

1. Growth, Gravity, and Friction

Map 1

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1.1 New challenges, fresh insights

East Asia is a completely different region today as compared to the place studied in the *East Asian Miracle* (World Bank, 1993, henceforth *Miracle*). *Miracle*, in analyzing the rise of eight high-performing Asian economies—which did not include China—pointed to strong fundamentals, international integration, and good government as East Asia’s key success factors. But three subsequent developments necessitate a reexamination of East Asian growth: the biggest economic crisis of the 1990s, which showed that its governments were anything but infallible; the rise of China, the biggest economic development story of the 1990s; and 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 crisis of the nineties, and the rapid growth of cities, all reflect a vastly different reality, a richer middle income region, than that at the beginning of the 1990s (Map 1). This report, like three previous World Bank studies since 1993 (see Box 1.1), is a contribution to the debate on

Box 1.1: Once every four years: World Bank regional studies in 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* (1993), *Lessons from East Asia* (1997), and *Rethinking the East Asian Miracle* (2001). The frequency befits the most dynamic region in the world. Each of these efforts has been different in nature, and this report again differs in both focus and format from the three previous World Bank publications.

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

- First, while the 1993 report analyzed growth in eight high-performing Asian economies (Japan, Korea, Hong Kong (China), Indonesia, Singapore, Malaysia, Thailand, and Taiwan (China), China), there was no explicit attempt to explain their experience 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 *Miracle* eight could have been anywhere, they just happened to be in East Asia. In contrast, regional or neighborhood factors are a central feature of this report.
- Second, *Miracle* deliberately omitted the growth experience of China, since China was so different from the eight HPAEs. The implication of China’s rapid rise is a central matter for this report, 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 report is also intended to inform 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 (henceforth “*Lessons*”) consisted of country case studies, and attempted to examine how public policy lessons permeated borders between countries in the region, and explain the adoption of development approaches with common elements in countries as different as post-conflict Japan and Korea, small states such as Hong Kong (China) and Singapore, and post-communist China and Vietnam. While *Lessons* did not stress the economic linkages within the region, these are a central part of this report.

Rethinking the East Asian Miracle (henceforth “*Rethinking*”) aimed to address questions raised by several commentators who, prompted by the financial crisis of 1997-1998, were skeptical of the durability of the East Asian development approach. *Rethinking* consisted of essays on several issues central to this report—trade, FDI, and technology, industrialization, corporate governance, and regional trade and monetary arrangements. This report reexamines many of these issues, but systematically uses the insights afforded by recent advances in economic thought outlined below.

how development strategies should be adapted in response to these 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 can help in determining their causes, consequences, and—with additional country-specific work—their policy implications.

East Asia is changing 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 towards each other by the same motives and modes. The result is rapid regional integration in the exchange of goods, capital, and ideas, which rivals those in the European Union and in North America. Section 2 below presents a brief overview of these developments.

This integration is the main source of dynamism in the region, and has given it a second breath. But it is also a source of growing economic contagion. The East Asian crisis was the most visible example 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 Latin America and Eastern Europe that have had periods of high growth make it clear that developing countries inevitably will face pitfalls that 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 and accounted for by most countries in East Asia. Labor market flexibility was long recognized as necessary, and remains a policy priority. High saving 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 its countries entered middle-income were similarly bright, but many Latin American economies have since disappointed. This report emphasizes three potential pitfalls—listless cities, conflictive 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 *Miracle* emphasizes unexhausted economies of scale as a central force driving industrial organization, international trade, geographic concentration of economic activity, and economic growth. While the new international trade theory was developed during the 1980s, empirical support—a prerequisite for being considered seriously by serious policy makers—for its central propositions came more than a decade later. Developed during the 1990s, the new economic geography, which can be viewed as an extension of both international trade and growth theory, has utilized economies of scale as a central precept to understand spatial differences and the role of cities. And while endogenous growth theory emerged in the late 1980s, it was only after the 1990s that it has become sufficiently refined to be of use for development policy.

All of these insights are useful in disciplining investigations of East Asian economic growth but, given its timing, the *The East Asian Miracle* could not make full use of them. The debates at the time 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 increasing returns literature 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 can 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 report (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. Section 3 of this chapter summarizes its findings.

1.2 East Asia since the early nineties: Selected facts

The East Asia region has grown faster 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. The second fact is that intra-regional trade and investment flows in East Asia have grown faster than its trade and financial links with the rest of the world. The most important reasons for this have been China's rapid rise, size, and relations with the rest of the world. The third fact 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 developments that have been receiving the most attention are a widening gap in incomes and living standards between less and more educated workers and between rural and urban residents.

1.2.1 Growing to middle income status

Developing East Asia (the region excluding Japan) has grown rapidly and resiliently during the last two decades, even accounting for the crisis of the late 1990s. The region is unique today in that it includes high income, middle-income, and low income countries.

The most resilient region

In the last quarter-century, during any five-year period, no other part of the world has grown faster than East Asia. East Asian 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 strength and resilience.

Table 1.1: East Asia has been growing faster than all other regions (GDP Growth, 1980-2004)

<i>Region</i>	<i>1980-1984</i>	<i>1985-1989</i>	<i>1990-1994</i>	<i>1995-1999</i>	<i>2000-2004</i>
East Asia & Pacific	7.2	7.8	9.4	6.8	7.2
Latin America & Caribbean	1.4	2.2	3.6	2.4	2.2
Europe & Central Asia	n.a.	n.a.	-5.2	2.0	5.2
Middle East & 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

Source: World Bank WDI and GDF Central Databases.

Even over a longer period, after accounting for year-to-year fluctuations such as the crisis of the 1990s, and with the comparison broadened to include developed countries, East Asia's performance stands out as remarkably strong and steady. Table 1.2 catalogs, for all the world's regions and for selected East Asian countries (China, Indonesia, Thailand, Malaysia and the Philippines), the number of years between 1961 and 2004 during which per capita GDP growth was negative, between 0 and 2 percent, and above 2 percent. As can be seen the East Asian region only had negative growth for three years.

Maddison (2003) estimates that East Asia's share of world GDP (purchasing power parity adjusted) was about 40 percent between 1500 and 1800, and peaked at about 43 percent in 1820. By 1950, its share was less than 15 percent. Today, the ratio is about 33 percent of the world's GDP. If the world grows at the same annual rate as it did during the past four decades, viz. about 3.6 percent, East Asia must grow at between 6 and 7 percent per year to get back to its peak share of 43 percent in or about 2025.

Table 1.2: East Asian growth has been strong and steady (Per capita GDP growth rates, 1966-2004)

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

*Note: Data for the Middle East and North Africa are from 1975 to 2004.

Source: World Bank WDI and GDF Central Databases.

The most diverse region

While regional groupings are somewhat arbitrary, cross-country comparisons of per capita income trends and levels can be instructive. Figure 1.1, which plots the ratio of selected countries' income to the respective regional average, shows that developing East Asia is the most “diverse” of all regions. Combined with geographical proximity and non-economic similarities, this diversity may be an important factor in mutually beneficial exchange of goods, finance, and ideas.

Figure 1.1 panel (a) also shows a rapid “club convergence” in developing East Asia. 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), Singapore, and South Korea. Indonesia and the Philippines have slipped from being above the regional average to below. But despite this convergence, per capita income in 2004 ranged from about \$27,000 in Hong Kong (China), and \$24,000 in Singapore; to \$15,000 in Taiwan (China), China and \$14,000 in South Korea; to almost \$5,000 in Malaysia; to about \$2,500 in Thailand; to \$1,400 in China and \$1,100 each in Indonesia and the Philippines; to \$600 in Mongolia and Vietnam, and about \$400 in Lao PDR and Cambodia. In other words, Hong Kong (China) still has a per capita income that is about 60 times that of Cambodia.

