

Source: Based on World Bank staff calculations. *Note:* In purchasing power parity dollars.

СНАРТЕК



COHESION

Much has been written about East Asia's stellar growth performance over the last two decades or so. The record is well known. As Chapter 1 notes, in terms of per capita growth in gross domestic product (GDP), East Asia has been the most rapidly growing region in the world by a good margin. The massive improvement in living standards is reflected in the fact that, between 1980 and 2004, average GDP per capita levels in the region rose by a factor of 4.5, while world GDP per capita increased by a factor of only 0.5. Per capita GDP in the region is now beginning to approach the levels Latin America and the Caribbean attained in the 1980s. Regional GDP per capita in 2004 was about three-quarters of the per capita GDP in Latin America and the Caribbean in 1980.1 In hindsight, even the Asian crisis of 1997–98 appears to have been a hiccup in the unfolding of an overall robust growth experience.2

While this record is both impressive and uncontroversial, concerns remain about how well this growth has successfully delivered on enhancing the lives of the 1.9 billion people who inhabit the region. Beyond the averages are questions on how widely the benefits have been shared and whether the region has also appreciably improved the economic and social opportunities for the vast majority of the citizenry. Underlying some of these concerns are questions about whether socioeconomic disparities can threathen economic growth aspects. This chapter is an attempt to assess these concerns and the emerging implications for public policy.

Convergence is occurring among countries, but within-country inequality is rising because of widening spatial and social gaps. Inequality is a natural consequence of scale-centered growth. A review of East Asia's development experience since the 1990s from this perspective reveals the following significant facts:

- Absolute poverty in terms of both the percentage and the absolute number of poor people has declined dramatically since the 1990s.
- The reduction of income poverty has been accompanied by progress in overall human development indicators on the countries in the region.
- However, looking beyond extreme poverty, a large proportion of the region's population continues to subsist at fairly low levels in terms of living standards.
- Inequality in income or consumption has risen significantly since the 1990s, and most of this rise is driven by the increase in inequality within countries.
- Even where relative inequalities do not show a trend, absolute disparities have been growing rapidly.
- Two fault lines of inequality within countries are of particular concern: the urban-rural divide and the regional-ethnic divide. These divisions are apparent in both the income and nonincome indicators of welfare.
- Vulnerability expressed as the ex ante risk of falling into poverty is emerging as a concern.

The next section documents these trends in greater detail. The rest of the chapter discusses some of the underlying forces driving these trends (the subsequent section), why we should care about rising disparities (the penultimate section), and some emerging implications for public policy (the final section).

The Main Trends

Poverty

Table 6.1 sets out the record of poverty reduction in the region since the 1990s. The progress has been dramatic and historically unprecedented. During the 1990s, the proportion of populations living on less than US\$1 a day declined from 29 to 14 percent; in absolute terms, the number of poor declined from 457 million to 248 million. Projections (based on macroeconomic and sectoral growth patterns and the most recent available household survey data) indicate that the current levels of US\$1-a-day poverty are around 8 percent, while the number of poor is down to about 150 million. The region has already attained and surpassed the Millennium Development Goal target of halving the 1990 absolute poverty rate by 2015.

Indicator	East Asia and Pacific	Cambodia	China	Indonesia	Korea, Rep. of	Lao PDR	Malaysia	Philippines	Thailand	Vietnam
Population (millions)										
1990	1,585.4	10.3	1,143.3	178.2	42.9	4.2	18.2	62.6	55.6	66.2
2000	1,789.6	12.7	1,267.4	210.5	47.0	5.4	23.3	76.3	61.9	79.9
2005	1,868.5	14.1	1,307.7	226.1	48.3	6.1	25.5	83.7	65.1	86.1
Mean consumption (1993 purchasing power parity US\$ per person per day)										
1990	2.24	1.84	1.88	2.02	9.90	1.29	6.42	2.97	3.38	1.37
2000	3.73	2.32	3.47	2.38	16.31	1.75	10.00	3.52	4.12	2.41
2005	5.32	2.61	5.43	3.05	18.21	2.11	12.06	3.76	5.16	2.97
Headcou	Headcount index (% of population living on less than US\$1 a day)									
1990	28.8	32.5	31.5	20.6	<0.5	53.0	2.0	19.1	12.5	50.8
2000	13.8	22.6	15.4	9.9	<0.5	33.9	<0.5	13.5	5.2	15.2
2005	8.0	17.3	8.9	4.4	<0.5	20.0	<0.5	10.8	1.7	7.9
Number of poor (millions living on less than US\$1 a day)										
1990	456.9	3.4	360.6	36.7	—	2.2	0.4	12.0	7.0	33.6
2000	247.8	2.9	194.8	20.9		1.8		10.3	3.2	12.1
2005	149.7	2.4	117.0	9.9	—	1.2	_	9.0	1.1	6.8

TABLE 6.1 East Asia's Progress in Poverty Reduction Since 1990

Source: World Bank 2006a.

Note: --- = no data are available.

While the regional aggregate numbers are dominated by the dramatic decline in poverty in China (from 361 million people to 117 million people living on less than US\$1 a day during 1990–2005), it is evident from Table 6.1 that progress has been rapid in most countries. Average consumption in the region and in most countries is now at a level suggesting that the virtual elimination of extreme poverty (less than US\$1 a day) is a potentially realizable objective.

The progress is also reflected in the human development index, which is a composite measure of development that aggregates three indexes: an index of life expectancy at birth, an education index (itself a combination of the adult literacy rate and the gross enrollment ratio), and an index for GDP per capita in purchasing power parity dollars. As shown in figure 6.1, most countries in the region have recorded significant improvements in the human development index during



FIGURE 6.1 Human Development Indicators in East Asia Have Improved Since 1990

this period. Improvements are especially noteworthy in China, the Lao People's Democratic Republic, and Vietnam. However, the disparities across countries are also striking; despite the improvement in the human development index across all countries, the countries nevertheless remain at quite different stages of economic and social development.

The extreme-poverty goalpost of a dollar-per-day is important. However, even the threshold of US\$1.08 a day adjusted to purchasing power parity dollars does not offer much in terms of the standard of living it affords.³ It is hardly surprising that most countries have chosen to set their national poverty lines (typically based on a threshold of the cost to provide about 2,100 calories per person per day, with some allowance for basic nonfood expenditure) well above US\$1 a day in purchasing power parity dollars. Going beyond US\$1 a day, there is a dramatic rise in the numbers at the relevant thresholds. For instance, it is estimated that nearly a quarter of East Asia's population currently has consumption levels at between US\$1 and US\$2 a day. Altogether, almost 585 million persons in the region, including large proportions of the population in many countries, are living below a US\$2-a-day benchmark (see table 6.2).

Inequality Across and Within Countries

While poverty has declined and human development indexes have improved, inequality within the region has grown. As shown in table 6.3, the Theil index of inequality of per capita consumption for the region as a whole increased from 34.5 percent in 1990 to 42.6 percent in 2002, a rise of about 24 percent.⁴ A decomposition of the overall inequality into between-country and within-country components indicates that most—about three-quarters—of the current inequality in the region is attributable to inequality within countries. In other words, even if all countries showed an identical level of mean consumption, but relative disparities in consumption persisted within countries, the overall inequality in the region would only decline by about a quarter.

