Lessons from East Asia* (Leipziger 1997), and *Rethinking the East Asian Miracle* (Stiglitz and Yusuf 2001). The frequency befits the most dynamic region in the world. Each of these efforts has been different in nature, and this book again differs in both focus and format from the three previous World Bank publications.

The East Asian Miracle emphasized export-led growth, rapid capital accumulation, skill-building, capable governments, and contestable private sectors. The differences between *The East Asian Miracle* and this report may be summed up in three points:

- First, while the 1993 report analyzed growth in eight high-performing Asian economies (Hong Kong [China], Indonesia, Japan, the Republic of Korea, Malaysia, Singapore, Taiwan [China], and Thailand), there was no explicit attempt to explain the experience of these countries in *regional* terms. While the report recognized that the countries learned from each other and, hence, adopted a pragmatic blend of market fundamentals and government intervention, there was no economic analysis of "neighborhood effects." The eight countries in *The East Asian Miracle* might have been anywhere; they happened to be in East Asia. In contrast, regional or neighborhood factors are a central feature of this book.
- Second, *The East Asian Miracle* deliberately omitted the growth experience of China since China was so different from the eight high-performing Asian economies. The implications of China's rapid rise are a central issue in this book precisely because China is so different from the other East Asian countries.
- Third, the aim of the 1993 report was to help other regions learn the lessons of rapid growth in East Asia and, by extracting general, transplantable lessons, inform the development debates current at the time. This book is also intended to inform the debates on *regional integration in East Asia* that have become widespread in the region since the financial crisis of the late 1990s.

Lessons from East Asia consisted of country case studies. It attempted to examine how public policy lessons permeated the borders between countries in the region and to explain the adoption of development approaches with common elements in countries that were so different, such as postconflict Japan and Korea, small states such as Hong Kong (China) and Singapore, and postcommunist China and Vietnam. However, *Lessons from East Asia* did not stress the economic links within the region that are a central part of this book.

Rethinking the East Asian Miracle aimed at addressing questions raised by several commentators who, prompted by the financial crisis of 1997–98, were skeptical of the durability of the East Asian development approach. *Rethinking the East Asian Miracle* consisted of essays on several issues central to this report: trade, foreign direct investment, technology, industrialization, corporate governance, and regional trade and monetary arrangements. This book reexamines many of these issues, but systematically uses the insights afforded by recent advances in economic thought outlined below.

East Asia is being transformed from a set of countries that rapidly integrated with the world to a region that is aggressively exploiting the sources of dynamism that lie within Asia. Just as the region was drawn earlier to the developed world by prospects of a mutually beneficial exchange of goods, capital, and ideas, different parts of the region are now being pulled toward each other by the same motives and modes. The result is rapid regional integration in the exchange of

goods, capital, and ideas that rivals the regional integration in the European Union and in North America. (The next section presents a brief overview of these developments.)

This integration is the main source of dynamism in the region and has given the region a second breath. But it is also a source of growing economic contagion. The East Asian crisis was the most visible reflection of this contagion, and it was a reminder that the transition from middle-income to high-income status is rarely linear. The experiences of countries in Eastern Europe and Latin America that have had periods of high growth make clear that developing countries will inevitably face pitfalls. Such pitfalls have slowed down some countries and have derailed most others.

In a high-performing region such as East Asia, it is perhaps easier to think of what is *not* a potential pitfall. Fiscal prudence is now almost a habit and is likely to remain one. Competitive exchange rates are seen by countries in the region as an important building block of economic policies to sustain growth, as is low inflation. Financial sector pitfalls have been faced and, by and large, recognized by most countries in East Asia. Labor market flexibility was long recognized as necessary and remains a policy priority. High savings rates are still ingrained in household and corporate behavior. The list of the region's strengths is long.

Latin America's prospects in the early 1970s as the region's countries entered middle-income status were similarly bright, but many Latin American economies have since disappointed. This report emphasizes three potential pitfalls—listless cities, conflict-ridden societies, and corrupt governments—that East Asia should take care to avoid.

As the challenges posed by economic development have changed, so too have the analytical tools available to development economists. An academic literature that has burgeoned since the publication of *The East Asian Miracle* emphasizes unexhausted economies of scale as a central force driving industrial organization, international trade, the geographical concentration of economic activity, and economic growth. While the new international trade theory was developed during the 1980s, empirical support—a prerequisite if a theory is to be taken seriously by serious policy makers—for its central propositions came more than a decade later. Developed during the 1990s, the new economic geography, which may be viewed as an extension of both international trade and growth theory, has utilized economies of scale as a central precept to understanding spatial differences and the role of cities. And, while endogenous growth theory emerged in the late 1980s, it has become sufficiently refined to be of use for development policy only since the 1990s.

All these insights are useful in disciplining investigations of East Asian economic growth, but, given its timing, *The East Asian Miracle* could not make full use of them. The debates of the period centered on whether the results yielded by government intervention are better than those provided by unfettered markets, and the report made a qualified case for selective government intervention. In fact, as pointed out by Krugman (1998), the type of economy outlined in the literature on increasing returns makes for a tempting target of government intervention. There is no presumption that the market will get it right. In some circumstances, small policy interventions may have large effects, and processes of concentration tend to produce winners and losers. So, there is an obvious incentive for governments to ensure that their countries emerge as winners.

Nevertheless, it remains difficult to draw general policy implications from even this body of thought. A background paper for this book (Gill, Hariharan, and Kharas 2006) discusses how the combination of new trade theory, new growth theory, and new economic geography yields several implications for public policy. Elsewhere below, this chapter summarizes relevant findings.

East Asia Since the Early 1990s: Selected Facts

The East Asia region has grown more rapidly and more steadily than any other region in the developing world during the last quarter century. As a result, by 2010, more than 95 percent of the region's population will be living in middle-income countries. A second key point is that intraregional trade and investment flows have grown more rapidly in East Asia than have the region's trade and financial links with the rest of the world. The most important reasons for this have been China's rapid rise, large size, and expanding relations with the rest of the world. A third point is that, in contrast to what was once considered East Asia's hallmark, growth with equity, recent economic growth has generally been accompanied by rising inequality. The aspects of development that have been receiving the most attention are a widening gap in incomes and living standards between less well educated and more well educated workers and between rural and urban residents.

Growing to Middle-Income Status

The developing countries of East Asia (in this chapter, only Japan is excluded in this grouping) have grown rapidly and resiliently during the last two decades, even if account is taken of the crisis of the late 1990s. The region is unique today in that it encompasses high-income, middle-income, and low-income countries.

The most resilient region. Over the last quarter century, during any five-year period, no other part of the world has grown more rapidly than East Asia. East Asian gross domestic product (GDP) per capita averaged between 5.5 and 8.0 percent during this time, and GDP growth ranged between 6.8 and 9.4 percent (see table 1.1). In the developing world, only South Asia's growth record comes close to matching East Asia's in terms of strength and resilience.

Even over a longer period, after accounting for year-to-year fluctuations such as the crisis of the 1990s and after broadening the comparison to include developed countries, East Asia's performance stands out as remarkably strong and steady. Table 1.2 catalogs, for some of the world's regions and for selected East Asian countries (China, Indonesia, Malaysia, the Philippines, and Thailand), the number of years between 1966 and 2004 during which per capita GDP growth was negative, between 0 and 2 percent, and above 2 percent. As may be seen, the East Asian region had negative growth only during two years.

Maddison (2003) estimates that East Asia's share of world GDP (adjusted for purchasing power parity) was about 40 percent between the years 1500 and 1800 and peaked in 1820. By 1950, the share was less than 15 percent. Today, the share is about 33 percent. If the world continues to grow at the same annual rate registered during the past four decades, that is, about 3.6 percent, East Asia GDP must grow at between 6 and 7 percent per year to regain the peak share of 42 percent by about 2025.

The most diverse region. While regional groupings are somewhat arbitrary, cross-country comparisons of per capita income trends and levels may be instructive.

TABLE 1.1 **East Asia Has Been Growing More Rapidly Than All Other Regions**
percent GDP growth, 1980–2004

Region	1980–84	1985–89	1990–94	1995–99	2000–04
East Asia and Pacific	7.2	7.8	9.4	6.8	7.2
Latin America and the Caribbean	1.4	2.2	3.6	2.4	2.2
Europe and Central Asia	—	—	–5.2	2.0	5.2
Middle East and North Africa	3.8	1.2	4.6	3.4	4.4
South Asia	5.4	6.0	5.0	5.8	5.6
Sub-Saharan Africa	1.6	2.4	0.6	3.6	3.4

Sources: World Development Indicators Database, World Bank, http://www.worldbank.org/data/datapubs/datapubs.html; Global Development Finance Database, World Bank, http://www.worldbank.org/data/datapubs/datapubs.html.
Note: — = no data are available.