A region that will soon be mostly middle income

The median East Asian is already a citizen of a middle-income country as China, Indonesia, the Philippines, Thailand,, and Malaysia all have per capita incomes between \$1,000 and \$10,000.³⁷ With Vietnam's per capita income expected to rise to more than \$1,000 by 2010, more than ninety-five of every hundred East Asians will be living in a middle-income country, and, at current growth rates, fewer than 25 million out of a total of about 2 billion East Asians will be living below the poverty line by 2020.

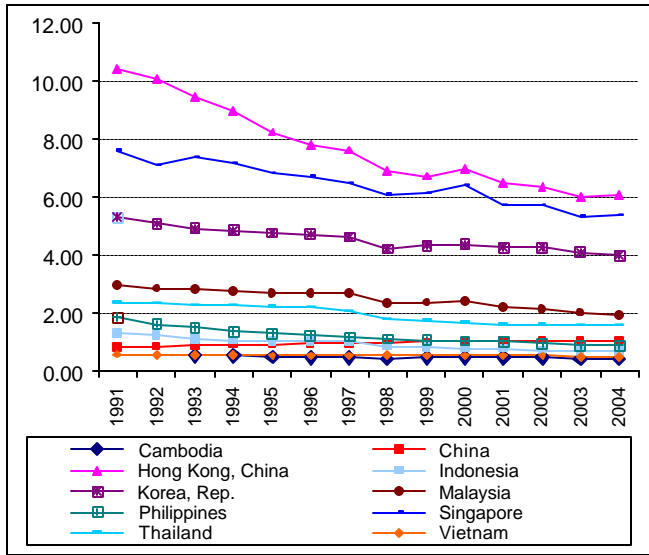
So while this report is about all of East Asia, it is especially about the development challenges faced by middle-income countries. The focus is deliberate. During the last fifty years, there are many cases of countries moving from levels of income that are associated with abject poverty to levels that have earned them “middle-income country” status. But, during this time, outside of Europe, only a handful have gone from low-income to high-income country 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 can be found—South Korea, Taiwan (China), Hong Kong (China), and Singapore.

Figure 1.2 plots 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 (Brazil, Mexico, Argentina, Colombia, Peru, Uruguay, Venezuela, and Chile), five East Asian economies that have reached high-income levels (Japan, Singapore, Hong Kong [China], Taiwan [China],

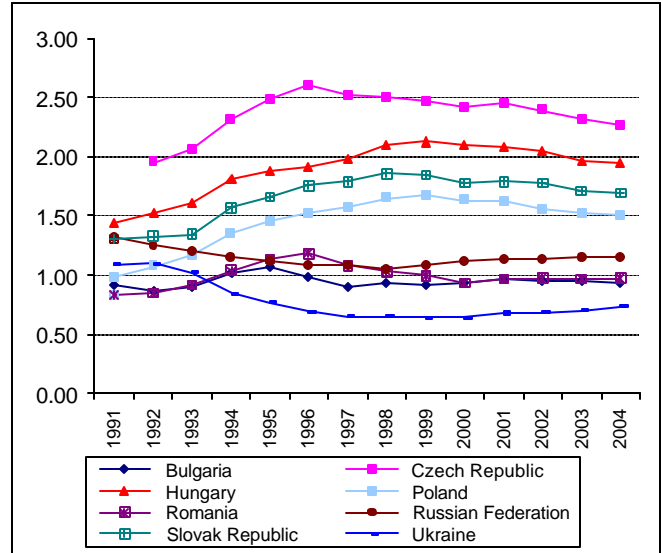
³⁷ The World Bank classifies countries with less than \$825 as low-income, countries with per capita incomes between \$826 and \$3,255 as lower middle-income countries, between \$3,256 and \$10,665 as upper middle-income countries, and those with more than \$10,066 as high-income countries. Since 1950, among countries with more than 1 million inhabitants, only Saudi Arabia, Singapore, Hong Kong (China), Taiwan (China), and South Korea have gone from low to high-income country status.

Figure 1.1: Developing East Asia is the most diverse region (country per capita income as a multiple of respective regional average, 1991-2004)