There has been a limited decline in inequality across countries, but a key feature of the evolution of inequality in the region is the sharp increase in withincountry inequality. In terms of changes during 1990–2002, the between-country component declined by a modest 1.5 percentage points owing to more rapid growth in mean consumption in relatively poorer countries. However, withincountry inequality increased sharply by 9.6 percentage points, and this resulted in a rise in overall inequality by about 8 percentage points.

Indicator	East Asia and Pacific	Cambodia	China	Indonesia	Korea, Rep. of	Lao PDR	Malaysia	Philippines	Thailand	Vietnam
Headcour	Headcount index (% of population living on less than US\$2 a day)									
1990	66.9	76.3	69.9	71.1	<0.5	89.6	18.5	53.5	47.0	87.0
2000	45.8	67.8	44.8	59.5	<0.5	79.4	9.7	47.2	35.6	63.5
2005	31.3	62.1	28.6	44.4	<0.5	68.6	5.5	41.9	22.8	49.1
Number o	Number of poor (millions living on less than US\$2 a day)									
1990	1,060.8	7.9	799.6	126.7	—	3.7	3.4	33.5	26.1	57.6
2000	819.9	8.6	567.4	125.3		4.3	2.3	36.0	22.0	50.7
2005	584.5	8.7	373.5	100.5	—	4.2	1.4	35.1	14.8	42.3

TABLE 6.2 Progress in Reducing US\$2-a-Day Poverty Since 1990

Source: World Bank 2006a. *Note:* — = no data are available.

	Around 1990		Arou	ind 2002	1990–2002	
Index	Theil index	Contribution to Theil index, %	Theil index	Contribution to Theil index, %	Change in index, %	Contribution to change, %
Total	34.5	100.0	42.6	100.0	23.6	100.0
Between country	12.0	34.8	10.0	23.6	-16.3	-17.7
Within country	22.5	65.2	32.6	76.4	44.8	117.7
Within Theil index	22.5	100.0	32.6	100.0	44.8	100.0
China	21.1	57.2	35.8	74.9	69.7	93.7
Indonesia	20.6	9.4	23.8	5.4	15.5	3.4
Korea, Rep. of	17.0	9.1	17.5	6.0	2.9	0.6
Lao PDR	19.8	0.1	23.1	0.1	16.7	0.1
Malaysia	35.2	5.2	36.7	3.5	4.2	0.5
Philippines	30.1	7.1	36.8	4.1	22.3	3.7
Thailand	39.2	9.3	34.2	3.9	-12.8	-2.8
Vietnam	22.4	2.6	25.4	2.1	13.4	0.8

TABLE 6.3 Evolution of Inequality in East Asia, 1990-2002: The Theil Index

Source: Calculations of the authors based on household survey data for these countries.

As table 6.3 also shows, inequality appears to have risen over this period in seven of the eight countries, the only exception being Thailand. Increases have been especially pronounced in China, but they have also been significant in Indonesia, Lao PDR, the Philippines, and Vietnam.

Changes in China are a big part of the story. The within-country component of regional inequality is a (consumption-share) weighted sum of inequality within individual countries. Given its large size, China contributed 57 percent to overall within-country inequality in the region even in 1990. However, due to the sharp growth in inequality in China (its own Theil index increased from 21.1 percent to 35.8 percent), as well as its growing prominence in the regional economy (reflected in its rising share in aggregate consumption from 61 to 68 percent), China's contribution to the within-country component of regional inequality had climbed to nearly 75 percent by 2002.

Figure 6.2 presents a decomposition of inequality within China in components relating to rural inequality, urban inequality, and intersectoral inequality. During 1990–2002, all three components contributed to the rise in inequality. Inequality within rural and urban areas increased, and intersectoral disparities rose sharply.



Of the total increase in the Theil index between 1990 and 2002, the rise in rural and urban inequality contributed in equal measure, about 30 percent each, while widening intersectoral disparities contributed the remaining 40 percent.

The Rural-Urban Divide

As the rising contribution of intersectoral disparity to overall inequality in China illustrates, the rural-urban divide is emerging as a key focal point of inequity in the region. This is obvious in economic and social indicators. As illustrated in figure 6.3, average real consumption levels in urban areas are often about twice as large as those in rural areas. In countries such as China and the Philippines, the gaps have been rising.

The differences in mean consumption levels are magnified in the rural-urban poverty rates (see figure 6.3). While poverty declined in rural and urban areas over the 1990s, there are no signs of a significant narrowing of the poverty dif-



FIGURE 6.3 Rural-Urban Differences in Income and Poverty Have Been Persistently Large

c. Share of rural poor in the total poor below US\$1 a day



Source: Calculations of the authors based on household survey data.

Note: The estimates relate to the following years: China and Indonesia, 1990 and 1999; Philippines, 1988 and 2000; Thailand 1992 and 2000; and Vietnam, 1993 and 2002. The estimates allow for urban-rural cost of living differentials within countries. For Indonesia, the Philippines, Thailand, and Vietnam, these differentials (for any given year) are taken from the urban and rural poverty lines estimated for the poverty assessments for these countries. For China, an estimated urban-rural differential of 10 percent is used for 1990, and this has then been updated using urban and rural consumer price indexes from national statistical sources.

ferences between cities or towns and the countryside. As a result, poverty in the region continues to be an overwhelmingly rural phenomenon.

Nor are the disparities limited to income and consumption. For instance, the mean number of years of schooling of adults who are likely to have completed their participation in education is between two and four years greater in urban areas relative to rural areas (see figure 6.4). The average adult in rural areas in



FIGURE 6.4 Rural-Urban Differences in Social Indicators Are Considerable

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many countries still has six or fewer years of lifetime schooling, and the average adult woman has fewer still. Similarly, infant mortality rates in rural areas remain well above those in urban areas throughout the region. With the available data, it is difficult to be conclusive about trends in these nonincome aspects of ruralurban disparities, but there is no denying that substantial gaps remain a continuing source of friction in the region.

Evidence for China does, however, indicate some worsening of rural-urban disparities in education and health indicators. For instance, while illiteracy and infant mortality rates declined in rural and urban areas, the ratio of the rural to the urban illiteracy rates rose from 2.1 to 2.3 between 1981 and 2000, and, similarly, the ratio of rural to urban infant mortality rates increased from 1.7 to 2.8 over the same period.⁵

The Regional and Ethnic Divide

Another important element of inequality within countries is regional disparity. Map 6.1 presents a province-level picture of poverty in the region in 2002. For each subregion, it indicates the proportion of the population living on less than US\$1 a day.

The provincial map illustrates three features of the geography of poverty in the region:

- First, national averages hide large differences within countries. Low-income countries include provinces with low poverty incidence, and middle-income countries include provinces with high poverty incidence. There are some regularities across the region. Poverty incidence tends to be higher in remote rural upland areas (for example, in China's Yunnan Province and in Lao PDR and Vietnam), in areas with a weak natural resource base (as in the northeast of Thailand), and in areas distant from major urban centers. Conversely, poverty headcount ratios are generally lower in urban agglomerations and surrounding areas. Poverty incidence also tends to be higher in provinces in the interior relative to coastal areas.
- Second, poverty incidence tends to be spatially clustered, and the clustering may transcend national borders. This suggests that there is an important role for geography in determining poverty over and above the influence of national history, policies, and institutions. The subregion with the most significant crossborder spillovers of poverty incidence is the Greater Mekong subregion,

which includes Cambodia, Yunnan Province in China, Lao PDR, Thailand, and Vietnam.