TABLE 1.2 **East Asian Growth Has Been Strong and Steady**
per capita GDP growth, percent, 1966–2004

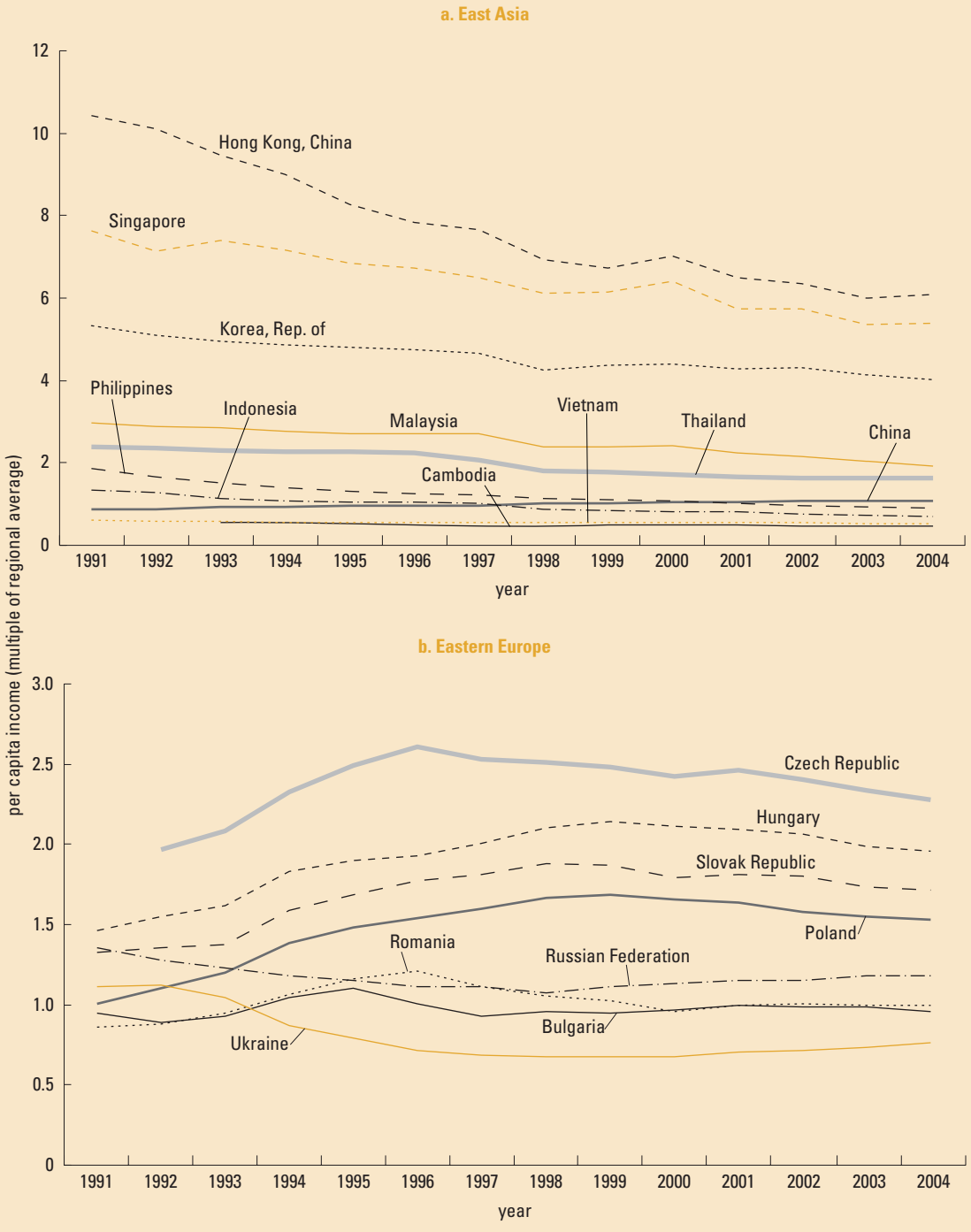
Region	Growth	Number of years in which the rate was:		
		Negative	0–2%	Above 2%
East Asia and Pacific	5.77	2	3	34
China	7.00	3	3	33
Indonesia	4.03	4	3	32
Malaysia	3.95	5	3	31
Philippines	1.28	6	21	12
Thailand	4.79	3	5	31
Latin America and the Caribbean	1.46	10	15	14
Middle East and North Africa[a]	1.23	8	13	9
South Asia	2.56	1	12	26
Sub-Saharan Africa	0.18	14	20	5
OECD[b]	2.49	0	18	21

Sources: World Development Indicators Database, World Bank, http://www.worldbank.org/data/datapubs/datapubs.html; Global Development Finance Database, World Bank, http://www.worldbank.org/data/datapubs/datapubs.html.
a. Data for Middle East and North Africa are from 1975 to 2004.
b. OECD = Organisation for Economic Co-operation and Development.

Figure 1.1, which plots the ratio of the incomes of selected countries to the respective regional average, shows that the developing nations of East Asia are the most diverse among nations in all regions. Combined with geographical proximity and noneconomic similarities, this diversity may be an important factor in the mutually beneficial exchange of goods, finance, and ideas.

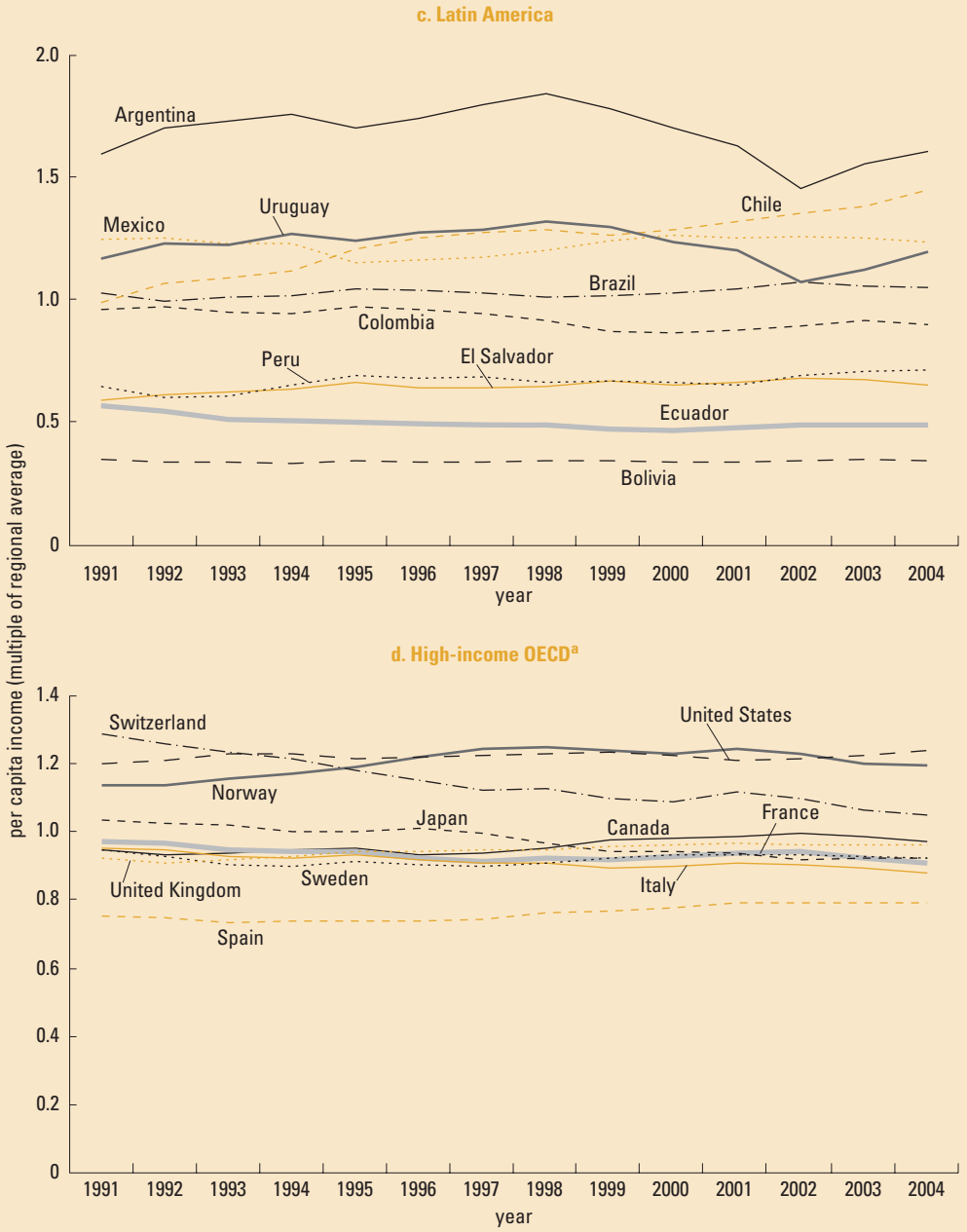
Figure 1.1 also shows a rapid "club convergence" in developing East Asia (chart a). Most importantly, perhaps, the ratio of China's income to the East Asian average rose from 0.86 to 1.09 between 1991 and 2004. The largest changes were recorded by the richest countries: Hong Kong (China), Korea, and Singapore. Indonesia and the Philippines slipped from above the regional average to below. But, despite this convergence, per capita income in 2004 ranged from about US$27,000 in Hong Kong (China) and US$24,000 in Singapore to US$15,000 in Taiwan (China) and US$14,000 in Korea and to almost US$5,000 in Malaysia, about US$2,500 in Thailand, US$1,400 in China, US$1,100 in Indonesia and the Philippines, US$600 in Mongolia and Vietnam, and about US$400 in Cambodia and the Lao People's Democratic Republic. In other words, Hong Kong (China) still has a per capita income that is about 60 times that of Cambodia.

FIGURE 1.1 **Developing East Asia Is the Most Diverse Region**



(Continued)

FIGURE 1.1 **Developing East Asia Is the Most Diverse Region (*Continued*)**



Sources: Calculations of the authors based on World Development Indicators Database, World Bank, http://www.worldbank.org/data/datapubs/datapubs.html (August 2005); Global Development Finance Database, World Bank, http://www.worldbank.org/data/datapubs/datapubs.html (August 2005).
Note: The figure shows per capita income as a multiple of the respective regional average.
a. OECD = Organisation for Economic Co-operation and Development.