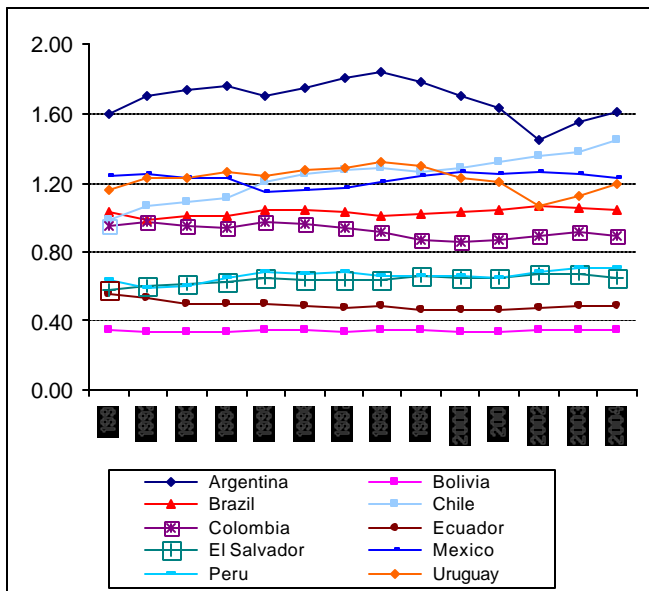
East Asia



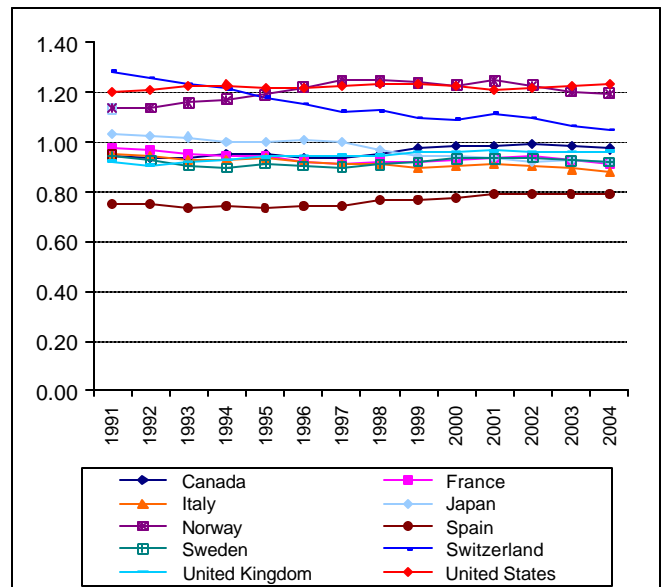
Eastern Europe



Latin America



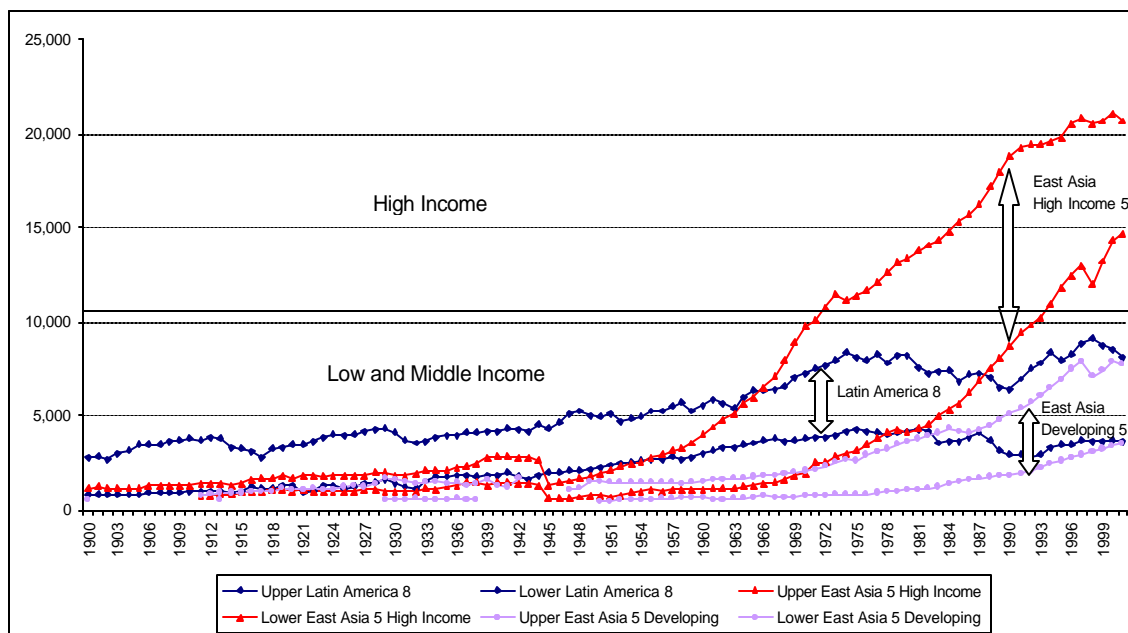
High Income OECD



Source: Authors' calculations based on World Bank GDF & WDI Central Databases (August 2005).

and South Korea), and the five middle-income countries in East Asia (China, Indonesia, Thailand, Malaysia, and the Philippines). Figure 1.2 illustrates two noteworthy developments. The first is that by the early 1970s, while the range of incomes differed considerably between the two groups, the average per capita income of the “Latin America Eight” was roughly the same as that of the

Figure 1.2: A second group of East Asian economies has caught up with Latin America (per capita income growth in East Asia and Latin America, 1900-2000)



Source: Maddison 2003.

“East Asian First Five”—an average of about \$5,000. The second is that by the early 2000s, the “East Asian Second Five” had caught up with the Latin America Eight, whose average per capita income had not changed much since the 1970s. Coincidentally, the range of incomes for the Latin America Eight and the East Asian Five was almost identical in 2000.

It is logical for policy makers in the second round of East Asian countries that are attaining middle-income country status to ask what the five Asian leaders did to successfully transit through middle-income stages of development, what the Latin American Eight did wrong, and what today’s middle-income countries in East Asia can do to ensure a future that is more similar to their more successful neighbors than those across the Pacific.

1.2.2 *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 \$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 a spreading of the supply chain, with China as 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 NAFTA’s share of about 20 percent and closing the gap with EU that still accounts for about one-third of world trade. Intra-regional trade was just 35 percent of East Asia’s trade in 1980; by 2004, this share was about 55 percent, second only to the European Union’s intra-regional 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 intra-regional trade in East Asia all add up to a huge increase in the absolute amount of intra-regional trade: while GDP in the region rose an average of 7.96 percent per year since 1980, intra-regional trade has increased by more than 13.5 percent annually.

The growth of intra-regional trade has been accompanied by the rising importance of intra-industry trade among East Asian countries. Between 1990 and 2004, the share of inter-industry trade in the regional total fell from about 45 to 22 percent, and that of intra-industry 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 parts and components trade in the region between 1990 and 2003 (see Table 1.4).

Taiwan (China) and South Korea emerge as regional technology influences

East Asian countries have made considerable progress since 1990 in the areas of intellectual property rights and research and development. One measure of technological effort is the number of patents registered with the U.S. Patent and Trademark Office (USPTO). Developing East Asia still lags behind the U.S. and Japan, which account for about 60 percent and 20 percent of registrations respectively, but it is nonetheless remarkable that its share in the total had quadrupled from less than 2 percent to almost 8 percent in 2004. In contrast, Eastern Europe and Latin America appear to have made no inroads at all.

Table 1.3: Share of intra-regional trade rose to about 50 percent in high & middle-income countries, China's share of intra-regional exports fell (*share of intra-regional trade, 1995-2004, percent*)

Country	Intra-regional Exports		Intra-regional Imports		Summary of Trend	
	1995	2004	1995	2004	Exports	Imports
<i>High Income</i>						
Japan	36	41	35	44	↑	↑
Korea, Rep. of	37	42	39	42	↑	↑
Taiwan (China)	28	43	47	55	▲	▲
Singapore	46	47	55	55	↔	↔
<i>Middle Income</i>						
China	32	26	48	51	↓	↑
Indonesia	51	58	47	53	▲	▲
Malaysia	48	49	56	61	↔	↑
Thailand	52	55	44	47	↑	↑
Philippines	36	52	46	56	▲	▲
<i>Low Income</i>						
Mongolia	32	55	29	41	▲	▲
Vietnam	64	40	69	72	▼	↑
Cambodia	69	12	87	78	▼	▼
Lao PDR	61	38	69	85	▼	▲

Note: Bold arrows indicate sizable changes; other arrows indicate small or no change.

Source: Authors' calculation, based on IMF Direction of Trade Statistics.

Table 1.4: Parts and components have become more important in East Asia’s trade since 1990 (*share of total trade, 1990 and 2003, percent*)

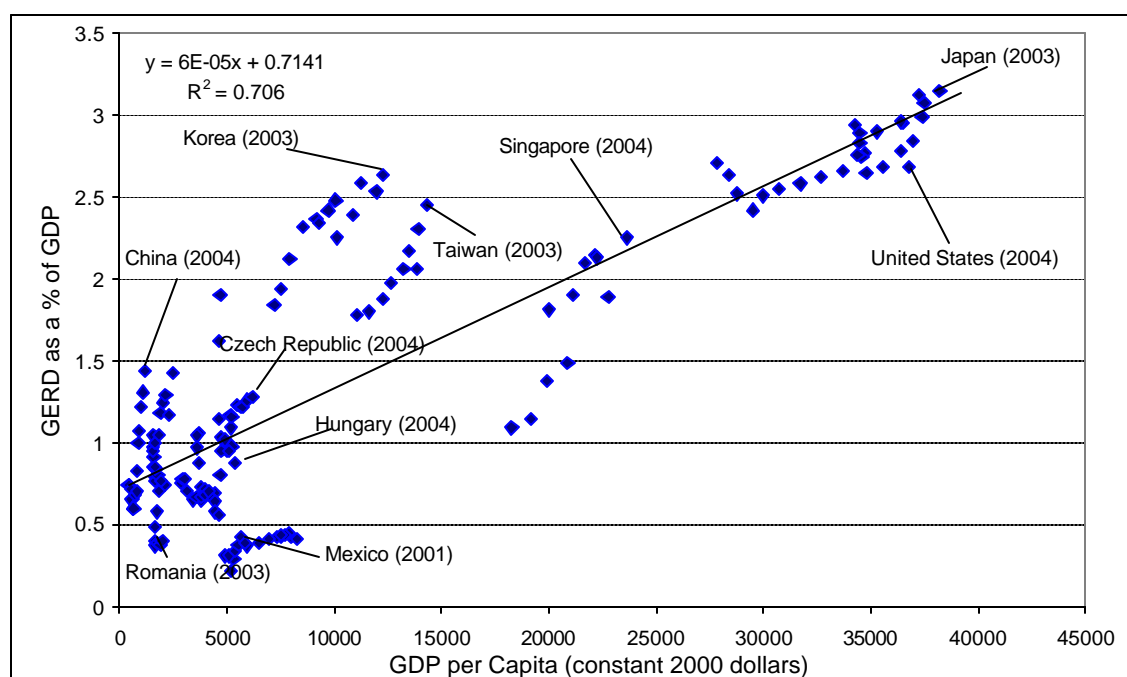
Country	Share of Exports		Share of Imports	
	1990	2003	1990	2003
Japan	22.9	32.6	6.4	15.3
Taiwan (China)	16.9	33.9	17.9	28.3
Korea, Rep. of	15.8	28.0	16.6	23.0
China	4.1	15.1	16.1	27.2
Indonesia	0.8	9.1	15.2	13.5
Malaysia	19.5	39.5	26.0	47.9
Philippines	17.8	55.6	15.6	48.8
Thailand	11.3	22.1	21.6	26.0