 Third, poor areas are generally sparsely populated. Areas exhibiting high poverty incidence and low population density include the western provinces of China (Xinjiang and Tibet), the upland areas of Lao PDR, the eastern provinces of Indonesia and Papua New Guinea, and the northern mountain areas of Vietnam. Low-incidence and high-density areas include the plain of Vientiane and the Mekong River corridor in Lao PDR, Luzon Island in the Philippines, and the Mekong River and Red River deltas in Vietnam. Nonetheless, some areas here show high poverty incidence and a large number of poor: for instance, Yunnan Province in China, Java Island in Indonesia, the eastern provinces of the Philippines, and the northeast region of Thailand.

Regional disparities are also notable in human development indexes across provinces. Based on the national Human Development Reports for seven countries in the region, figure 6.5 presents the range of human development indexes across provinces within each country. The provinces with low (high) indexes are often the ones with high (low) poverty rates, although the correlation is not perfect.



Source: Human Development Reports Web site, United Nations Development Program, http://hdr.undp.org/reports/view_reports.cfm?type=3. Note: The numbers and solid vertical lines indicate ranges of the human development index in provinces of the countries shown. The intersections of the orange line with the vertical lines indicate the nationwide value of the index for each country.

For instance, in the Philippines in 2003, seven of the 10 most and least well performing provinces in terms of poverty incidence were also among the 10 most and least well performing provinces in terms of the indexes.⁶

There is also a significant ethnic dimension to inequality within countries that often also overlaps with the spatial disparities discussed above. For instance, compared with the majority community (Lao-Tai) in Lao PDR, ethnic minority groups exhibit higher poverty and child malnutrition rates, lower net primary enrollment rates, and lower values for agricultural assets per capita, thus compounding any deprivations because of their minority status in multiple ways (see table 6.4). It is notable that the Lao-Tai mostly live along the busy Mekong corridor, while the ethnic minorities live mainly in more remote upland areas in the north and center-south.

Similarly, in rural China, poverty rates among the non-Han ethnic minorities are two to three times higher than those among the Han population (see figure 6.6). Remoteness in terms of mountainous residence accentuates the poverty among minority communities. Thus, while only about a fifth of the Han population is located in mountainous areas, the proportion of minorities living in such areas is around two-thirds.

The story is similar in Vietnam, where, relative to the Kinh and Chinese majority, the ethnic minorities are much poorer in terms of consumption levels, access to clean water, and school enrollment, especially at the lower secondary and postsecondary levels (see table 6.5).

There is also evidence of increasing regional disparities in some countries, for instance, China. Using data on per capita consumption expenditure in rural and urban areas in 28 provinces, Kanbur and Zhang (2005) report that measures of

Population segment	Share of population, %	Poor, %	Underweight children under 5, %	Net primary enrollment, %	Value of agricultural assets per capita, KN millions
Majority group					
Lao-Tai	66	25	34	76	4.5
Minority groups					
Mon-Khmer	24	54	43	49	2.0
Hmong-lu Mien	3	46	41	35	2.0
Chine-Tibet	8	40	37	47	3.8

TABLE 6.4 The Ethnic Dimension of Disparities in Lao PDR, 2002–03

Source: Lao PDR, Committee for Planning and Investment et al. 2006.



regional inequality have been increasing significantly since the postreform period; the Gini and Theil indexes rose from about 26 percent and 11 percent, respectively, in 1984 to 37 percent and 25 percent in 2000.

Evidence on trends over time in ethnic disparities is often not readily available. One exception is Vietnam, where the data clearly indicate that improvements among ethnic minorities have not kept pace with those among the majority pop-

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Population segment	1993	1998	2002				
Share who are poor							
Kinh and Chinese	53.9	31.1	23.1				
Ethnic minorities	86.4	75.2	69.3				
Lower secondary enrollment rate							
Kinh and Chinese	33.6	66.2	75.9				
Ethnic minorities	6.6	36.5	48.0				
Share with access to clean water							
Kinh and Chinese	29.0	44.9	52.6				
Ethnic minorities	5.3	9.9	12.8				

TABLE 6.5 **The Ethnic Dimension of Disparities in Vietnam, 1993, 1998, and 2002** *percent*

Source: World Bank 2003.

Note: Ethnic minorities had a 13 percent share in the Vietnamese population in 2002.

ulation in most cases (see table 6.5). This widening ethnic gap cannot be generalized for other countries, but the reality of the large gaps is undeniable. Evidence such as that presented above for China and Lao PDR illustrates that, despite the growth and poverty reduction of the 1990s, ethnicity continues to be a significant axis of disparity in the region.

Vulnerability

The cross-sectional data that underlie the evidence presented above are, however, limited in one important respect: they do not tell us how the living standards of the same households have changed over time. Poverty reduction would be an easier problem to solve if the remaining poor at any given time were a fixed group of households. Instead, there is considerable income and consumption mobility and, especially, movements of people into and out of poverty. This has an important implication: the number of people who are at risk of poverty may be appreciably larger than the number who are observed to be poor. This is illustrated by recent longitudinal data on rural China showing that, as against 18 percent of the population who were observed to be poor, on average, during 2001–04, about 31 percent of the population were poor during at least one of the three years examined (see figure 6.7). Thus, for every poor person, there is another person who faces a one-third or higher probability of entering poverty during the same period.

It is difficult to determine if the relative risk of poverty has been increasing in China or, more generally, within the East Asia region. However, subnational-level evidence on China does indicate that, as the incidence of poverty declines, the share of transient poverty tends to rise.⁷ If that is any guide, then the issue of transient poverty is likely to become more important as East Asia reduces poverty.

Understanding Disparities

The uneven spread of economic growth within countries has thus been as compelling a feature of the growth experience in East Asia over the last two decades as has been the rapid pace of growth itself. Put differently, growth has been accompanied by friction, understood here as the widening or at least the persistence of disparities across space, sectors, or groups and, ultimately, across individuals. The two features are not unrelated, of course. As argued below, many of the same forces that have contributed to rapid growth have also shaped this unevenness in growth. This section looks at five major drivers of friction in the region that have, to varying degrees, influenced the emerging trends in different countries: (1) trade and globalization, (2) labor market reform, (3) the formation



FIGURE 6.7 Many of China's Rural Residents Move Into and Out of Poverty, 2001–04

of clusters and agglomeration effects, (4) the ongoing process of fiscal decentralization, and (5) impediments to the process of internal migration within countries, which is otherwise an equalizing force.

While the first two factors appear to have contributed to rising skill premiums in East Asian labor markets, the third factor underlies much of the observed spatial concentration of economic activity, and the fourth factor has had significant implications for the equitable distribution of public spending, especially in education and health. Given the centrality of China to both the level of and trends in inequality in the region, the following discussion pays particular attention to developments in China.