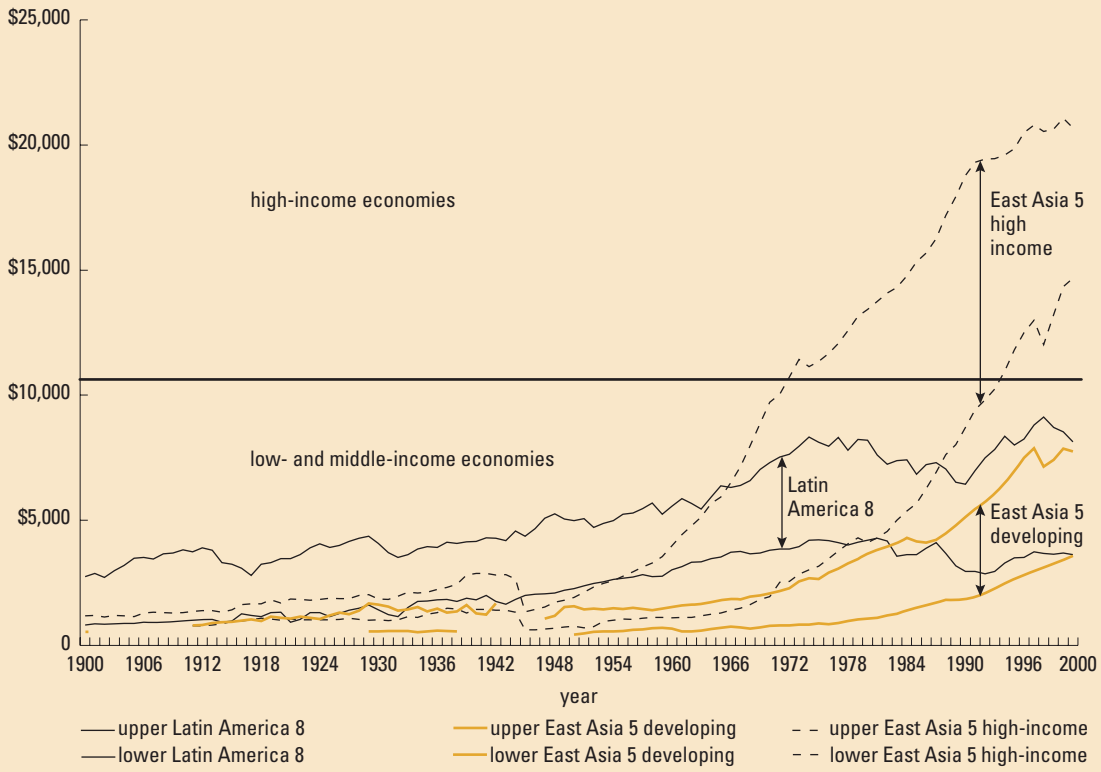
A region that will soon be mostly middle income. The median East Asian is already a citizen of a middle-income country. China, Indonesia, Malaysia, the Philippines, and Thailand all have per capita incomes between US$1,000 and US$10,000.[1] With Vietnam's per capita income expected to rise above US$1,000 by 2010, about 90 of every 100 East Asians will be living in a middle-income country, and, at current growth rates, fewer than 25 million of a total of about 2 billion East Asians will be living below the poverty line by 2020.

So, while this report is about all of East Asia, it is especially about the development challenges faced by middle-income countries. The focus is deliberate. During the last 50 years, many countries have moved from levels of income that are associated with abject poverty to levels that have earned them middle-income status. But, during this time, outside of Europe, only a handful have gone from low-income to high-income status. The part of the world that has been most disappointing is Latin America, where many countries reached middle-income levels and then, essentially, stopped growing. And the part of the world that has most notably defied this tendency is East Asia, where four of the most prominent high-performing economies are found: Hong Kong (China), Korea, Singapore, and Taiwan (China).

Figure 1.2 plots the per capita income levels of three groups of countries between 1900 and 2000: the eight largest Latin American countries that have reached middle-income levels (Argentina, Brazil, Chili, Colombia, Mexico, Peru, Uruguay, and the República Bolivariana de Venezuela), five East Asian economies that have reached high-income levels (Hong Kong [China], Japan, Korea, Singapore, and Taiwan [China]), and the five middle-income countries in East Asia (China, Indonesia, Malaysia, the Philippines, and Thailand). Figure 1.2 illustrates two noteworthy developments. The first is that, by the early 1970s, while the range of incomes differed considerably between the high-income East Asia Five and the Latin America Eight, the average per capita income of the two groups was roughly the same: about US$5,000. The second is that, by the early 2000s, the developing East Asia Five had caught up with the Latin America Eight, where the average per capita income had not changed much since the 1970s. Coincidentally, the range of incomes for the Latin America Eight and the developing East Asia Five was almost identical in 2000.

It is logical for policy makers in other East Asian countries that are attaining middle-income status to ask what the five Asian leaders did to transit successfully through middle-income stages of development, what the Latin America Eight did wrong, and what today's middle-income countries in East Asia might do to ensure

FIGURE 1.2 **A Second Group of East Asian Economies Has Caught Up with Latin America**



Source: Maddison 2003.
Note: The figure shows the growth in the range of per capita incomes within three groups of economies: the high-income East Asia Five (upper limit and lower limit), middle-income East Asia Five (upper limit and lower limit), and the large, middle-income Latin America Eight (upper limit and lower limit). See the text for a more detailed description.

a future that is more similar to the situation among their successful neighbors than among the countries across the Pacific.

Being Pulled Together by China

Many of these favorable patterns are simply a reflection of China's size. After all, about two-thirds of all East Asians live in China. But this is not the full story: China accounts for less than one-quarter of East Asia's gross national income of US$7,150 billion; Japan still weighs in with more than two-thirds. What has been

happening in East Asia since the early 1990s has been the spreading out of the supply chain, and China is the destination of choice.

China's rise spurs regional trade integration. East Asia's share of world trade has increased from about 10 percent in the 1970s to more than 25 percent today, overtaking the North American Free Trade Area's share of about 20 percent and closing the gap with the European Union that still accounts for about one-third of world trade. Intraregional trade was only 35 percent of East Asia's trade in 1980; by 2004, this share was about 55 percent, second only to the European Union's intraregional share of 60 percent. A rapid rise of global trade, a steady rise in East Asia's share of world trade, and a big increase in the share of intraregional trade in East Asia all add up to a huge increase in the absolute amount of intraregional trade (see table 1.3). While GDP in the region has risen an average of almost 8 percent per year since 1980, intraregional trade has increased by more than 13.5 percent annually.

The growth of intraregional trade has been accompanied by the rising importance of intraindustry trade among East Asian countries. Between 1990 and 2004, the share of interindustry trade in the regional total fell from about 45 to 22 percent, and that of intraindustry trade rose from 55 to 78 percent. Related to this is the development of regional production and distribution networks in East Asia that, according to Ando and Kimura (2003), are both distinctive and relatively sophisticated compared with networks in other parts of the developing world. One indicator of the extent of these networks is the importance of parts and components in regional trade. Okamoto (2005) finds rapid growth in the trade in parts and components in the region between 1990 and 2003 (see table 1.4).

Korea and Taiwan (China) emerge as regional technology influences. East Asian countries have made considerable progress since 1990 in intellectual property rights and research and development (R&D). One measure of technological effort is the number of patents registered with the United States Patent and Trademark Office. Developing East Asia still lags behind Japan and the United States, which account for about 20 percent and 60 percent of registrations, respectively, but it is nonetheless remarkable that the developing East Asia share in the total had quadrupled from less than 2 percent to almost 8 percent by 2004. In contrast, Eastern Europe and Latin America appear to have made no inroads.

An important driver of the generation of useful ideas and of technological progress is the gross expenditure on R&D. As shown in figure 1.3, East Asian

TABLE 1.3 **The Intraregional Trade Share Has Risen in High- and Middle-Income Countries**
share of intraregional trade, percent, 1995 and 2004

Country	Intraregional exports		Intraregional imports		Summary of trends	
	1995	2004	1995	2004	Exports	Imports
High income						
Japan	36	41	35	44	⇧	⇧
Korea, Rep. of	37	42	39	42	⇧	⇧
Singapore	46	47	55	55	⇳	⇳
Taiwan, China	28	43	47	55	⇑	⇑
Middle income						
China	32	26	48	51	⇩	⇧
Indonesia	51	58	47	53	⇑	⇑
Malaysia	48	49	56	61	⇳	⇧
Philippines	36	52	46	56	⇑	⇑
Thailand	52	55	44	47	⇧	⇧
Low income						
Cambodia	69	12	87	78	⇓	⇓
Lao PDR	61	38	69	85	⇓	⇑
Mongolia	32	55	29	41	⇑	⇑
Vietnam	64	40	69	72	⇓	⇧

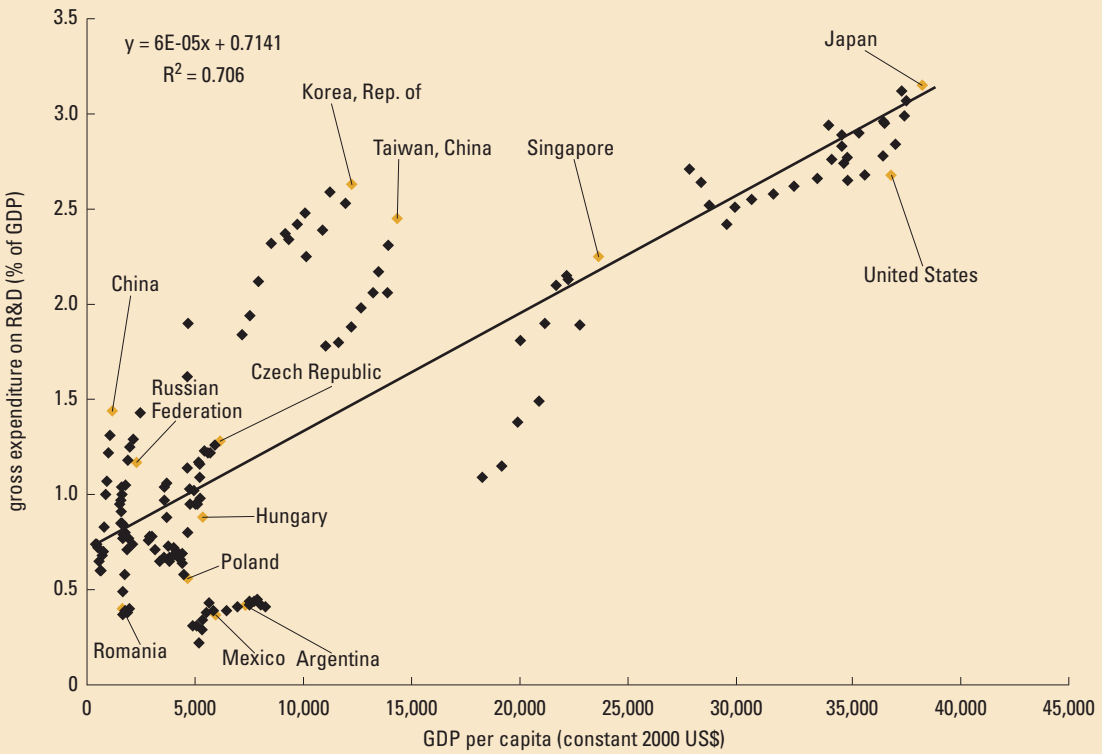
Source: Calculation of the authors based on Direction of Trade Statistics Database, International Monetary Fund and ESDS International, http://www.esds.ac.uk/international/access/access.asp.
Note: Black arrows indicate sizable changes; open arrows indicate a small or no change.