Source: Okamoto (2005).

An important driver of the generation of useful ideas and of technological progress is the gross expenditure on research and development (GERD). As seen in Figure 1.3, East Asian countries spend a greater share of their GDP on R&D than the average country in the sample; China, Korea, Taiwan (China), Singapore and Japan all lie above the line of best fit.

In a background paper for this report, Hu (2006) finds strong evidence of 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

Figure 1.3: China, South Korea, and Taiwan (China) are outperforming their peers in R&D (*gross expenditures on research and development, latest*)



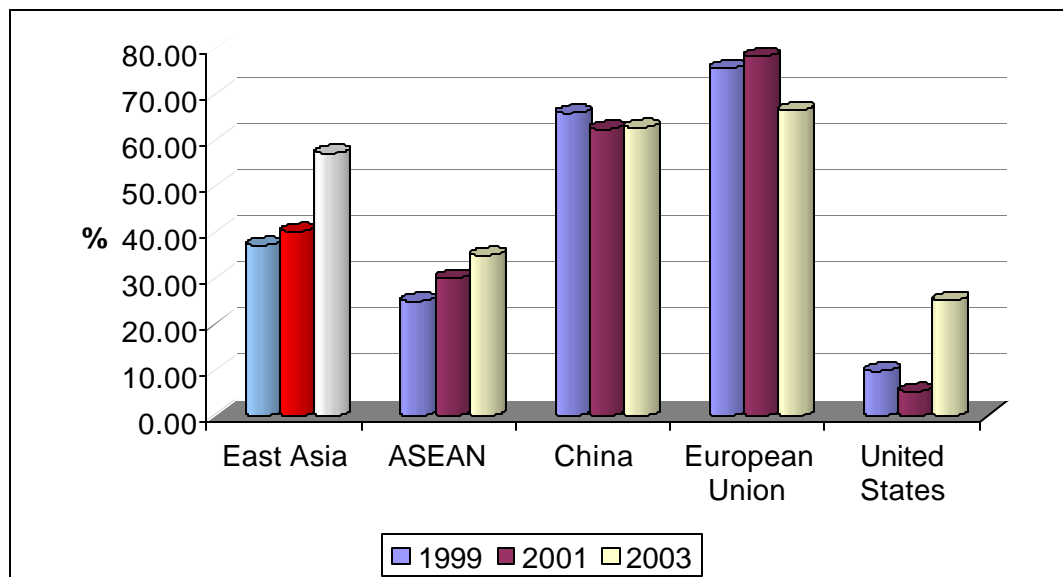
Source: OECD Main Science and Technology Indicators 2005, World Bank GDF & WDI Central Databases (August 2005).

the U.S. and Japan. With the exception of Thailand, all of the East Asian economies examined (Hong Kong [China], Singapore, Malaysia, and China) cite Korea and Taiwan (China) as frequently as they cite the U.S. and Japan. Intra-regional knowledge flows have substantially intensified since the mid-1990s and—while the U.S. remains an important source of technological know-how—Britain, France, Germany, Italy, and Canada are now the least cited holders of U.S. patents.

China and the crisis alter the flow of finances

The growth in intra-regional trade has been accompanied by a similar expansion in intra-regional FDI. While the evolution of intra-regional FDI has been more volatile than trade, the trend over the past decade has been a positive one. Intra-regional 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 intra-regional trade, there is considerable diversity within East Asia. Some countries such as Thailand and the Philippines saw increases in this 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 (*intra-regional FDI flows as a share of total flows, 1999-2003, percent*)



Note: The 2003 figure for East Asia is for 2002; figures for China include FDI from Japan; figures for ASEAN refer to FDI from East Asia to ASEAN, and not strictly to intra-ASEAN FDI.

Source: UN World Investment Report 2003, EU Foreign Direct Investment Yearbook 2005, U.S. Bureau of Economic Analysis, China State Statistical Yearbook, Statistics of Foreign Direct Investment in ASEAN (2004), Rana (2005).

Table 1.5: Regional FDI patterns have changed over the last two decades (*intra-regional FDI as share of total, selected countries, 1985-2004*)

Country	Definition	Average share (percent)			
		1985-1989	1990-1994	1995-1999	2000-2004
China	Inward FDI flows	76.5	83.2	73.2	61.4
Indonesia	Inward FDI approvals	40.6	47.1	38.0	41.8
Malaysia	Inward FDI flows	n.a.	48.5	28.4	28.6
Korea, Rep.	Inward FDI approvals	53.1	29.7	26.3	25.8
Thailand	Inward FDI flows	71.0	62.3	51.9	94.4
Philippines	Inward FDI registered with Central Bank	25.9	38.9	43.3	41.9

Sources: China: State Statistical Bureau, China Statistical Yearbook; Indonesia: Investment Coordinating Board (BKPM); Malaysia: Bank Negara Malaysia, Monthly Statistical Bulletin, various issues; The Philippines: Central Bank of the Philippines (BSP); Thailand: Bank of Thailand; Korea: UNCTAD, World Investment Directory, 2000 (for data up to 1997); Ministry of Commerce, Industry and Energy (for data from 1998).

1.2.3 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 the others, between rural and urban interests, and between the public and private interest.

Developing East Asia's per capita income is still a fraction of the income level of industrialized countries, so the *distribution* of the fruits of economic growth should not excessively preoccupy policy makers. To put it crudely, it is more important that countries in the region adopt policies that help per capita incomes grow from \$1,000 to \$10,000, rather than those that simply prevent income inequality indices from rising from 0.4 to 0.5. But it does not seem that distribution concerns can 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 those 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 can be a signal that growth opportunities are being missed and that the economy is not operating at its full potential.