The "China Price" Is Not Only Cheap, Unskilled Labor

A key factor underlying the rise in inequality within the region has been the expansion in wage inequality.⁸ There has been a significant increasing trend in the returns to education in several countries, which reflects rising skill premiums in labor markets. For instance, in urban China, returns to the completion of educational levels above senior high school rose sharply during 1988–2001 (see figure 6.8). Those completing technical school earned 3 percent more than did



FIGURE 6.8 Well-Educated Workers Are Earning More in High-Growth Countries

Sources: China: Zhang et al. 2005; Vietnam: World Bank 2005b; Indonesia: Alatas and Bourguignon 2005 and World Bank 2006c; Thailand: Blunch 2004.

senior high school graduates in 1988; by 2001, this had increased to 18 percent. Similarly, college graduates earned 12 percent more than did senior high school graduates in 1988, but 37 percent more in 2001.⁹ The growing returns to education suggest that the so-called China price that has been instrumental in making China the factory of the world is not merely a matter of the country's abundant supply of cheap, unskilled labor.

A similar pattern of rising skill premiums is also notable for Vietnam during 1993–2004 and for men workers in urban Indonesia during 1980–2004, while trends in Thailand indicate some increase since the 1998 crisis, though the trends appear to be flat over the longer period from 1994 to 2002 (see figure 6.8). In the case of Thailand, there is some evidence of an increase in relative returns to higher education during an earlier period, from 1985 to 1998. Similarly, there is also evidence of an increase in skill premiums for Taiwan (China) in 1979–94, while rates of return to different levels of education remained stable for Malaysia over 1989–97.¹⁰

Thus, while the trend is not universal, there is evidence of rising returns to skills in several countries in the region. Moreover, the rise in these wage premiums has often occurred despite increases in the relative supply of skilled labor. For instance, the share of urban workers with a college education in China increased from 13 percent to 28 percent during 1988–2001;¹¹ growth rates in postsecondary education in other East Asian countries also generally increased. This suggests that demandside factors have been important (see below).

Trade and Globalization

The sources of the East Asian growth miracle have been extensively studied.¹² One key factor that is especially relevant to the discussion of emerging disparities in the region has been the role of trade liberalization and the ability of the region to take advantage of greater global economic integration through foreign direct investment (FDI) and export-oriented industrialization. It is arguable that, through various channels, the particular pattern of trade and globalization, while stimulating rapid growth in the region, has also contributed to relatively more rapid growth in the demand for skilled labor.

First, in most East Asian economies, rapid economic growth and the associated structural transformations have not only expanded the traded manufactured goods sectors, but have also increased the demand for financial, commercial, and other services and boosted these (still predominantly nontraded) skill-intensive sectors. Skilled labor supply is in less elastic supply in the short to medium term

because of the costs and the time required for acquiring education. Hence, even skill-neutral growth in labor demand (arising from economic growth) may widen wage dispersion for a while if supply elasticities differ across skill categories. As a result, in rapidly growing economies such as China and Vietnam, we may reasonably expect to see some widening of wage disparities even if no other forces are at work.

Second, the pattern of trade and globalization in the region has not conformed to the stylized Heckscher-Ohlin framework, which predicts reduced wage dispersion in countries relatively abundant in unskilled labor. In this framework, trade liberalization leads countries to expand the production of goods that are intensive in the factor in which the countries are relatively abundant, thereby increasing the returns to that abundant factor. Since unskilled labor is the relatively abundant factor in developing countries, trade liberalization might be expected to reduce the relative returns to skilled labor in these countries. However, as noted above, skill premiums have, on the contrary, increased in several countries in the region. This points to the role of other factors affecting such premiums (for instance, labor market reform, as discussed below), but also to some important ways in which the simple Heckscher-Ohlin framework fails to capture the particular features of trade and globalization in the region. Two of these features are notable, as follows.

International capital flows. Contrary to the assumption in the standard Heckscher-Ohlin model that there is no international factor mobility, the capacity to attract large amounts of FDI has been a distinguishing feature of the development success of East Asia. The FDI-trade nexus in East Asia has contributed substantially to narrowing the technology gap with the developed world, a by-product of which has also been the increasing demand for (and wages of) relatively skilled labor through a number of channels. FDI has tended to be concentrated in relatively skill-intensive sectors in East Asian economies.¹³ FDI has also induced skill-biased technological change through the technology directly brought in by foreign firms, as well as through horizontal and vertical transmission to existing and new local firms.¹⁴ Foreign-owned enterprises have likewise tended to pay relatively more to (relatively scarce) skilled labor than have local firms.¹⁵

Production networks. Another significant development in the region has been the growth of production and distribution networks, whereby firms in East Asia have become increasingly integrated into global supply chains. The process of production has been deverticalized and fragmented such that lead firms in developed countries have sought to outsource the noncore fragments of the value chain to

external suppliers. The phenomenon—greatly facilitated by the spread of recent advances in information and communications technology and logistics—is particularly developed in the manufacturing sector, but is by no means confined to manufacturing. A measure of the increasing importance of production networks in the region is the growing importance of the trade in parts and components.¹⁶ The development of production networks and outsourcing have tended to boost the demand for skilled labor in both home and host countries because the outsourced activities, while less skill intensive in the home country, are nonetheless more skill intensive relative to the host country average.¹⁷ Theoretical models that explicitly incorporate intermediate goods and product fragmentation generate results suggesting that trade liberalization and globalization may increase skill premiums and widen wage dispersion.¹⁸ While the mechanisms that link wage dispersion to higher levels of product fragmentation differ across various theoretical models, the complementarity of skilled labor with particular types of capital often emerges as an important mechanism.

Direct econometric evidence of the contribution of increasing trade and globalization to widening wage dispersion in East Asian economies remains sparse, but the above theoretical insights and empirical observations are highly suggestive of such an effect, and the limited direct evidence is also consistent with this view. For instance, in a study of five East Asian economies—Hong Kong (China), the Republic of Korea, the Philippines, Singapore, and Thailand—during 1985–98, Te Velde and Morrissey (2004) find that trade and FDI tend to raise wage inequality.¹⁹ Similarly, Kanbur and Zhang (2005) find that greater trade openness has contributed appreciably to the rise in spatial income inequality in China over the postreform period.