TABLE 1.4 **Parts and Components Have Become More Important in East Asia's Trade**
share of total trade, percent, 1990 and 2003

Country	Share of exports		Share of imports	
	1990	2003	1990	2003
China	4.1	15.1	16.1	27.2
Indonesia	0.8	9.1	15.2	13.5
Japan	22.9	32.6	6.4	15.3
Korea, Rep. of	15.8	28.0	16.6	23.0
Malaysia	19.5	39.5	26.0	47.9
Philippines	17.8	55.6	15.6	48.8
Taiwan, China	16.9	33.9	17.9	28.3
Thailand	11.3	22.1	21.6	26.0

Source: Okamoto 2005.

FIGURE 1.3 **China, Korea, and Taiwan (China) Are Outspending Their Peers on R&D**



Sources: OECD 2005; World Development Indicators Database, World Bank, http://www.worldbank.org/data/datapubs/datapubs.html (August 2005); Global Development Finance Database, World Bank, http://www.worldbank.org/data/datapubs/datapubs.html (August 2005).

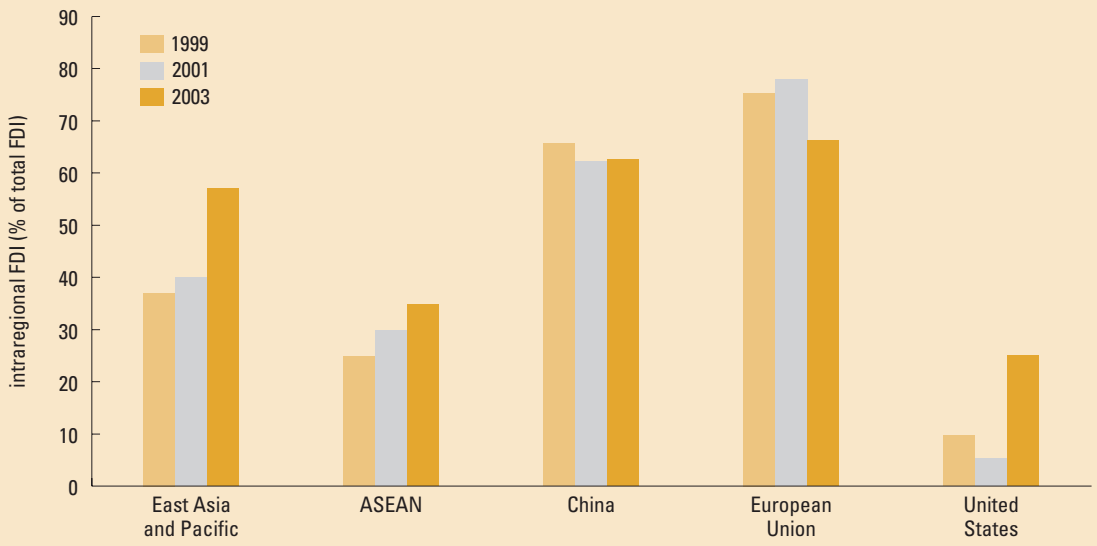
countries spend a greater share of their GDP on R&D than the average country in the sample; China, Japan, Korea, Singapore, and Taiwan (China) all lie above the line of best fit.

Hu (2006) finds strong evidence of the increasing regionalization of knowledge flows in East Asia. Korea and Taiwan (China), the region's leading innovators after Japan, have begun to cite each other's patents at least as frequently as they cite Japanese and U.S. patents. With the exception of Thailand, all the East Asian economies examined (China, Hong Kong [China], Malaysia, and Singapore) cite patents of Korea and Taiwan (China) as frequently as they cite patents of Japan and the United States. Clearly, intraregional knowledge flows have intensified substantially since the mid-1990s.

China and the crisis alter the flow of finances. The growth in intraregional trade has been accompanied by a similar expansion in intraregional FDI. While the evolution of intraregional FDI has been more volatile than that of trade, the trend over the past decade has been a positive one. Intraregional FDI as a share of total FDI had reached 57 percent by 2003. China is receiving about two-thirds of its FDI from other parts of East Asia, thus offsetting its growing trade deficit with these countries (see figure 1.4). These figures indicate that capital flows are an equally important driver of international integration in East Asia.

Like the trends in intraregional trade, there is considerable diversity within East Asia. Some countries, such as the Philippines and Thailand, saw increases in the share despite considerable volatility; some countries, such as Indonesia, experienced volatility without an increase in the share coming from within East Asia; this share fell for others, such as China and Korea, though it remained above 60 percent for China (see table 1.5).

FIGURE 1.4 **FDI Flows within East Asia Have Increased Since the Financial Crisis**



Sources: UNCTAD 2003; Eurostat 2005; data of the U.S. Bureau of Economic Analysis (http://www.bea.gov/); China, National Bureau of Statistics 2005; ASEAN 2004; Rana 2005.
Note: The 2003 figure for East Asia is for 2002; figures for China include FDI from Japan; figures for the Association of Southeast Asian Nations (ASEAN) refer to FDI from East Asia to ASEAN and not strictly to intra-ASEAN FDI.

TABLE 1.5 **Regional FDI Patterns Have Changed during the Last Two Decades**
intraregional FDI as a share of total FDI, selected countries, 1985–2004

Country	Definition	Average share (%)			
		1985–89	1990–94	1995–99	2000–04
China	Inward FDI flows	76.5	83.2	73.2	61.4
Indonesia	Inward FDI approvals	40.6	47.1	38.0	41.8
Korea, Rep. of	Inward FDI approvals	53.1	29.7	26.3	25.8
Malaysia	Inward FDI flows	—	48.5	28.4	28.6
Philippines	Inward FDI registered at the central bank	25.9	38.9	43.3	41.9
Thailand	Inward FDI flows	71.0	62.3	51.9	94.4

Sources: Data on China: National Bureau of Statistics, various; Indonesia: Investment Coordinating Board; Korea: UNCTAD 2000 (for data up to 1997), Ministry of Commerce, Industry, and Energy (for data from 1998); Malaysia: BNM, various; the Philippines: Central Bank of the Philippines; Thailand: Bank of Thailand.
Note: — = no data are available.

Looking for a Middle Path

This integration-driven growth has been instrumental in reducing poverty and in raising the quality of life through the improved access to services that generally accompanies urbanization. But growth has also brought in its wake concerns about rising inequality, urban congestion, and corruption. These can be seen as sources of rising friction between the wealthy and other people, between rural and urban interests, and between public and private interests.

The per capita income of developing East Asia is still a fraction of the corresponding income of industrialized countries. So, the *distribution* of the fruits of economic growth should not excessively preoccupy policy makers. To put it crudely, it is important for countries in the region to adopt policies that help per capita incomes grow from US$1,000 to US$10,000 rather than those that simply prevent income inequality indexes from rising from 0.4 to 0.5. Nonetheless, it does not seem that distribution concerns may be altogether ignored without imperiling economic growth. As in other parts of the world, there are debates in the region about the distribution of the gains from growth between city dwellers and residents in the countryside, between educated and uneducated workers, and between those who have the ear of governments and those who do not. More broadly, worsening distribution may be a signal that growth opportunities are being missed and that the economy is not operating at full potential.

A big move into cities; a growing concern about livability. Urbanization is a natural correlate of development. As societies develop, they become increas-

ingly urbanized and industrialized, while the relative importance of the agricultural sector frequently declines. After sub-Saharan Africa, East Asia experienced the largest annual average urban growth rate during 1960–2004. With an annual growth rate of 3.7 percent, East Asia's urban population has more than doubled every two decades. The Middle East and North Africa, South Asia, and Latin America have had comparably high urban population rates of growth of between 3.0 and 3.6 percent. East Asia's urban growth was three times as rapid as that of high-income countries in the Organisation for Economic Co-operation and Development. In East Asia, the share of urban areas in total population rose from 17 percent in 1980 to 40 percent in 2005.

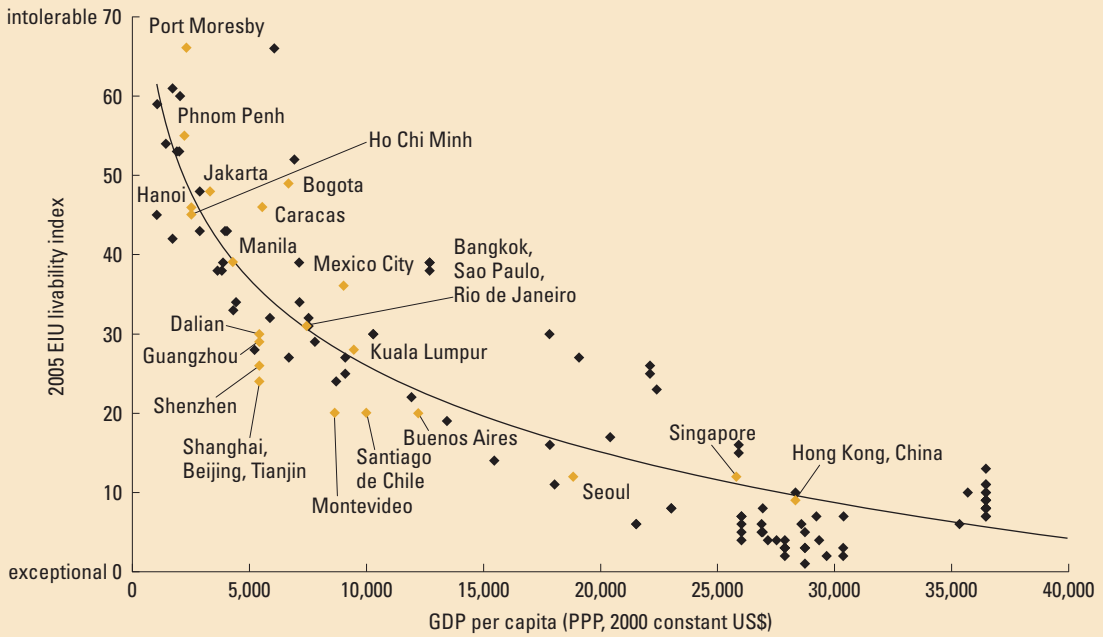
The future promises even larger growth among urban populations in countries of the region. Urbanization in East Asia over the next two decades is likely to result in the largest rural-urban shift in population in human history. Indeed, it is expected that East Asian cities will have an additional 550 million persons by 2025, an increase equal in size to the entire population of Latin America.