A big move into cities, a growing concern about livability

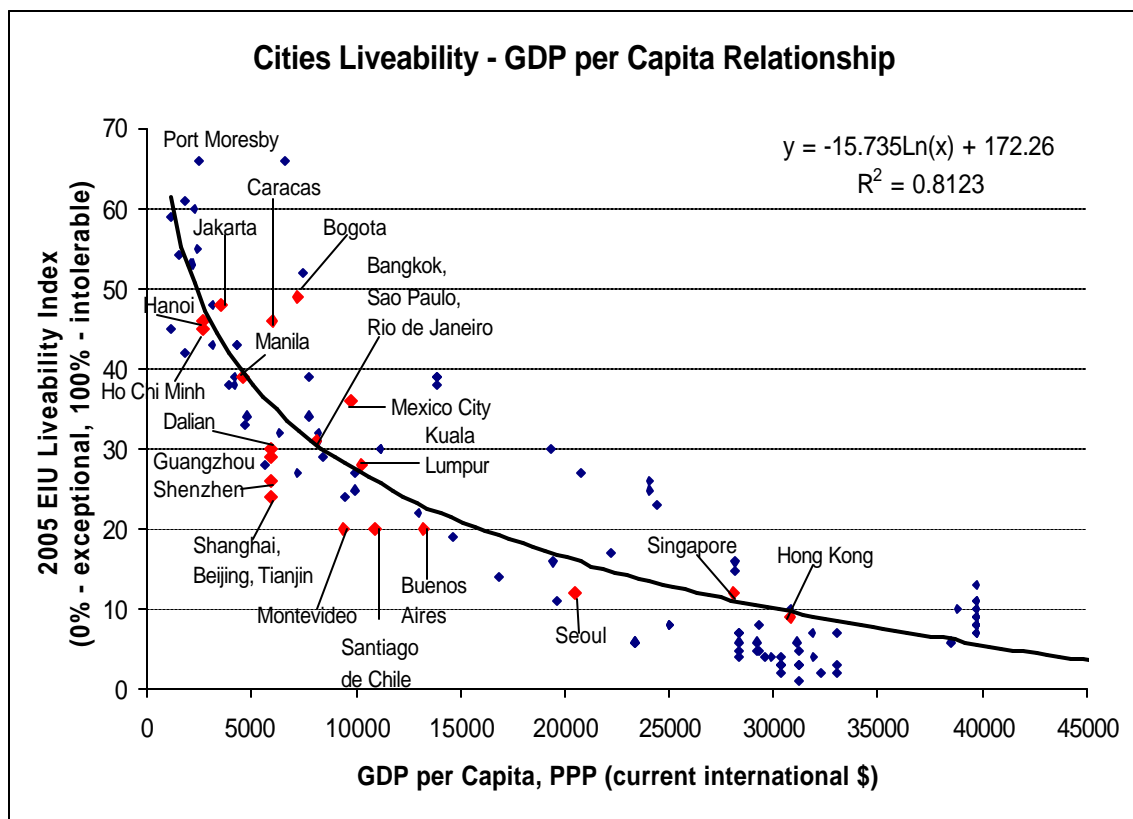
Urbanization is a natural consequence of development. As societies develop, they often become increasingly urbanized and industrialized, while the relative importance of the agricultural sector often declines. East Asia has experienced the second largest annual average growth rate during 1960-2004, after Sub-Saharan Africa. With an annual growth rate of 3.7 percent, East Asia's urban population has more than doubled every two decades. The Middle East & North Africa, South Asia, and Latin America have had comparably high urban population rates of growth between 3.0 and 3.6 percent. East Asia's urban growth was three times as fast as that of high-income OECD countries. As a result, in East Asia, the share of urban areas in total population has more than doubled from 17 percent in 1980 to 40 percent in 2005.

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

This massive urbanization will bring opportunities for growth but also raises big challenges. The literature on economic geography and endogenous growth emphasizes the benefits associated with agglomeration through economies of scale, production networks, backward and forward linkages, and spillover effects of technology and human capital. But urbanization at such a scale can also easily lead to problems such as congestion, unemployment, crime and deteriorating public services. In East Asia, this could jeopardize entire economies, because of the concentration of economic activity in cities: Today, Bangkok has 40 percent of Thailand's GDP and 12 percent of the population, Manila has 30 percent of the GDP and 13 percent of its population, Ho Chi Minh City has 20 percent of Vietnam's GDP but only 6 percent of its population, and Shanghai accounts for 11 percent of China's GDP but less than 1 percent of its population.

These considerations also raise questions with regard to the growing gap between prosperous mega-cities and the rest of the country, viz. rural areas and small and medium-sized cities. Population growth in East Asian mega-cities raises important questions about urban

Figure 1.5: Large East Asian cities are as livable as those in Latin America



sustainability and management. Many East Asian mega-cities are expected to grow by more than 50 percent by 2030. Cities such as Jakarta and Shanghai are likely to grow from around 12 million in 2005 to more than 20 million each by 2030. Beijing is expected to expand from less than 10 to more than 15 million inhabitants.

While East Asian cities differ in many ways, they share some attributes. Their population and wealth is growing rapidly, their governments are gaining administrative 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 of the demographic growth in most countries, including China, Indonesia, Thailand, and the Philippines. East Asia's economic growth will depend on how cities can handle the challenges associated with service delivery, infrastructure, land markets, the environment, development of neighboring rural regions, employment creation, and urban poverty.

East Asia is the poverty reduction champion of the world. Since the crisis in the 1990s, headcount poverty (at two dollars a day) has fallen by about 250 million people. In other words, during the last five years, about a million East Asians have moved out of poverty *every week*. Consumption per person has more than doubled in real terms since 1990 in the region (see Table 1.7), and every country in the region experienced sizable improvements in human development between 1990 and 2003 (UNDP, 2005). Approximately 150 million persons, or about 8 percent of East Asia, now live on less than a dollar a day. A big part of the story is China, but other countries, especially Vietnam but also others such as Cambodia and Laos, have also effected poverty reduction on an unprecedented scale.

Table 1.6: East Asia's urban population will increase by more than 500 million over the next 25 years (*current share and level of urban population and projected growth, 2005-2030*)

<i>Country</i>	<i>Share Urban (Percent)</i>		<i>Urban Population (millions)</i>		<i>Annual Growth rate</i>
	<i>2005</i>	<i>2030</i>	<i>2005</i>	<i>2030</i>	<i>2005-2010</i>
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
<i>East Asia</i>	<i>44.2</i>	<i>62.0</i>	<i>921.3</i>	<i>1463.0</i>	<i>2.6</i>
<i>World</i>	<i>48.7</i>	<i>59.9</i>	<i>3150.5</i>	<i>4912.5</i>	<i>2.0</i>

Source: World Urbanization Prospects (2005).