Labor Market Reform

A factor that has been particularly important in transition economies such as China and Vietnam is the implementation of labor market reforms, which have been associated with a progressive reduction in the share of the state sector in the economy and the accompanying fall in state sector employment. Since the early 1990s, the de facto deregulation of labor markets in both China and Vietnam has progressed briskly, and market forces play the dominant role in wage setting within the greatly expanded private sector. For example, in China, the share of the state-owned and collective sector in urban employment had declined from over 85 percent in 1980 to less than 30 percent by 2004.²⁰ Similarly, in Vietnam, the number of state-owned enterprises had declined from about 12,000 at the end of 1989 to less than 2,600 by early 2006.²¹ The share of private domestic and foreign enterprises in total employment rose from 11 percent in 1993 to over 18 percent in 2004, while state-owned enterprises and the government sector only accounted for about 8 percent of total employment in 2004.²²

The effects of economic restructuring and labor market reform on wage and income inequality may emerge through a number of channels, as illustrated in the Chinese case. First, as wages begin to reflect skill-related productivity differences, wage dispersion across workers increases. The evidence for China indicates that returns to education rose in the private sector, as well as state and collective sector enterprises, indicating that increasing wage dispersion was not merely the result of a rising share of the private sector in overall employment, but wider labor market reforms involving a shift from a system of wages set by the government along a compressed wage scale to a more market-determined system.²³

Second, the massive layoffs associated with economic restructuring meant that many (especially older) workers opted out of the labor force, and many others remained unemployed for long periods. Giles, Park, and Cai (2006), using data for five cities in China, estimate that, of all those people experiencing job separation during 1996–2001, only about 35 percent were employed again within 12 months, and about 55 percent were still unemployed in November 2001. The limited public support available (through subsidies for laid-off workers, pensions, unemployment insurance, and a minimum income support program) failed to compensate for the income losses among those who were not reemployed.²⁴

Third, there is also evidence of greater wage disparity among those people who were sufficiently fortunate to find reemployment. For instance, Giles, Park, and Cai (2006) estimate that, among those who were reemployed, workers under 40 experienced an increase in their average wage, while those over 40 saw their average wage decline.

Fourth, a parallel process has been the rising share of employment in the urban informal sector. The share of such employment in urban China is estimated to have grown from about 14 percent in 1990 to about 39 percent in 2003.²⁵ While part of this increase may be statistical in that it reflects some previously unrecorded economic activity, especially in the tertiary sector,²⁶ most seems to have occurred on account of the rapid growth in the unregistered and imperfectly monitored private sector, among unreported migrant workers, and through the significant share of informal employment carried out among urban residents employed in the state and collective sector.²⁷ The share of informal employment is higher among women,

among the youngest and oldest workers, among migrants, and among less well educated workers.²⁸ Workers in the informal sector not only show relatively lower wage earnings,²⁹ but, because they are largely uncovered by protective regulation and social insurance programs, they are also the most vulnerable segment in the labor market.³⁰

Agglomeration Effects and Clusters

The emergence and growth of industrial and services clusters around large cities and the persistent and, in many instances, widening disparities between dynamic growth regions and underdeveloped lagging regions is the most visible aspect of uneven growth in East Asia.³¹ Spatial concentration or the clustering of economic activities reflects the influence of location and agglomeration economies. Transport costs and factor availability provide incentives for locating close to input suppliers and output markets, and increasing returns to scale magnify the advantages of locating in such clusters. Forward and backward links generate centripetal forces toward agglomeration, and distance (which influences market access) and market size begin to matter in decisions on industry location. Firms that locate in a cluster enjoy access to thicker labor pools and more component suppliers. Because agglomeration processes are path dependent, an existing industry concentration may exert a powerful gravitational pull on new industries. These forces often complement rather than conflict with classical comparative-advantagebased locational factors that attract industries to locate and expand in particular cities or regions.

While such agglomeration effects are powerful levers for growth, they may also be a source of significant spatial inequality. Spatial disparities in average incomes across China's metropolitan regions may be related to one dominant factor: distance from a port. The income differences are also reflected in provincial wage disparities: provinces in coastal regions gain a wage premium due to their location advantage.³²

While first-nature geography (the proximity to coasts, rivers, or borders) is often an instigating factor in the development of clusters and spatial concentration, the role of trade and foreign investment on the one hand and public policy on the other is being increasingly recognized.³³ For instance, about 80 percent of FDI in China during 1989–2003 was concentrated in the coastal provinces, and the three provinces of Dong Nai, Hanoi, and Ho Chi Minh City accounted for almost 61 percent of FDI in Vietnam during 1988–2003 (see figure 6.9).³⁴ Analysis reveals that the entry decisions of foreign firms with respect to China are influenced by the access to



international markets and suppliers, such that provinces with good access to sea and river berths and open to international trade attract more foreign entry.³⁵

These trends in FDI are also highly correlated with foreign trade. For instance, the top four provinces attracting FDI in China (Guandong, Jiangsu, Shandong, and Shanghai) accounted for about 56 percent of total FDI in 2003 and about 66 percent of the country's total trade (exports, plus imports).³⁶ As shown in figure 6.10, the persistently high shares of coastal (relative to inland) provinces in trade and FDI are also reflected in growth in incomes. During 1989–2004, while the share of coastal provinces in total population remained stable, their share in GDP increased from 47 to 54 percent, indicating significantly more rapid growth in per capita incomes in the coastal region.

Domestic public and private investments have favored the same regions. For instance, in 2004, coastal provinces in China accounted for 55 percent of total domestic investment in fixed assets.³⁷ The locational advantages are thus magnified over time as a result of investments in superior infrastructure and facilities, all of which, in turn, contribute to a growing geographical concentration of economic activity.³⁸

It is not surprising then that growth has also been spatially concentrated. For China, it is estimated that about 19 percent of the increase in regional inequality (log variance of GDP per worker across provinces) during 1986–98 is explained by regional differences in trade and foreign capital, while nearly three-quarters is explained by domestic capital.³⁹



FIGURE 6.10 Coastal China Has Nearly All the Country's Foreign Trade and Investment

Fiscal Decentralization

Another significant trend in East Asia that gained momentum during the 1990s is the move toward greater fiscal decentralization. Various structural and political imperatives have propelled the process in different countries, ranging from the end of authoritarian regimes in Indonesia and the Philippines to the transition to a market economy in China and Vietnam. The share of subnational government spending has risen in several countries in the region to significant, though varying levels (see figure 6.11).

However, while fiscal decentralization has progressed, subnational fiscal disparities remain persistently large. There are big differences in revenue capacity across local governments. These reflect the underlying and substantial variations in the economic and resource base of the local governments, which seek to fill the vertical imbalances between subnational revenues and expenditures through transfers from the central government. However, the transfers have not been suf-



Sources: Indonesia: Brodjonegoro and Martínez-Vázquez 2002; Philippines: World Bank and ADB 2005; Vietnam: World Bank 2005c; China: China, National Bureau of Statistics 2005.

ficient to address the horizontal inequality. Central government transfers reduce the disparities in per capita revenues, but often not by much (see figure 6.12).

As a consequence, there are large disparities in per capita local government spending across lower levels of government. For instance, Shanghai Province in China spends eight times as much per capita as Henan Province.⁴⁰ Differences at the subprovincial level are much larger still; the county with the highest per capita expenditure spends 48 times as much as the one with the lowest.⁴¹

As may be expected, the differences in per capita spending are closely related to the level of per capita income, as illustrated for China in figure 6.13. As the figure shows, the positive relationship between per capita GDP and provincial expenditures is equally strong for total provincial spending and for spending on education and health care. In public health and education, there is an increasing reliance on user charges such that the share of out-of-pocket expenses in total sectoral spending has grown rapidly.⁴² While this may have filled some of the



financing gap, out-of-pocket spending is often regressive, discourages the utilization of services by the poor, and, in the case of health shocks, exposes households to financial risks.