This massive urbanization will bring opportunities for growth, but also raises big challenges. While East Asia's cities are as livable as those in Latin America today (controlling for per capital income), urbanization is still ahead for many countries in the region—whereas much of it has already occurred in Latin America (see figure 1.5). The literature on economic geography and endogenous growth emphasizes the benefits associated with agglomeration. But urbanization at such a scale may also easily lead to problems such as congestion, crime, and deteriorating public services. In East Asia, this might jeopardize entire economies because of the concentration of economic activity in cities. Today, Bangkok represents 40 percent of Thailand's GDP and 12 percent of the population; Manila has 30 percent of the GDP and 13 percent of the population of the Philippines; Ho Chi Minh City has 20 percent of Vietnam's GDP, but only 6 percent of the country's population; and Shanghai accounts for 11 percent of China's GDP, but less than 1 percent of China's population.

These considerations also raise questions with regard to the growing gap between prosperous megacities and the rest of a country, namely, rural areas and small- and medium-sized cities. Population growth in East Asian megacities raises important questions about urban sustainability and management. Many East Asian megacities are expected to grow by more than 50 percent by 2030 (see table 1.6). Cities such as Jakarta and Shanghai are likely to grow from around 12 million each in 2005 to more than 20 million each by 2030. Beijing is expected to expand from less than 10 million to more than 15 million inhabitants.

While East Asian cities differ in many ways, they share some attributes. Their population and wealth are growing rapidly; their governments are gaining administra-

FIGURE 1.5 **Large Cities in East Asia Are as Livable as Those in Latin America**



Source: Global Liveability Rankings, Economist Intelligence Unit, http://www.eiu.com/index.asp?layout=displayIssueTOC&toc2=no&publication_id=1140003314&issue_id=99473795.
Note: The livability index ranges from 0 for exceptional livability to 100 for intolerable. PPP = purchasing power parity.

tive power; and they are the nerve centers for the regional production networks on which so much of East Asia's prosperity depends. Cities account for perhaps three-quarters of the economic growth in East Asia and all the demographic growth in most countries, including China, Indonesia, Malaysia, the Philippines, and Thailand. East Asia's economic growth will depend on how well cities handle the challenges associated with service delivery, infrastructure, land markets, the environment, the development of neighboring rural regions, employment creation, and urban poverty.

A big move out of poverty; a growing concern about inequality. East Asia is the poverty reduction champion of the world. Since 1999, headcount poverty (at US$2 a day) has fallen by about 250 million people. Put another way, between 2000 and 2006, about 1 million East Asians moved out of poverty *every week.* Consumption per person has more than doubled in real terms in the region since

TABLE 1.6 **East Asia's Urban Population Will Rise by More Than 500 Million in the Next 25 Years**
current share and level of urban population and projected growth, 2005–30

Country	Share urban (%)		Urban population (millions)		Annual growth rate
	2005	2030	2005	2030	2005–10
Korea, Rep. of	80.8	86.3	38.6	42.4	0.6
Malaysia	67.3	81.9	17.1	28.4	3.0
Japan	65.8	73.7	84.3	90.4	0.4
Philippines	62.7	76.7	52.1	87.5	2.8
Mongolia	56.7	65.7	1.5	2.2	1.5
Indonesia	48.1	68.9	107.2	186.7	3.6
China	40.4	60.3	531.8	872.6	2.7
Thailand	32.3	45.8	20.7	33.8	1.8
Myanmar	30.6	48.4	15.5	29.3	2.9
Vietnam	26.4	41.8	22.2	45.2	3.0
Lao PDR	20.6	34.0	1.2	3.2	4.0
Cambodia	19.7	37.0	2.8	7.9	4.9
East Asia	44.2	62.0	921.3	1,463.0	2.6
World	48.7	59.9	3,150.5	4,912.5	2.0

Source: World Urbanization Prospects: The 2005 Revision Population Database, United Nations Population Division, http://esa.un.org/unup/.

1990 (see table 1.7), and every country in the region experienced sizable improvements in human development between 1990 and 2003.[2] Approximately 150 million persons, or about 8 percent of East Asia, now live on less than US$1 a day. A big part of the story is China, though other countries, especially Vietnam, but also Cambodia and Lao PDR, have also effected poverty reduction on an unprecedented scale.

An ambitious region should perhaps have more ambitious poverty reduction targets. Using a poverty line of US$2 a day, an estimated 585 million East Asians are still poor: about 375 million in China, 100 million in Indonesia, 40 million in Vietnam, 35 million in the Philippines, and about 30 million in the other countries in the region.[3]

Strong and steady economic growth has been the principal reason for poverty reduction in the region, and growth-oriented policies will remain the main antipoverty program for the foreseeable future in most of the countries. But growing economies have also been associated with growing income disparities in East

TABLE 1.7 **The Number of East Asians Living on Less Than US$2 a Day Fell by 500 Million**
mean consumption and headcount poverty, 1990, 2000, and 2005

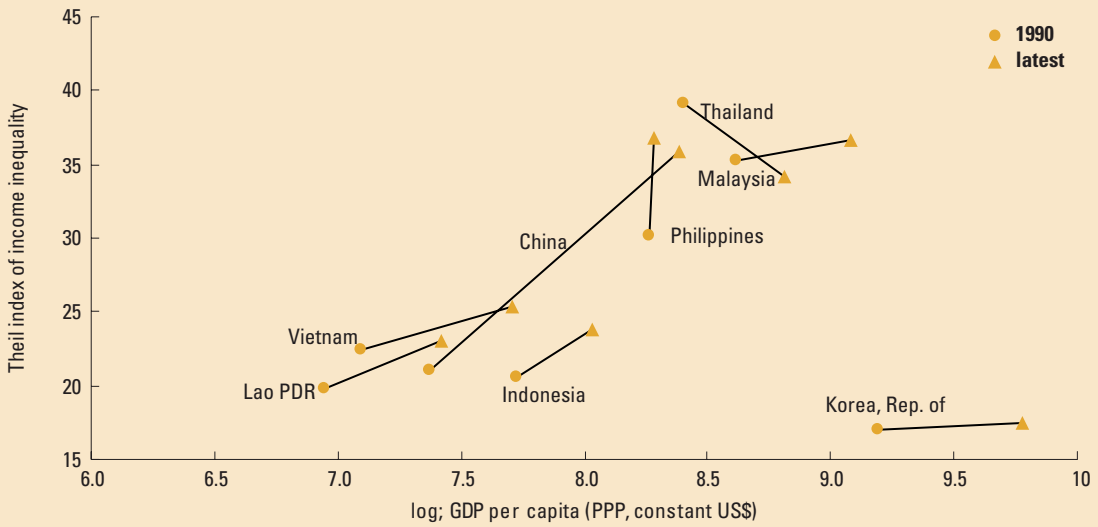
Year	East Asia and Pacific	China	Indonesia	Vietnam	Philippines	Thailand	Korea, Rep. of	Malaysia	Cambodia	Lao PDR
Population (millions)										
1990	1,585.4	1,143.3	178.2	66.2	62.6	55.6	42.9	18.2	10.3	4.2
2000	1,789.6	1,267.4	210.5	79.9	76.3	61.9	47.0	23.3	12.7	5.4
2005	1,868.5	1,307.7	226.1	86.1	83.7	65.1	48.3	25.5	14.1	6.1
Mean consumption (1993 US$ adjusted for purchasing power per person per day)										
1990	2.2	1.9	2.0	1.4	3.0	3.4	9.9	6.4	1.8	1.3
2000	3.7	3.5	2.4	2.4	3.5	4.1	16.3	10.0	2.3	1.8
2005	5.3	5.4	3.1	3.0	3.8	5.2	18.2	12.1	2.6	2.1
Poverty headcount index 1 (percentage of population living on less than US$1 a day)										
1990	28.8	31.5	20.6	50.8	19.1	12.5	<0.5	2.0	32.5	53.0
2000	13.8	15.4	9.9	15.2	13.5	5.2	<0.5	<0.5	22.6	33.9
2005	8.0	8.9	4.4	7.9	10.8	1.7	<0.5	<0.5	17.3	20.0
Poverty headcount index 2 (percentage of population living on less than US$2 a day)										
1990	66.9	69.9	71.1	87.0	53.5	47.0	<0.5	18.5	76.3	89.6
2000	45.8	44.8	59.5	63.5	47.2	35.6	<0.5	9.7	67.8	79.4
2005	31.3	28.6	44.4	49.1	41.9	22.8	<0.5	5.5	62.1	68.6
Persons living on less than US$1 a day (millions)										
1990	456.9	360.6	36.7	33.6	12.0	7.0	—	0.4	3.4	2.2
2005	149.7	117.0	9.9	6.8	9.0	1.1	—	—	2.4	1.2
Persons living on less than US$2 a day (millions)										
1990	1,060.8	799.6	126.7	57.6	33.5	26.1	—	3.4	7.9	3.7
2005	584.5	373.5	100.5	42.3	35.1	14.8	—	1.4	8.7	4.2

Source: World Bank staff estimates.
Note: — = no data are available.

Asia (see figure 1.6). By one measure, inequality rose by more than 22 percent between 1990 and 2002: Chapter 6 documents that the Theil index of inequality of per capita consumption in the region rose from 35 percent in 1990 to 43 percent in 2002. Other measures may show an even sharper increase.

The share of within-country inequality in the total increased between 1990 and 2002, while between-country inequality fell, thereby erasing a small fraction of

FIGURE 1.6 **Inequality Has Been Rising in Much of East Asia Since 1990**



Source: World Bank staff estimates based on household surveys.
Note: PPP = purchasing power parity.