Table 1.7: The number of East Asians living on less than 2 dollars a day fell by 500 million since 1990 (mean consumption and headcount poverty, 1990, 2000, and 2005)

	<i>EAP</i>	<i>China</i>	<i>Indonesia</i>	<i>Vietnam</i>	<i>Philippines</i>	<i>Thailand</i>	<i>South Korea</i>	<i>Malaysia</i>	<i>Cambodia</i>	<i>Laos</i>
Population (millions)										
1990	1585.4	1143.3	178.2	66.2	62.6	55.6	42.9	18.2	10.3	4.2
2000	1789.6	1267.4	210.5	79.9	76.3	61.9	47.0	23.3	12.7	5.4
2005	1868.5	1307.7	226.1	86.1	83.7	65.1	48.3	25.5	14.1	6.1
Mean consumption (1993 \$ 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 \$1/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 \$2/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 \$1/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 \$2/day (millions)										
1990	1060.8	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

A big move out of poverty, a growing concern about inequality

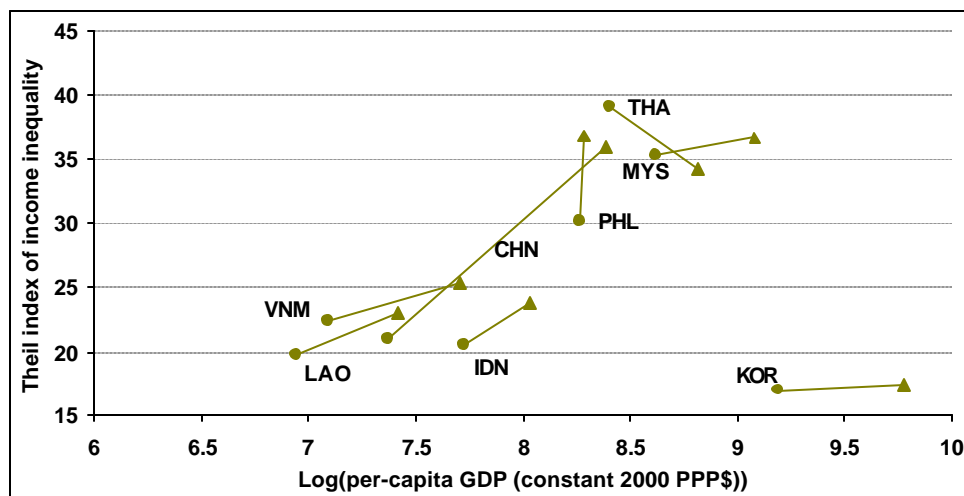
An ambitious region should perhaps, however, have more ambitious poverty reduction targets. Using a poverty line of two dollars a day, an estimated 585 million East Asians are still poor—about 375 million in China, 100 million in Indonesia, 40 million in Vietnam, 35 million in the Philippines, and about 30 million in the other countries in the region.³⁸

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 its countries. But growing economies have also been associated with growing income disparities in East Asia. 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, erasing a small fraction of 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 rose

³⁸ These figures exclude Myanmar and the Democratic People's Republic of Korea.

Figure 1.6: Inequality has been rising since 1990 in much of East Asia (*Theil Coefficients, 1990 and 2002, versus per capita income*)



to more than three-fourths by 2002. Growth and regional integration seem to be helping to bring the average living standards of different countries closer, while driving apart the differences within countries.

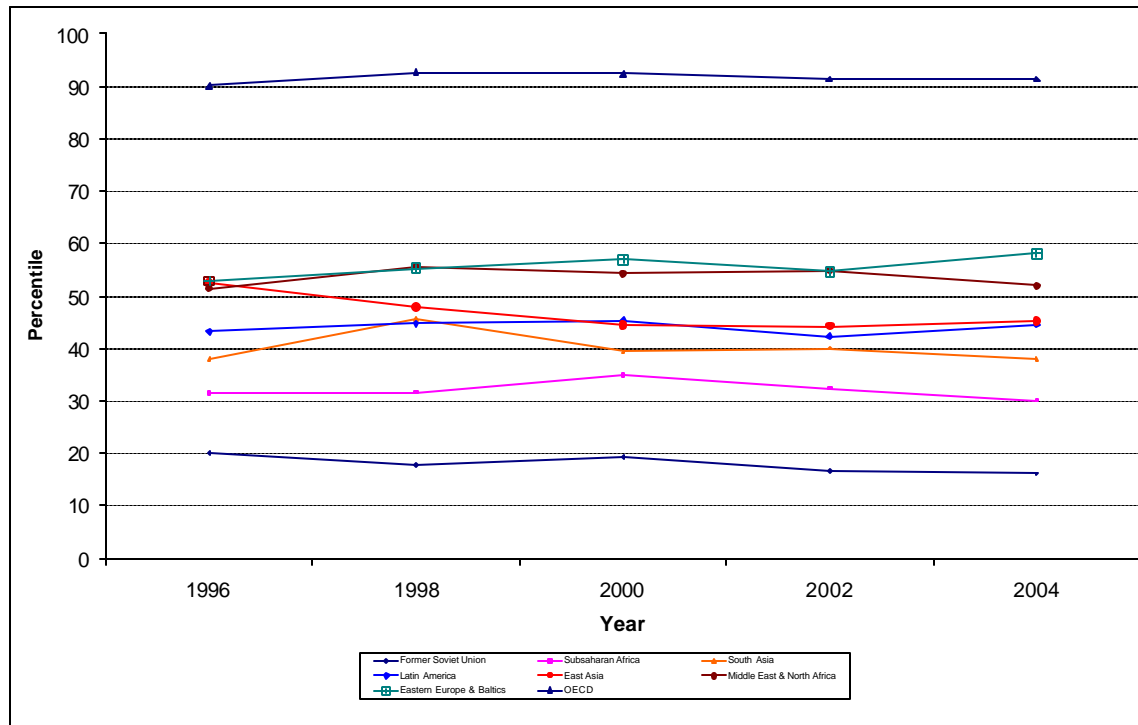
An aspect of inequality that is robust across all countries of the region is the rural-urban gap in incomes, consumption, poverty, education, and health. Urban mean consumption levels are between 50 (in countries such as Indonesia) and 100 percent (in countries such as China, the Philippines, and Thailand) higher than rural levels. Rural poverty rates are between 2 and 3 times urban poverty rates; poverty rates appear to have fallen equally rapidly in urban and rural areas since 1990. Poverty remains an overwhelmingly rural phenomenon in East Asia, with the rural share of the poor (calculated using national poverty lines) ranging from about 75 percent in the Philippines and Indonesia to about 95 percent or more in China, Vietnam, and Cambodia. These ratios have not changed much since 1990. The urban schooling attainment is between 33 percent (the Philippines) to 50 percent (in countries such as China, Indonesia, and Thailand) higher than rural levels.

Bigger responsibilities for governments, a growing concern about corruption

One measure that illustrates the extent of corruption in a given region is “control of corruption.”³⁹ This measure shows the percentage of countries that are doing relatively worse in controlling corruption than a given country or region in the sample. East Asia’s position has deteriorated somewhat between 1996 and 2004. Indeed, in 1996, East Asia lagged only higher income OECD countries 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.

³⁹ “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 (2004).

Figure 1.7: East Asia and Latin America do equally poorly in controlling corruption (regional averages, control of corruption, percentiles)



Source: Kaufmann, Kraay, and Mastruzzi, 2005.

Some have argued that East Asians are more tolerant of corruption than in other societies and do not consider some practices, such as giving of small gifts to public officials, as corrupt. But there does not appear to be any such empirical basis for such statements. Firms consider corruption to be a major obstacle to business in Cambodia, Indonesia, and Philippines, and household surveys in Cambodia, Thailand, and Indonesia 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 its level.

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

As East Asian economies become wealthier and more complex, their 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 the case 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.