These fiscal disparities are reflected in the widely varying coverage (and quality) of the public services supplied across regions. Hofman and Guerra (2005) provide some evidence of how spending disparities are related to education and health outputs and outcomes in China, Indonesia, and Vietnam. Other evidence for China suggests that, during the postreform period, fiscal decentralization has contributed to the increase in inequality of per capita consumption expenditures across provinces, rural and urban areas, and coastal and inland regions.⁴³

Impediments to Internal Migration

Over the past few decades, massive internal migration, especially from the rural agricultural sector to urban secondary and tertiary industries, has been observed



in a number of East Asian countries. For instance, household survey data for China suggest that the total population of rural migrant labor was nearly 120 million in 2004.⁴⁴ For Vietnam, it is projected that the flow of migrants to urban areas may reach almost 1 million every year over the next two decades.⁴⁵ More generally, the level of urbanization has increased rapidly in all countries.

Labor mobility may be a powerful equalizing force through its effect on reducing wage and income differentials across regions and sectors. However, the persistence of disparities noted above within many countries suggests that the equalizing role of migration has been more limited than may have been believed. In practice, a number of factors have inhibited the process of migration and its effect on reducing inequalities.

First, studies have suggested that the poorest households, constrained by their limited endowments, may be unable to make use of migration opportunities. Du, Park, and Wang (2005) and McKenzie and Rapoport (2004) find an inverted-U-shaped relationship between household endowments and the likelihood of migration. Specifically, Du, Park, and Wang (2005) find that households near the poverty line are most likely to migrate, while, for those households at lower or higher incomes, the probability of migration is lower. This suggests that a

minimum level of productive resources is required if poor households are to take advantage of new migration opportunities.

Second, low education level and lack of training and qualifications limit employment opportunities for potential migrants. Du, Park, and Wang (2005) find that lack of education and skill constitutes a major barrier to migration in China. Thus, with lower migration rates among the relatively poorer households, increasing migration seems to have contributed to some of the observed rise in rural inequality in China.⁴⁶

Third, the institutional environment in many instances restricts labor mobility. For example, in China, although overt restrictions on labor mobility have been eased to a large extent during the course of economic reforms, there is still a guest worker system in place whereby migrant workers continue to be tied to their land, are often deprived of services such as public education and health care at an affordable cost in cities, and are entitled to hardly any social protection. Similarly, the registration system in Vietnam, whereby migrants who do not have a place of residence do not obtain access to some basic services, is a key administrative barrier to the geographical mobility of labor.⁴⁷

Fourth, insufficient access to information may limit migration possibilities. The available evidence suggests that there is a heavy reliance on informal networks in migration. For instance, Sheng and Peng (2005) find that the primary source of migrant employment information in China is families, relatives, and friends from the same province of origin of the migrants. Those who migrate through the channel of government organizations account for less than 2 percent of all migrants. This highlights a significant inadequacy in the formally organized sources of information that facilitate and assist migration processes.

Should We Care about Disparities?

Since rapid growth in East Asia has also been associated with rapid poverty reduction, one may wonder if the persistence or the increase of inequalities, as documented above, should be particularly worrisome. One might indeed take the view that, since some of the factors that have been responsible for rising disparities are the same ones that have contributed to growth, the observed higher inequality is merely the price to be paid for rapid growth. Alternatively, rising disparities might be viewed as transitional within a Lewisian model of development whereby recent economic growth is seen as characterized by the development of the modern sector. According to this view, as the modern sector continues to grow and absorb everlarger proportions of low-productivity labor from other sectors, the disparities will eventually decline. Migration is seen as an essential part of this process. While there is an element of truth to each of these viewpoints, several reasons remain for concern about the level and the trends in economic and social disparities in the region.⁴⁸

The first and perhaps most basic reason is that people care about inequalities. For example, according to a 2002 household survey in urban China, more than 80 percent of the respondents considered the income distribution to be "either not so equitable" (48 percent) or "very inequitable" (34 percent).⁴⁹ Related evidence from the World Values Survey for East Asia is more mixed. On the particular question of whether large income differences are needed as incentives for individual effort, the majority of respondents in all seven countries participating in the survey favored such differences.⁵⁰ On the broader issue of market capitalism, however, while there is majority support in Japan, Korea, and Singapore, only minority support is indicated for China, Indonesia, the Philippines, and Vietnam.⁵¹ Two other considerations are relevant in this context. First, inequality is generally more easily tolerated in an environment of rapid growth. If there were to be a slowdown in the rapid growth that East Asia has recently experienced, the current levels of inequality would likely find less acceptance in the region. Second, even if relative inequalities remain unchanged, absolute disparities widen with economic growth. For instance, Ravallion and Chen (2006) estimate that absolute Gini indexes in urban and rural China increased much more rapidly during 1981–2001 than did the conventional relative-income Gini indexes.⁵² Because this translates into large differences in absolute standards of living, it may be an additional source of discontent and friction.

The second main reason for concern about the level and the trends in economic and social disparities in the region is that inequality in income and wealth may become inequality of opportunity across generations. Estimates of intergenerational mobility are low even for developed countries.⁵³ For developing countries in East Asia, with their weaker credit markets, the estimates are likely to be lower still, meaning that inequalities will probably be reproduced over time.⁵⁴ Thus, given the presence of credit market imperfections, even merit-based or incentive-promoting income differentials may turn into inherited advantages or drawbacks, and inequality at one date may become reinforced or even widen as time passes.

A third and related concern arises from the growing evidence that inequality may hamper productive investments, especially in human capital.⁵⁵ Because investments in human and physical capital are a crucial factor in determining

household incomes, differential ability to invest in such capital affects the degree of income inequality.⁵⁶ In an environment of highly imperfect credit and factor markets, individual investments are often limited by individual endowments. Thus, the resource- and income-poor tend to underinvest, which, in turn, limits their future income growth. This is consistent with the evidence that higher inequality tends to make growth less pro-poor.⁵⁷

Fourth, high levels of inequality (especially when they overlap with ethnic or religious divisions) may be a source of political instability. As figure 6.14 shows, countries with more (less) equal income distributions tend to exhibit greater (less) political stability. There are indications of growing social unrest in some parts of East Asia. Thus, estimates cited by Gill (2006) indicate that the number of incidents of social unrest in China grew from 8,300 in 1993 to over 80,000 in 2005. While there are many underlying reasons for such unrest, spatial and other



Sources: World Income Inequality Database, United Nations University–World Institute for Development Economics Research, http://www. wider.unu.edu/wiid/wiid/thm (version 2.0a, June 2005); Kaufmann, Kraay, and Mastruzzi 2005. Note: The figure is based on a sample of 76 countries during 1996–2004. The gold diamonds indicate the countries identified by name in the figure. disparities related to the economic reform process appear to be a factor.⁵⁸ Similarly, the rise of ethnic-based (Malay-Muslim) violence in Thailand's southernmost provinces (Narathiwat, Pattani, and Yala) since 2001 appears to be grounded in part on the absolute and relative deprivation of the local populations.⁵⁹ In the Philippines, while the Moro and communist insurgencies have been mostly concentrated in the Mindanao region, their effects have been felt throughout the country (in 91 percent of the provinces during 1986–2004). A recent analysis suggests that a contributing factor to the incidence of armed conflict in the country during 1986–2004 was the disparity in access to basic infrastructure and services, especially a reliable water supply, electricity, and education.⁶⁰ Such incidents of social unrest, in addition to their direct human cost, also have the potential of eroding popular support for economic reforms and, more generally, disrupting the process of economic growth.