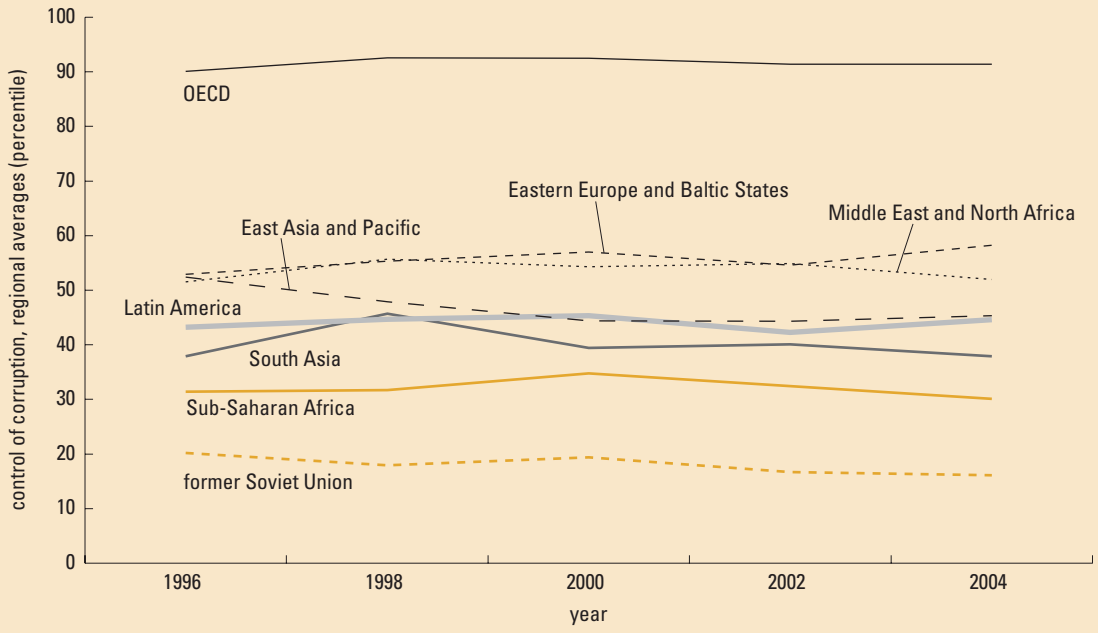
the increase in within-country differentials in well-being. A (static) decomposition of inequality indicates that, in 1990, within-country inequality explained less than two-thirds of the inequality among East Asians. This had risen to more than three-fourths by 2002. Growth and regional integration seem to be helping to bring the average living standards of countries closer, while driving apart the differences within countries.

An aspect of inequality that is robust across all countries of the region is the rural-urban gap in income, consumption, poverty, education, and health. Urban mean consumption levels are between 50 percent (in countries such as Indonesia) and 100 percent (in countries such as China, the Philippines, and Thailand) higher than the rural levels. Rural poverty rates are between two and three times urban poverty rates, though poverty rates appear to have fallen equally rapidly in urban and rural areas since 1990. Poverty remains an overwhelmingly rural phenomenon in East Asia; the rural share of the poor (calculated using national poverty lines) ranges from about 75 percent in Indonesia and the Philippines to about 95 percent or more in Cambodia, China, and Vietnam. These ratios have not changed much since 1990. The urban school-

ing attainment rate is between 33 percent (the Philippines) and 50 percent (in countries such as China, Indonesia, and Thailand) and higher than the rural levels.

Bigger responsibilities for governments; a growing concern about corruption. One measure that illustrates the extent of corruption in a region is the control of corruption.[4] This measure shows the percentage of countries that are doing relatively worse in controlling corruption than a given country or region in the sample (that is, a higher percentage position indicates more control). East Asia's position deteriorated somewhat between 1996 and 2004. Indeed, in 1996, East Asia lagged behind only higher-income countries in the Organisation for Economic Co-operation and Development as far as control of corruption is concerned (see figure 1.7). By 2004, the regional average had declined to fourth, tied with Latin America.

FIGURE 1.7 **East Asia and Latin America Do Equally Poorly in Controlling Corruption**



Source: Kaufmann, Kraay, and Mastruzzi 2005.
Note: For the significance of the control of corruption percentile, see the text.

Some have argued that East Asians are more tolerant of corruption than are people in other societies and that they do not consider some practices, such as giving small gifts to public officials, as corrupt. But there does not appear to be an empirical basis for such statements. Firms consider corruption a major obstacle to business in Cambodia, Indonesia, and the Philippines, and household surveys in Cambodia, Indonesia, and Thailand also find a strong intolerance for high-level corruption. Corruption has become a major issue in several political campaigns in the region, again suggesting that people care deeply about reducing it.

Regional averages mask considerable variation among countries, perhaps nowhere as much as in East Asia. East Asian countries span the range from the very clean to the very corrupt. Transparency International, for example, rates Singapore at better than 9 on a 0-to-10 scale in terms of perceived corruption, while Hong Kong (China), Japan, and Taiwan (China) get ratings of around 8, 7, and 6, respectively. At the opposite extreme are countries such as Cambodia, Indonesia, and the Philippines with ratings close to 2.

As East Asian economies become wealthier and more complex, citizens are demanding better government. Growth success translates into less tolerance for corrupt governments. In general, the region's successful developers have reduced corruption. It may also be that greater regional and global integration has led to increased pressure on governments to reduce corruption. In any case, governments in the region are likely to experience even stronger pressures to reduce corruption.

Understanding Economic Growth: Recent Advances

With rapid growth, East Asia is becoming a region of middle-income countries. But since East Asian countries still have only a fifth of the world's gross national product in dollar terms, they have found it profitable to strengthen their trade, investment, and technology links with North America and Western Europe, each of which account for about one-third of world gross national income. Continued per capita income growth of between 5 and 7 percent annually over the next two decades will help East Asia regain its historically high share of 43.4 percent of world output (see box 1.2).

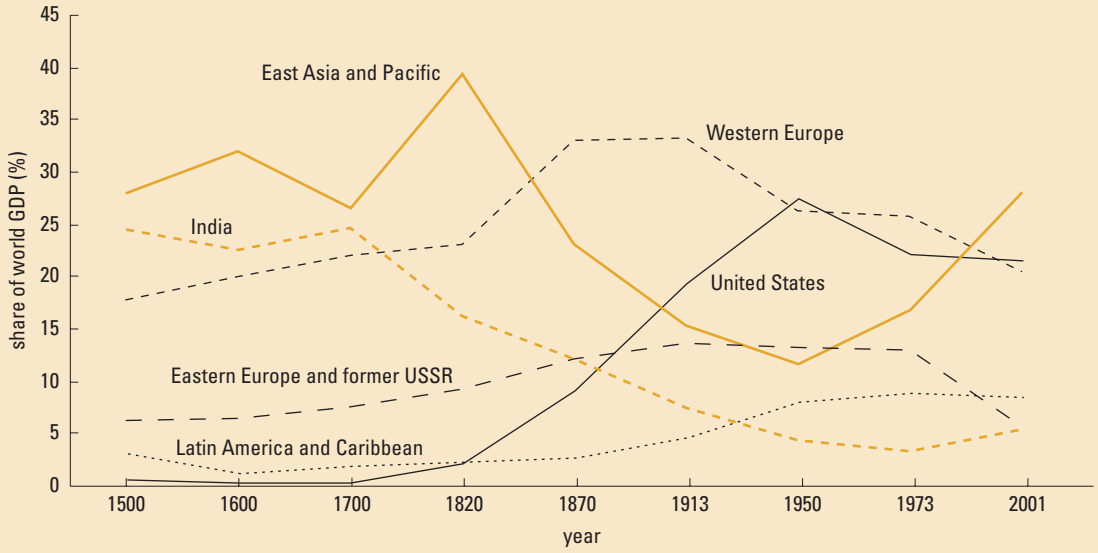
Because of declining transport costs, the countries of the region have augmented global integration through rapidly escalating regional exchange levels in goods, finance, and ideas. Countries in East Asia now face the potential pitfalls associated with congestion, conflict, and corruption, the domestic side effects of rapid growth driven by international integration. The challenge ahead is to complement successful global and regional integration through domestic integration.

BOX 1.2 **"The East Asia Project": Achieving a Big Share in the World Economy**

For more than 300 of the past 500 years, East Asia's share in world GDP hovered around 30 percent, with a peak of 40 percent in 1820. India came in second with a share in world GDP of around 25 percent between 1500 and 1700. With the industrial revolution in the United Kingdom in the mid-to-late 18th century and the early 19th century and in most of Western Europe and in the United States throughout the 19th century, these two regions caught up rapidly with East Asia. East Asia had lost its lead to Western Europe by the mid-19th century and then was also overtaken by the United States at the beginning of the 20th century. By 1950, East Asia accounted for only 11.4 percent of world GDP. Since then, the region has effected an impressive rebound. By 2001, it again topped the list, accounting for almost 30 percent of the world economy in purchasing power terms (see figure 1.8).

Assuming that world GDP grows at the same rates of the last 30 years (that is, about 3.5 percent annually from 1975 to 2005), it will reach around US$109.1 trillion in 2025. For East Asia's share to account for 40 percent by that time, it would need to grow 5.9 percent annually. East Asia's annual growth during the last 30 years has been about 5.6 percent.

FIGURE 1.8 **Regional Share of World GDP**



Source: Maddison 2003.
Note: The GDP figures are expressed in 1990 international Geary-Kharmis dollars.

This book considers the prospects in East Asia of this third integration to be as important as the prospects of the first two. To understand this assessment, one should examine recent advances in thinking and use the insights to frame and discipline the inquiry. This section summarizes relevant recent breakthroughs in economic theory and how they may help in understanding what is happening in East Asia.

Ever since Romer (1986) and Lucas (1988) revived broad academic interest in economic growth, some of the best minds in economics have been working on the problem of development. While economic growth remains a mystery, these efforts have yielded some insights. The next few pages attempt to summarize these developments within the backdrop of East Asia's experience over the last two decades and to discuss the potential policy implications of these advances.[5] Putting this work in the East Asian context is not difficult because East Asian economic growth already figures prominently in these efforts.