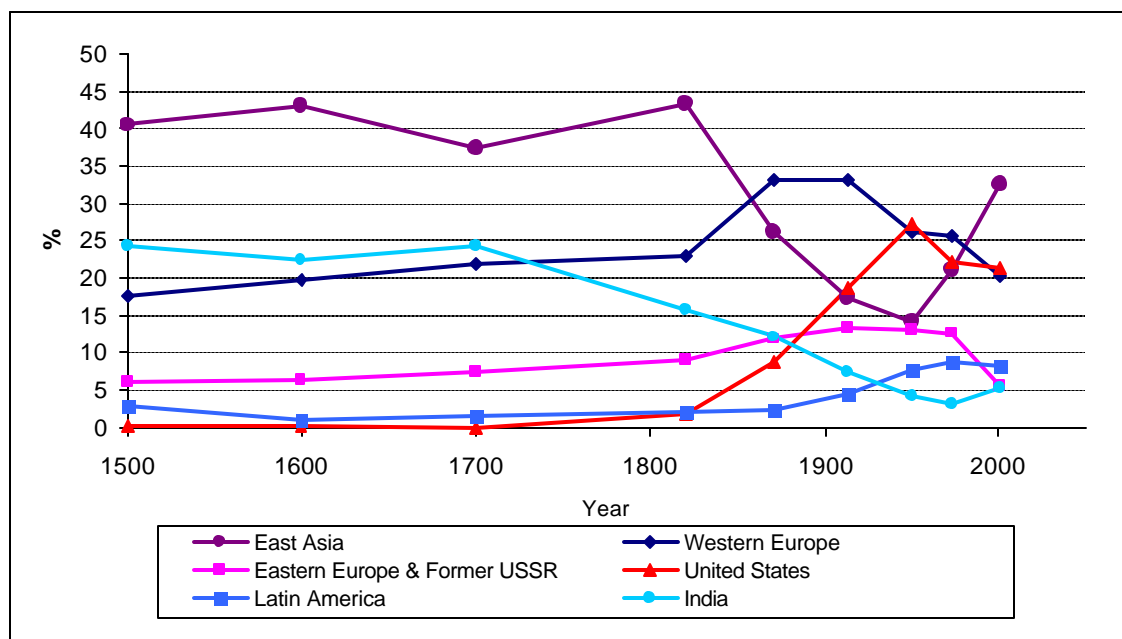
With rapid growth, East Asia is becoming a region of middle-income countries. But since East Asian countries still have only a fifth of the world’s gross national product in dollar terms, they have found it profitable to strengthen trade, investment, and technology links with North America and Western Europe, each of which account for 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).

With declining transport costs, countries of the region have augmented global integration by rapidly escalating regional exchanges of goods, finance, and ideas. Countries in East Asia now face potential pitfalls associated with congestion, conflict, and corruption, the domestic side

Box 1.2: “The East Asia Project”: Achieving historically high shares in the world economy

For more than 300 of the past 500 years, East Asia’s share of world GDP hovered around 40 percent, with a peak of 43.4 percent in 1820. India came in second with a share of world GDP of around 25 percent between 1500 and 1700. With the Industrial Revolution in Great Britain in the mid-to-late 18th century, and in most of Western Europe and the United States throughout the 19th century, these two regions caught up rapidly with East Asia. East Asia lost its lead to Western Europe by 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 just 14.3 percent of world GDP. Since then the region has effected an impressive rebound. By 2001, it again topped the list, accounting for about a third of the world economy in purchasing power terms (see Figure 1.8).

Figure 1.8: Share of world GDP (PPP, constant 1990 international \$)



Note: The actual figures for East Asia might be a bit lower, since in this classification, East Asia is the sum of Japan, China and other Asia, which includes countries from both East Asia and West Asia (Central Asian countries are part of the former USSR group). Even so, given that West Asia’s share in the GDP of Asia has been rather low (3.7 percent in 1820, 5.3 percent in 1870 and 6.0 percent in 1913), the exact figures for East Asia are most likely only slightly lower, by around 1-1.5%.

Source: Maddison 2003.

Assuming that world GDP grows at the same rates it did during the last 25 years (viz. at 2.9 percent annually), it will be about \$70 trillion in 2028. For East Asia’s share of this to be 43.5 percent, it would need to grow at 5.3 percent annually. East Asia’s annual growth during the last 25 years was about 6.9 percent.

effects of rapid growth driven by international integration. The challenge ahead can be seen as one of complementing successful global and regional integration with domestic integration.

This report assesses the prospects of this “third integration” being as potent as the first two in East Asia. In making this assessment, it is useful to understand recent advances in thinking, and to use these insights to frame and discipline the inquiry. The next section summarizes the relevant recent breakthroughs in economic theory, and how they can help in understanding what is happening in East Asia.

1.3 Understanding economic growth: Recent advances

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 problems of development. While economic growth remains a mystery, these efforts have yielded several insights. The next few pages attempt to summarize these developments with the backdrop of East Asia’s experience over the last two decades and discuss the potential policy implications of these advances.⁴⁰ Putting this work in the East Asian context is not hard to do, because the East Asian economic growth figures prominently in these papers.

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 predicted that efforts to accumulate physical and human capital, improve efficiency of production, and utilize the latest technologies were to pay off in a narrowing of income gaps between developed and developing countries and, eventually, to lead to roughly equal welfare levels across the globe. The fundamental implication of mainstream economic theory was that in seeking the highest possible returns, financial and human capital would move from places where it is abundant to 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 problem of economic growth.

To ensure that markets can do this, the role of governments is first and foremost to ensure “peace, low taxes and tolerable administration of justice.”⁴¹ 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 faster even than 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.

⁴⁰ Helpman (2004) provides an insightful but somewhat technical account of these developments, and Warsh (2006) contains an accurate account of the thinking that has led to these insights.

⁴¹ 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.”

But this has not happened. With few exceptions—primarily the East Asian high performers— 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 more than 150 percent, and the income ratio between high and low-income countries has been cut in half. But 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. And as often as capital has flowed downhill from rich to poorer countries, it has climbed uphill to rich countries, even from middle-income countries that had peace, low taxes, and 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 conditions for sustained growth and being so close to the few countries which 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 have to sustain high rates of income growth all the way to high-income levels.

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 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 can do even better. Chapters 5, 6, and 7 discuss how countries in the region can address distributional concerns, so that the foundations for rapid growth are progressively strengthened.

1.3.1 Economies of scale

The force behind convergence between rich and poor countries is the law of diminishing returns. With convergence being 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 non-rival nature of ideas. That is, ideas are different from goods and factors because an idea can be used again and again, and by many people at the same time. And an idea, once formed, can be used by others as a starting point for new ideas.

While ideas are non-rival, they are generally neither free nor non-excludable. Coming up with useful ideas usually requires effort. And it is possible to exclude people from using ideas to improve products or production processes through secrecy or enforcement of intellectual property rights, even if temporarily. This excludability results in knowledge, conferring on its

creators some monopoly power. Bringing knowledge explicitly into formulations of economic growth allows economists to recognize the centrality of ideas and the importance of increasing returns, but it also requires recognizing the proliferation of imperfect competition. By the late 1980s, scale economies were standard features of explanations of international trade. By the early 1990s, growth theorists had accepted the need to incorporate imperfect competition among firms into aggregate formulations of the economy. By the mid-1990s, theorists had shown how these ideas could 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 closer to the world that policy makers have to live in. 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, related to how economic growth relates to trade, innovation, and cities respectively:

Table 1.8: Recognizing the importance of scale economies: Recent advances

<i>Subdiscipline</i>	<i>Decade</i>	<i>Key publications</i>	<i>Main insights</i>
Industrial organization	1970s	Spence (1976), Dixit & Stiglitz (1977)	Formal models of increasing returns to scale and imperfect competition
International trade	1980s	Krugman (1980, 1981), Ethier (1982), Helpman & Krugman (1985), Grossman and Helpman (1995)	Increasing returns and imperfect competition explain intra-industry trade between countries with similar endowments; initial endowments can, 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, & 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 & Helpman (1991), Aghion & 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 and/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).