To summarize, the existence of a certain degree of inequality is consistent with economic systems (increasingly typical of East Asian countries) that aim to reward higher individual effort, productivity, and innovation. As the data of the World Values Survey show, there is a fair degree of social support in the region for such incentive-promoting inequality. However, from a normative perspective, the primary concern is with the equality of opportunity and, hence, with the need to ensure that income and wealth differences do not translate into highly unequal opportunities across society. At a more pragmatic level, a key concern is that high or rising levels of inequality do not threaten social and political stability, which is not only important in its own right, but is also necessary for sustaining growth.

Addressing Spatial and Social Disparities

While East Asia's record of poverty reduction over the past two decades has been enviable, the foregoing discussion indicates that the issue of disparities across people, sectors, and regions is becoming more important. Large disparities persist in terms of income and human development, and, in many instances, they have grown. This chapter discusses several underlying forces contributing to the observed patterns, including the role of trade and globalization, labor market reform, the growth of clusters and agglomeration economies, fiscal decentralization, and internal migration. Because many of these underlying forces are likely to endure during the next phase of growth, equity in the countries of the region is a mounting concern. As the discussion highlights, many of the same forces that have helped augment growth in the region have also contributed to these disparities. It is reasonable to expect that these forces will continue to unfold in the foreseeable future. Greater openness to trade and investment, international production and distribution networks, dynamic urban clusters building on agglomeration economies, the reform of labor markets in transitional countries, migration and the process of decentralization: these trends are all well established in the region and are unlikely to be reversed. Hence, looking ahead, the policy challenge for the region involves determining how these processes may be managed so as to reap the benefits in terms of growth (and poverty reduction), while keeping disparities in check so as to maintain the overall social cohesion that is necessary (though not sufficient) for sustaining the growth process itself. From this perspective, this concluding section draws out the emerging implications for public policy in the region in the following areas.

- Investments in human capital. Increasing rates of return to education and rising skill premiums raise the private incentives to acquire higher education. Hence, some of the increase in wage dispersion may be viewed as transitional and may be reversed as people invest more in their human capital, enabling them to make better use of the opportunities created by economic growth. However, in an environment of imperfect credit markets, individual investments are typically constrained by individual endowments, and this points to an important role for public policy. Moreover, the social return to human capital investment is even higher than the private return because there are significant spillover effects of human capital in improving the absorption of new ideas and technology, enhancing the adaptability to the changing configuration of new opportunities, and promoting systems for innovation. While East Asia has made big strides in primary education over the last two decades, enrollments at the secondary and tertiary levels remain relatively low in many countries, and there are large disparities within countries. Policies to promote wider and more equal access to higher education, which will almost certainly require greater public investment, will be critical not only for the next phase of growth in the region, but also for ensuring that this growth is more equitably distributed.
- Facilitating migration. Internal migration has the potential to become a major equalizing force within countries, in addition to its contribution to growth, which is already being realized in several countries in the region. However, the large differences existing in rural-urban and cross-regional wage and income levels indicate that impediments to labor mobility remain. These include the low human capital base of potential migrants, the de facto restric-

tions on the movement of people across regions, and the poor access to basic services (education of children, housing, and health) for migrants in destination areas. Public policy to alleviate such impediments will be important in realizing the potential of migration in contributing to more equitable growth.

- Investments in lagging regions. Moving people to where the jobs are will not be enough, however. In the medium term, this effort will need to be supplemented through policies to support greater job creation in lagging areas through investments in physical and social infrastructure and measures to improve the investment climate in smaller cities, so that growth clusters beyond the current set of dynamic urban agglomerations may be developed that offer off-farm employment opportunities to rural populations. This will require some rethinking of the role of industrial policy during the next phase of growth in the region.
- The development of credit markets. An additional policy area relevant to physical and human capital investment, as well as migration, is credit market development. The financial constraints faced by poor households often inhibit these households from taking advantage of the income-generating opportunities offered by the process of economic growth. Thus, lessening the impediments to access to credit by the poor may be a major step in supplementing public investments and promoting a more equitable distribution of the benefits of economic growth.
- The development of social protection systems. Greater economic integration has tied the fate of people in East Asia to changes in the world and regional economies, thus exposing populations to new sources of vulnerability. The coverage of formal social protection systems is limited in most countries, while the demands on the systems have risen because of expanding urbanization and migration and the aging populations in several countries. Improving the coverage and performance of unemployment insurance, health insurance, and pension systems, as well as targeted income-transfer programs, is likely to assume more importance in the future. East Asian countries should strive to develop systems that do not unduly weaken the incentives to work, save, and maintain strong family ties.
- The promotion of greater fiscal equalization. While the ongoing process of decentralization faces many challenges, addressing large fiscal disparities in the system will be important for ensuring a more equitable distribution of public services, especially in education, health care, and the upgrading of local infrastructure. Current intergovernmental transfer systems will need to rebalance

greater horizontal equalization against the goal of maintaining optimal fiscal incentives for local governments. However, the provision of greater resources to poorer areas in itself will not be sufficient, and building adequate channels of accountability at different levels of government will continue to be a key challenge.

These observations are inevitably rather general in character. The region comprises a diverse group of countries which—despite their shared experience of rapid growth over the last decade or more—remain at very different stages of development. And, hence, the nature of specific policy challenges and options for addressing these priorities in different countries will vary with the level of development of the countries. The discussion above nonetheless suggests that there may be some short-term trade-offs between promoting greater growth and more equity. However, keeping equity considerations in mind while designing and implementing public policies is likely to be good for long-term growth. This will likely require clearer and more transparent governments than in the past.

Notes

1. In 1980, per capita GDP in East Asia and the Pacific was about 30 percent of that in Latin America and the Caribbean. Growth in Latin America and the Caribbean languished, while East Asia and the Pacific prospered, and the ratio was 64 percent by 2004 (World Development Indicators Database, World Bank, http://www.worldbank.org/data/datapubs/datapubs.html).

2. As Joseph Stiglitz noted, "What is remarkable about East Asia is not that it experienced a crisis in 1997 but that it had experienced so few crises over the preceding three decades—two of the countries had not had one year of downturn and two had had one year of recession, a better record than any of the supposedly advanced and well-managed Organization for Economic Co-operation and Development (OECD) countries" (Stiglitz 2001: 510).

3. The dollar-a-day line actually refers to a threshold of US\$32.74 per person per month, or about US\$1.08 per person per day, in 1993 purchasing power parity dollars (World Bank 2005a).

4. The Theil index provides a measure of the discrepancy between the structure of the distribution of income across groups and the structure of the distribution of individuals across those same groups. Groups that receive their fair share of income contribute nothing to the Theil index. If all groups receive the fair share of income, the Theil index attains its minimum value of zero. See Conceição and Ferreira (2000).

- 5. See Zhang and Kanbur (2005).
- 6. See HDN (2005).
- 7. See World Bank (2006b).