The renewed interest in economic development has been triggered by the observation that income levels across countries have not been converging as predicted by traditional neoclassical economic theory. This theory predicts that efforts to accumulate physical and human capital, improve the efficiency of production, and utilize the latest technologies should pay off in a narrowing of income gaps between developed and developing countries and eventually lead to roughly equal welfare levels across the globe. The fundamental implication of mainstream economic theory is that, in seeking the highest possible returns, financial and human capital would move from places where it is abundant to places where it is scarce, bringing with it the latest and best products, processes, and technologies. In this way, the working of the market would potently and effectively address the problems involved in achieving economic growth.

To ensure that markets would accomplish this, the role of governments is first and foremost to ensure "peace, easy taxes, and a tolerable administration of justice."[6] And, while openness to foreign trade, finance, and ideas makes good sense, neoclassical theorists recognize that money and skilled people may not move quickly enough and so emphasize the virtues of "more saving and more schooling." If countries did all this, it was thought, the newest technologies would be available to them. Developing countries could pick and choose among these ideas, and grow more rapidly than even those they were learning from. Capital and bright people in developed countries would not miss the chance to go where growth was high and bring their entrepreneurship and ideas along. This would happen until, in all the parts of the world where peace and justice prevailed, wealth gaps would narrow.

But this has not happened. With few exceptions (primarily the East Asian high-performing countries), income gaps between the West and the rest have grown. This does not mean the market has not worked at all: most countries have become

richer, and poverty has fallen. Garrett (2004), for example, points out that, while the per capita GDP of high-income countries rose by about 50 percent between 1980 and 2000, that of low-income countries increased by more than 150 percent, and the income ratio between high- and low-income countries has been cut in half. But the average real per capita incomes of *middle-income* countries grew by less than 20 percent in the 1980s and 1990s; so, the distance between them and high-income countries *increased* by about 20 percent. Moreover, as often as capital has flowed downhill from richer to poorer countries, it has climbed uphill to rich countries even from middle-income countries that had peace, low taxes, a tolerable administration of justice, high savings, and rising levels of schooling. Adhering to classical and neoclassical advice seems to be necessary to grow, but is not sufficient to catch up to advanced countries.

Having demonstrated that they can institute the conditions for sustained growth and being so close to the few countries that have had success in achieving high-income levels, East Asia's middle-income countries should not settle for less than convergence with Western living standards. For this to happen in any reasonable length of time, middle-income countries must sustain high rates of income growth until they attain high-income levels. To do so, these countries may have to adjust their growth strategies (box 1.3).

BOX 1.3 **Middle-Income Status: A Period of Significant Change**

While the achievement of economic development requires constant learning and adjustment, recent findings point to the need for several major changes in strategy when countries reach per capita incomes between US$1,000 and US$10,000.

- *From diversification to specialization.* Recent evidence indicates that countries generally appear to diversify in the early stages as they grow, but that this trend is reversed after per capita incomes reach levels around US$5,000–US$8,000, after which the countries begin to specialize again. This tipping point may arrive earlier or later depending on the country's size and export orientation. Thus, for example, Singapore started to specialize at a per capita income of around US$2,500. The reasons are likely related to economies of scale.
- *From investment to innovation.* As firms in a country approach the technological frontier, regulatory policies that favored investment by incumbent firms should give way to regulations that encourage the entry of new firms and the exit of firms whose products or technologies have been rendered redundant by the new firms. This switchover must be well timed, and it will be difficult to implement because of vested interests.
- *From basic to tertiary education.* As countries become more well informed about the products and the areas of production in which they should specialize and the related R&D activities which they should subsidize, governments must switch from general subsidies for schooling to more specific incentives for the creation of new products and processes. If policy makers are unable to reliably determine which R&D activities should be subsidized, second-best strategies include general subsidies for tertiary education.

Sources: Imbs and Wacziarg 2003; Aghion and Howitt 2005; Helpman 2006.

Do the recent advances in economic thought help in determining what East Asian countries need to reach high incomes? This report proposes that they do. At the risk of oversimplification, the insights provided by this work for middle-income countries in East Asia may be grouped into two categories: the role of *economies of scale* in growth and the importance of the efficient *distribution of economic rents.*

The remaining parts of this chapter discuss these two points. Chapters 2, 3, and 4 show that East Asia has done well in exploiting economies of scale, but might do even better. Chapters 5, 6, and 7 discuss how countries in the region might address distributional concerns so that the foundations for rapid growth are progressively strengthened.

Economies of Scale

The force behind convergence between rich and poor countries is the law of diminishing returns. Given that convergence has been slow, recent explanations point to the presence of increasing returns to scale in some activities or the absence of diminishing returns associated with a factor of production. Romer (1986, 1990) identifies knowledge as the factor exhibiting increasing returns and stresses the nonrival nature of ideas; that is, ideas are different from goods and factors because an idea may be used again and again and by many people at the same time. An idea, once formed, may be used by others as a starting point for new ideas.

Though ideas are nonrival, they are generally neither free nor nonexcludable. Coming up with useful ideas usually requires effort, and, through secrecy or the enforcement of intellectual property rights, it is possible to exclude people from using ideas to improve products or production processes, even if temporarily. This excludability results in knowledge that confers a monopoly power on the creators of the knowledge. By adding knowledge explicitly to formulations of economic growth, economists are able to recognize the centrality of ideas and the importance of increasing returns, but this also requires a recognition of the proliferation of imperfect competition. By the late 1980s, scale economies were standard features of the explanations of international trade. By the early 1990s, growth theorists had accepted the need to incorporate imperfect competition among firms into aggregate formulations of an economy. By the mid-1990s, theorists had shown how these ideas might be used to understand the spatial distribution of economic activity, including the rise and economic importance of cities. Table 1.8 provides a selective summary of this literature.

The formal recognition of scale economies, externalities, and imperfect competition makes economic theory conform more closely with the world in which

TABLE 1.8 **Recognizing the Importance of Scale Economies: Recent Theoretical Advances**

Subdiscipline	Decade	Key publications	Main insights
Industrial organization	1970s	Spence (1976); Dixit and Stiglitz (1977)	Formal models of increasing returns to scale and imperfect competition
International trade	1980s	Krugman (1980, 1981); Ethier (1982); Helpman and Krugman (1985); Grossman and Helpman (1995)	Increasing returns and imperfect competition explain intra-industry trade between countries with similar endowments; initial endowments may, through trade and specialization, influence the long-run rate of growth; trade unleashes forces of both convergence and divergence
Economic geography	1990s	Krugman (1991); Fujita, Krugman, and Venables (1999)	Increasing returns to scale activities are characterized by agglomeration and imperfect competition, while constant returns-to-scale sectors remain dispersed and competitive, helping to explain the spatial distribution of economic activity and the growth of cities
Endogenous growth	1980s	Romer (1986); Lucas (1988)	Perfect competition and knowledge- or human-capital-related externalities imply aggregate increasing returns and explain why growth rates may not fall over time and why wealth levels across countries do not converge
	1990s	Romer (1990); Grossman and Helpman (1991); Aghion and Howitt (1992)	Imperfect competition explains why the incentive to spend on R&D does not fall, and knowledge spillovers explain why R&D costs fall over time, resulting in more or better products that fuel growth
	2000s	Aghion and Howitt (2005)	Imperfect competition and Schumpeterian entry and exit of firms, with entrants bringing new technologies, explain how a country's growth and optimal policies will vary with distance to the technology frontier

Source: Gill, Hariharan, and Kharas 2006.

policy makers must live. For middle-income countries that have established peace, low taxes, and a reasonable administration of justice, there are three sets of implications from this work; these are determined by how economic growth relates to trade, innovation, and cities, as follows:

- *Intraindustry trade.* The main insight provided by a formal recognition of increasing returns to scale and product differentiation is that trade may take place between economies that are similar in factor endowments; both interindustry *and* intraindustry trade may profitably take place. The principal implication is that countries may, in theory, profitably encourage some activities and ensure comparative advantage.
- *Idea-driven economies.* The main insight is that the nonrival nature of ideas makes ideas different from other factors of production such as capital, land,

and labor in that the market may underinvest in the creation of new ideas. The principal implication is that governments should, theoretically, subsidize certain strands of R&D, for example, those that will ensure the continuance of the comparative advantage a country has acquired in certain areas.

- *City-based growth.* The main insight is that activities that display increasing returns due to factors external to a firm will tend to be concentrated in cities, while those displaying constant returns will remain more widely spread. The implication is that policies to keep cities business friendly and livable will become increasingly important as economies develop.

During the last decade, the thinking on economic growth has increasingly emphasized the interplay of scale economies, product differentiation, quality improvements, and the heterogeneity of firms within industries, for example, between exporters and nonexporters and between young and old firms. These profiles differ among countries depending on their distance to the technological frontier. This line of thought yields useful insights for middle-income countries. In general, economic theory has progressively recognized that economic growth has differential impacts on firms and workers depending on the sector, location, skill, and government relations of these firms and workers. The underlying reason is the love for variety in consumption and the economies of scale in production; the proximate causes are product differentiation, monopolistic power, specialization, and location externalities. The problem for governments is to address the divergence of market solutions from social optima because of scale economies and, because these lead to sizable economic rents, to the efficient and equitable distribution of economic rents.