- **Intra-industry trade.** The main insight that a formal recognition of increasing returns to scale and product differentiation provides is that trade can take place between economies that are similar in factor endowments; both inter-industry *and* intra-industry trade can profitably take place. The principal implication is that countries can, theoretically, profitably encourage some activities and ensure comparative advantage.
- **Ideas-driven economies.** The main insight is that the non-rival nature of ideas makes them different from other factors of production such as capital, land, and labor, in that the market may under-invest in creation of new ideas. The principal implication is that governments should, theoretically, subsidize certain strands of research and development, e.g., those that will ensure continuing comparative advantage that a country has acquired in some activities.
- **Cities-based growth.** The main insight is that activities that display increasing returns due to factors external to the firm will tend to concentrate in cities until congestion costs counter these external economies, while those displaying constant returns will be remain widespread. The implication is that policies to keep cities business-friendly and livable 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 and quality improvements, and heterogeneity of firms within industries, e.g., between exporters and non-exporters and between young and old firms. These profiles differ between 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 upon their sector, location, skill and relations with government. The underlying reason is the love of variety in consumption and economies of scale in production: the proximate causes are product differentiation, monopolistic power,

Box 1.3. Middle income: A time for big changes

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

- **From diversification to specialization.** Recent evidence indicates that countries generally appear to initially diversify as they grow, but that this trend is reversed after per capita incomes reach levels around \$5,000-\$8,000, after which they begin to specialize again. This tipping point can come sooner or later, depending on the country's size and export orientation. Thus, for example, Singapore started to specialize at a per capita income around \$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 entry of new firms and exit by those whose products or technologies are made redundant by new firms. This switch has to be timed right, and it should be recognized that it will be difficult to implement because of vested interests.
- **From basic education to basic research.** As countries become better informed about which goods in whose production they should specialize and, relatedly, the R&D activities 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 cannot 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), and Helpman (2006).

specialization, and location externalities. The problem for government is to address divergence of market solution from social optima because of scale economies and, because these lead to sizable economic rents, to their efficient and equitable distribution.

1.3.2 *Distribution of economic rents*

While aggregate models have recognized scale economies, externalities, product differentiation, and imperfect competition among firms, recent trends have been towards more disaggregated models of the economy that recognize the differential impacts. To oversimplify somewhat, these models focus on the differences between skilled and the unskilled workers, between firms that are large and those that are not, and between activities and people located in cities that have high economic rents and those who live elsewhere. Put another way, while section 1.3.1 discussed the scale of economic activities and imperfect competition among firms, this section will discuss the distribution of economic rewards and imperfect allocation among workers and consumers. Table 1.9 attempts a summary of the advances in economic theory in understanding the latter.

Table 1.9: Economic growth and distribution: Recent advances

<i>Subdiscipline</i>	<i>Channels</i>	<i>Key publications</i>	<i>Main insights</i>
Correlation between growth and distribution			
International trade	Skill premia	Ethier (1982); Helpman & Krugman (1985); Feenstra and Hanson (1996)	Trade in final goods takes place on Heckscher-Ohlin terms and reduces skilled-unskilled wage premia in middle-income countries. Trade in intermediate goods can increase these gaps.
Industrial organization	Skill premia	Acemoglu (1996)	Moves towards flatter organizations and team-based work within firms and growing segregation of firms by skill levels across sectors, likely reduces within-firm wage dispersion and raises across-firm wage gaps.
Endogenous growth	Skill premia	Aghion and Howitt (1998) Garcia-Penalosa and Turnovsky (2006)	General purpose technologies such as engines, laser, and computers generate structural shifts that favor the more educated Higher saving or productivity leads to higher growth and inequality if initial distribution of capital is less uniform than that of labor.
Economic geography	Rural-urban differentials	Krugman (1991), Fujita, Krugman, & 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 leading to large and persistent urban-rural differentials
Effects of distribution on growth			
Industrial organization	Investment	Loury (1981); Perotti (1992); Aghion & Bolton (1997);	Capital market imperfections imply that poor but talented individuals cannot take advantage due to inability to borrow and invest.
Political economy	Incentives	Alesina and Rodrik (1994); Persson and Tabellini (1996);	Higher inequality leads to a 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.)

The recognition of distributional implications of economic growth driven by increasing returns and leading to large economic rents allows economic theory to better inform the tradeoffs and choices confronting policy makers. For middle-income countries that are growing rapidly and seek to maintain this momentum, there are three aspects of distribution that have policy implications:

- **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 and product market linkages 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.
- **Socio-economic 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 both 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 which aggressively exploit economies of scale will likely experience rising inequality (both 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 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 activities and methods for taxing and subsidizing 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 especially strong efforts to address corruption.

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

1.3.3 Plan of this report

The line of thinking developed in the literature during the last decade and a half can 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 understanding the nature and causes of growth in developing countries. The international flow of goods, ideas, and finance is necessary for successfully exploiting scale

economies in all countries, but especially in middle-income countries which have successfully built the basic foundations for development.

- *Intra-industry trade reflects scale economies.* Scale economies are an important reason for the growth of intra-industry trade alongside the more “conventional” inter-industry 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 can widen 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 generating economic progress because, given their non-rival 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, relatedly, from an emphasis on investment to innovation.
- *Foreign capital is a critical facilitator of intra-industry trade and a conduit for knowledge.* Stable flows of finance within and between countries are a critical prerequisite of specialization that enables exploitation of scale economies, especially between partners in production networks. International flows of finance are also a potent instrument for accessing new technology, even though these flows can pose risks for middle-income countries.
- *Scale economies imply economic rents which are unevenly distributed within countries.* The sector and size of firms, the location of economic activities, and the skill 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 can reasonably be interpreted as a reflection of the importance of economies of scale. Large and mega-cities serve as hotbeds for 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 keep the world’s leading innovators within striking distance.
- *Rural urban differences are inevitable and skill premiums tend to widen.* Growing intra-industry trade and related foreign direct investment in middle-income countries have differential impacts on people in a country, depending on whether or not they are entrepreneurs and/or employees in sectors that exhibit scale economies, and depending whether they are skilled or unskilled. The rapid urbanization in East Asia’s middle-income countries can be an opportunity for expanding the access of rural populations to the same social services and economic dynamism experienced by residents of large cities.
- *Societies have to 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 to efficiently regulate, tax, and reinvest the rents associated with activities that exhibit scale economies, and imperfect competition. This implies that it is increasingly important for governments to be both less corrupt and less centralized, since successful encouragement of selected activities requires close relations between private

enterprises and government, and 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. These ideas—the importance of exploiting the advantages of bigness *and* recognizing the absence of sameness—are developed in the next six chapters for 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 respectively. These chapters discuss what East Asia is doing well, and what it perhaps can do better. Chapters 5, 6, and 7 discuss the challenges of managing the domestic distribution of economic rents, taking up the topics of cities, cohesion, and corruption respectively. This report proposes that it is in these aspects of domestic integration that East Asia’s developers have to do a lot more. As pointed out in earlier sections of this chapter, the experiences of 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 the part of the world where many countries have achieved success in increasing per capita incomes from about \$100 to more than \$1,000, and of some countries in going from per capita incomes of about \$1,000 to more than \$10,000. Countries in East Asia that have reached middle income have heeded Smith (1755), and instituted the basic 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 investments in human capital. For such middle-income economies looking to become high-income countries, it is not helpful to simply repeat these messages. The subsequent chapters of this report are a contribution to the efforts of developing countries in East Asia to grow through and beyond middle-income levels.

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