8. Benjamin et al. (2005) estimate that, on decomposing income inequality by source of income, wage income was shown to be the largest contributor to overall income inequality in both urban and rural China in 2000–01. It was also the biggest contributor to the increase in inequality during 1987–2001.

9. For further evidence of increasing returns to education in urban China and the growing concentration of urban wages during 1995–2002, see Khan and Riskin (2005).

10. See Hawley (2004) on Thailand; Bourguignon, Fournier, and Gurgand (2005) on Taiwan (China); Fields and Soares (2005) on Malaysia.

11. See Zhang et al. (2005).

12. The literature on this is too voluminous to be referenced or summarized adequately. For a detailed review of the East Asian growth experience following the crisis of 1997–98 and the subsequent recovery, see Stiglitz and Yusuf (2001).

13. See Te Velde and Morrissey (2004).

14. See Hu and Jefferson (2002); Keller (2002).

15. For instance, Zhao (2001, 2002), using data for 1996 on China, finds that, even accounting for nonwage benefits (pensions, housing, and health care) for state sector employees, skilled workers earn more and unskilled workers earn less in foreign-invested enterprises than in state-owned enterprises. For related evidence, see Lipsey and Sjoholm (2001) on Indonesia; Matsuoka (2001) on Thailand; Ramstetter (2000) on Hong Kong (China), Malaysia, Singapore, and Taiwan (China).

16. See Athukorala and Yamashita (2005), who report that, while the trade in parts and components has grown more rapidly than total world trade in manufacturing, East Asia's dependence on this form of trade is larger, and the growth in this trade relative to overall manufacturing trade is more rapid in East Asia than in the rest of the world. Also see Okamoto (2005) for similar evidence on the changing spatial pattern and structure of trade in East Asia.

17. See Feenstra and Hanson (1996).

18. See Ethier (2002), for instance.

19. The positive effect of the trade ratio was significant in the authors' pooled regression; the effect of FDI was insignificant in the pooled regression, but significant for Thailand.

20. See Park, Cai, and Zhao (2006).

21. See World Bank (2006d).

22. See World Bank (2005b).

23. See Zhang et al. (2005).

24. See Meng (2004) for similar evidence.

25. See Park, Cai, and Zhao (2006). The phenomenon of the high and rising share of informal employment in labor markets is not limited to China. For parallel evidence on Indonesia and the Philippines, see ADB (2005).

26. Based on the economic census of 2005, the National Bureau of Statistics made a 50 percent upward revision in GDP related to the tertiary sector in 2004 (with corresponding adjustments going back to 1994), raising the share of the tertiary sector in GDP from 32 to 41 percent (Park, Cai, and Zhao 2006).

27. Cai and Wu (2006) use ninefold criteria to determine informal employment. The most important categories include self-employed workers, people working on a temporary or hourly basis, and people without labor contracts and not considered officially registered workers. Cai and Wu estimate that 23 percent of employment in the state and collective sector in 2002 was informal, while the share of informal employment was as high as 84 percent in other sectors.

28. See Park, Cai, and Zhao (2006); Cai and Wu (2006).

29. There is evidence of a significant, even growing, segmentation in the Chinese urban labor market. A large share of the difference in wage earnings during 1995–2002 between private domestic enterprises and state-owned or foreign-invested enterprises was not caused by differences in worker endowments, but by higher wage premiums in the latter sectors (Démurger et al. 2006).

30. For instance, in 2002, the proportions of informal workers in urban China covered by pensions, unemployment insurance, and health insurance were 34, 21, and 14 percent, respectively, against 85, 73, and 62 percent among formal workers (Park, Cai, and Zhao 2006).

31. For a detailed survey of clusters in East Asia, see Yusuf (2003).

32. See Lin (2005).

33. See Yusuf (2003); Kanbur and Venables (2005).

34. Altogether, five provinces, containing 15 percent of the total population of Vietnam, accounted for 74 percent of total FDI in the country (Leproux and Brooks 2004).

35. See Amiti and Javorcik (2005).

36. Calculated from data reported in China, National Bureau of Statistics (2005).

37. See China, National Bureau of Statistics (2005).

38. See Wen (2004) for evidence on the growing regional concentration of manufacturing activity in China during 1980–95.

39. See Zhang and Zhang (2003).

40. Similar fiscal disparities have also been found in other countries in the region. For evidence on Indonesia, the Philippines, and Vietnam, see Hofman and Guerra (2005). See King and Guerra (2005) for evidence on disparities in per capita education spending across districts in Indonesia and in per pupil spending through the special education fund across municipalities in the Philippines.

41. See Dollar and Hofman (2006). For related evidence on the growth of fiscal disparities in China, see Wong and Bird (2005).

42. See World Bank (2006b).

43. See Kanbur and Zhang (2005).

44. See Sheng and Peng (2005).

45. See World Bank (2003).

46. It is important to note that migrant workers are included in rural (not urban) household surveys in China. Thus, rises in the incomes of migrant workers are reflected in rural rather than urban poverty and inequality measures. Benjamin et al. (2005) point out that the failure of nonfarm labor markets to provide sufficient income opportunities (mostly through migration outside the village) to offset the declining share of crop incomes was a significant cause of the increase in rural inequality during 1987–2001.

47. See World Bank (2003).

48. The empirical evidence on the relationship between growth and inequality remains rather inconclusive in terms of the direction of causality—is the relationship positive, negative, or nonmonotonic? and the mechanisms underlying the relationship. For a range of differing results, see, for instance, Barro (2000), Banerjee and Duflo (2003), and Voitchovsky (2005).

49. See UNDP (2005a). Similarly, Han and Whyte (2006) report that 72 percent of over 3,000 Chinese adults surveyed in 2004 either "strongly agreed" (40 percent) or "agreed somewhat" (32 percent) that inequality in the country as a whole is "too large."

50. See Shin and Dalton (2006).

51. See Shin (2005), who describes market capitalism as norms relating to (1) the private ownership of business and industry, (2) competition in the marketplace, (3) the unequal distribution of income as an incentive for individual striving, and (4) the responsibility of individuals for their own welfare.

52. Absolute Gini indexes are calculated by normalizing income differences by a fixed mean income at a particular date.

53. See World Bank (2005a).

54. From a theoretical perspective, Fender and Wang (2003) present an overlapping-generations model wherein credit constraints contribute to a rise in inequality between the skilled and the unskilled through the channel of human capital accumulation. Empirically, using a measure of financial depth and inequality in the distribution of land as proxies for capital market development, Li, Squire, and Zou (1998) find that capital market imperfection is an important determinant of international and intertemporal inequality across 49 countries spanning the period 1947 to 1994.

55. See World Bank (2005a), especially chapter 5, for a review of this evidence.

56. For instance, Wan and Zhou (2005) identify capital input as an increasingly significant determinant of income inequality in rural China. For similar evidence on urban and rural China as a whole, see Zhang and Zhang (2003).

57. For international evidence, see World Bank (2005a); for evidence on China during 1981–2001, see Ravallion and Chen (2006).

58. See Keidel (2005).

59. See Croissant (2005).

60. See Edillon (2005).

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