Distribution of Economic Rents

While aggregate models have recognized scale economies, externalities, product differentiation, and imperfect competition among firms, recent trends have been toward more disaggregated models of an economy that recognize the differential impacts. Though perhaps an oversimplification, there may be some truth in the statement that these models tend to focus on the differences between skilled and unskilled workers, between firms that are large and those that are not, and between activities and people located in cities where the economic rents are high and those who live elsewhere. Put another way, while the section above on "economies of scale" discusses the scale of economic activities and imperfect competition among firms, this section discusses the distribution of economic rewards and imperfect allocation among workers and consumers. Table 1.9

TABLE 1.9 **Economic Growth and Distribution: Recent Theoretical Advances**

Subdiscipline	Channels	Key publications	Main insights
Correlation between growth and distribution			
International trade	Skill premiums	Ethier (1982); Helpman and Krugman (1985); Feenstra and Hanson (1996)	Trade in final goods takes place on Hecksher-Ohlin terms and reduces skilled-unskilled wage premiums in middle-income countries; trade in intermediate goods may increase these gaps
Industrial organization	Skill premiums	Acemoglu (1996)	Moves toward flatter organizations and team-based work within firms and the growing segregation of firms by skill levels across sectors likely reduce within-firm wage dispersion and raise across-firm wage gaps
Endogenous growth	Skill premiums	Aghion and Howitt (1998)	General-purpose technologies such as engines, lasers, and computers generate structural shifts that favor the more educated
		García-Peñalosa and Turnovsky (2006)	Higher saving or productivity leads to higher growth and inequality if the initial distribution of capital is less uniform than that of labor
Economic geography	Rural-urban differentials	Krugman (1991); Fujita, Krugman, and Venables (1999)	Increasing-returns-to-scale activities are characterized by rents and agglomerate in urban areas, while constant-returns-to-scale activities remain competitive and dispersed, thereby leading to large and persistent urban-rural differentials
Effects of distribution on growth			
Industrial organization	Investment	Loury (1981); Perotti (1992); Aghion and Bolton (1997)	Capital market imperfections imply that poor but talented individuals are unable to take advantage because of their inability to borrow and invest
Political economy	Incentives	Alesina and Rodrik (1994); Persson and Tabellini (1996)	Higher inequality leads to pressure for more redistribution, higher taxes, and lower growth
	Insecurity	Benabou (1996)	Inequality leads to sociopolitical conflict and, hence, less secure property rights that reduce investment

Source: Gill, Hariharan, and Kharas 2006.

attempts a summary of the advances achieved by economic theory in the efforts to understand these later.

The recognition of the distributional implications of economic growth that is driven by increasing returns and that leads to large economic rents allows economic theory to inform policy makers more accurately about the trade-offs and choices being faced. For middle-income countries that are growing rapidly and

seeking to maintain this momentum, there are three aspects of distribution that have policy implications, as follows:

- *Spatial dispersion.* The main insight provided by the economics of geography is that there will be large and persisting differences between rural and urban areas at least until countries reach high-income levels. The implication for middle-income countries is that urbanization should be seen as a correlate of development, and rural-urban factor links and product market links should be strengthened. Combined with the implication that cities are central for growth, this implies a special effort on the part of governments to ensure the continued vibrancy of cities.
- *Socioeconomic disparities.* The insight provided by the new trade theory is that, while trade is essential for exploiting economies of scale, it will likely result in a widening skill premium in developed and middle-income developing countries. Greater trade and investment flows imply a greater potential for outsourcing, which raises skill premiums in both developed and developing countries. Countries that aggressively exploit economies of scale will likely experience rising inequality (within urban areas and between urban and rural incomes) even if they follow egalitarian human capital policies. The implication is that middle-income countries need to undertake especially aggressive efforts to ensure universal access to social services.
- *Reallocation of rents.* The insight provided by endogenous growth theory is that, for purely economic reasons, such as imperfections in credit markets and coordination failures, and perhaps also because of political economy considerations, there are grounds for growth-enhancing reallocations of economic rents. Choosing the appropriate activities and methods for taxation and the allocation of subsidies will involve learning and mistakes, but the solutions lie in closer, but more transparent relations between governments and the private sector, not attempts to build walls between them. The implication is that middle-income countries need to undertake especially strong efforts to address corruption.

Aggressive and well-implemented urban and social investments require governments that are well informed, efficient, and uncorrupt so that they are able both to tax economic rents appropriately and to spend the proceeds in ways that promote growth. Taxing urban economic rents and reinvesting the proceeds in the infrastructure of cities is an obvious way to reduce rural-urban differentials and keep cities livable, and social investments in education are the obvious way to ensure that the skill premiums associated with high growth in open economies remain reasonable.

Plan of This Report

The line of thinking developed in the literature during the last decade and a half may be summarized as follows:

- *Scale economies are important, and international integration is critical.* The literature on the role of unexhausted scale economies is persuasive, and scale economies are an important issue in the understanding of the nature and causes of growth in developing countries. The international flow of goods, ideas, and finance is necessary for the successful exploitation of scale economies in all countries, but especially in middle-income countries that have built the basic foundations for development.
- *Intraindustry trade reflects scale economies.* Scale economies are an important reason for the growth of intraindustry trade, alongside the more conventional interindustry trade based on relative factor abundance. For middle-income countries, trade is a potent instrument for obtaining access to new ideas, but it is important to recognize that such access depends on and may widen the differences between firms within a country and even within a specific sector.
- *Ideas are a key source of external economies.* New ideas are the most important source for the power to generate economic progress because, given their nonrival nature, ideas are the most important source of unexhausted scale economies. Growth means new products, especially intermediate goods, and new production structures. Middle-income levels generally include the stage of development in which economies appear to shift from increasing diversification to specialization and, hence, from an emphasis on investment to innovation.
- *Foreign capital is a critical facilitator of intraindustry trade and a conduit for knowledge.* Stable flows of finance within and between countries are a critical prerequisite of the specialization that enables the exploitation of scale economies, especially among partners in production networks. International flows of finance are also a potent instrument for accessing new technology, even though these flows may pose risks for middle-income countries.
- *Scale economies imply economic rents that are unevenly distributed within countries.* The sectoral location and the size of firms, the location of economic activities, and the skills of workers are critical correlates of the benefits of market-led growth. Scale economies, externalities, and distributional concerns imply a divergence between market solutions and social optima.
- *Cities reflect scale economies and are critical connectors.* The rise of cities may reasonably be interpreted as a reflection of the importance of economies of scale. Large cities and megacities serve as hotbeds of innovation as countries

approach the frontiers of world technology in economic activities in which their firms have become proficient. Cities, both small and large, facilitate the smooth flow of trade, finance, and ideas into and within developing countries. Vibrant cities are indispensable for middle-income countries that hope to match the achievements of the world's leading innovators.

- *Rural-urban differences are inevitable, and skill premiums tend to widen.* Growing intraindustry trade and the related FDI in middle-income countries have differential impacts on people depending on whether or not they are entrepreneurs or employees in sectors that exhibit scale economies and depending on whether they are skilled or unskilled. The rapid urbanization in East Asia's middle-income countries may represent an opportunity to expand the access of rural populations to the same social services and economic dynamism experienced by residents of large cities.
- *Societies must efficiently reinvest economic rents.* In middle-income countries, these investments should address the differential effects of rapid growth on workers and enterprises and, hence, be aimed at ensuring livable cities, innovative enterprises, and equitable societies. It is necessary for governments efficiently to regulate, tax, and reinvest the rents associated with activities that are characterized by scale economies and imperfect competition. This implies that it is increasingly important for governments to be both less corrupt and less centralized since the successful encouragement of selected activities requires close relations between private enterprises and government, not attempts to isolate government officials from business interests.

Developments in economic theory during the last two decades do inform the efforts of policy makers to blend discipline and discretion. In the next six chapters, these ideas—the importance of exploiting the advantages of bigness *and* recognizing the absence of sameness—are described and analyzed for the case of East Asia. Chapters 2, 3, and 4 discuss how East Asian countries are exploiting scale economies through international integration, especially with their East Asian neighbors, using the channels of trade, technology, and finance. These chapters discuss what East Asia is doing well, and what it may perhaps do more effectively. Chapters 5, 6, and 7 discuss the challenges of managing the domestic distribution of economic rents, taking up in turn the topics of cities, cohesion, and corruption. This report proposes that it is in these aspects of domestic integration that East Asia's developers must accomplish much more. As pointed out in other sections of this chapter, the experiences of the East Asian tigers since the 1960s show that this can be done, while the experiences of Latin American countries since the 1970s provide a cautionary tale of how things can go wrong.

Development economics has seen major advances during the last two decades, but many questions remain unanswered. It would be fair to say, however, that, since the early 1990s, East Asia is a favorite place for economists to look for answers to these questions. The reason is obvious: this is a part of the world where many countries have achieved success in increasing per capita incomes from about US$100 to more than US$1,000 and where some countries have raised per capita incomes from around US$1,000 to more than US$10,000. Countries in East Asia that have reached middle-income status have heeded Adam Smith and instituted the classical prerequisites of economic growth: "peace, easy taxes, and a tolerable administration of justice." They have also adhered to the neoclassical tenets of openness, macroeconomic stability, and broadly based investment in human capital. For such middle-income economies looking to become high-income countries, it is not helpful simply to repeat these messages. The subsequent chapters of this book draw upon modern economic growth theories, and are intended as a contribution to the efforts of developing countries in East Asia to grow through and beyond middle-income levels.

Notes

1. The World Bank classifies countries with per capita incomes below US$825 as low income, countries with incomes between US$826 and US$3,255 as lower middle income, countries with incomes between US$3,256 and US$10,665 as upper middle income, and countries with incomes over $10,066 as high income. Since 1950, among countries with more than 1 million inhabitants, only Hong Kong (China), Korea, Saudi Arabia, Singapore, and Taiwan (China) have gone from low- to high-income status.
2. See UNDP (2005).
3. These figures exclude the Democratic People's Republic of Korea and Myanmar.
4. The control of corruption "measures perceptions of corruption, conventionally defined as the exercise of public power for private gain. Despite this straightforward focus, the particular aspect of corruption measured by the various sources differs somewhat, ranging from the frequency of 'additional payments to get things done,' to the effects of corruption on the business environment, to measuring 'grand corruption' in the political arena or in the tendency of elite forms to engage in 'state capture' " (Kaufmann, Kraay, and Mastruzzi 2005: 131).
5. Helpman (2004) provides a discerning, though somewhat technical account of these developments, and Warsh (2006) offers an accurate account of the thinking that has led to these insights.
6. Smith (1755) wrote that "little else is requisite to carry a state to the highest degree of opulence from the lowest barbarism but peace, easy taxes, and a tolerable administration of justice: all the rest being brought about by the natural course of things." (See "Adam Smith Quotes," Adam Smith Institute, http://www.adamsmith.org.)

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