

Chapter 4

The Extended Pacific Rim: an awakening giant

C.-H. C. Bae and K. M. Chan

INTRODUCTION

The forces of globalization have accelerated in the past two decades. Probably their impact has nowhere been felt more strongly than in the Extended Pacific Rim. Of all the potential hypotheses related to globalization, one of the most interesting is that globalization has accentuated core periphery differentials within countries by benefiting the primate city and other large metropolitan areas in the core region. This tendency may be reinforced in countries where the market is relatively small compared to the global market. A related issue is the intra-metropolitan consequences of globalization in terms of the core periphery model. One question is whether the core and periphery is a meaningful distinction in terms of the distribution of income, even if it may be losing significance in spatial terms. Another issue is the interaction between globalization and the 'New Economy'. Can the two effects be disentangled, and are they important in this question in the Pacific Rim?

The Pacific Rim is a flexible term. For the purposes of this chapter, and primarily on the grounds of space constraints rather than principle, the major focus is on China, Japan and South Korea. Korea is given perhaps disproportionate attention because its heavily core-dominated spatial distribution and how this has been influenced by globalization is especially interesting. China is also an important case study, but the size and the diversity of the country makes its analysis very complex, and only broad issues can be touched upon within a chapter of this length and scope. Some attention is also given to the major Southeast Asian Pacific Rim countries (Singapore, Thailand, Malaysia, Indonesia and the Philippines). Almost no reference is made to Australasia (Australia and New Zealand), other Southeast Asian countries (for example Vietnam, Cambodia, Laos) or to the South Pacific countries (for example

Fiji, Papua New Guinea, Samoa); this does not imply that these countries are unimportant, only that a single chapter cannot cover everything.

There are two views about the relationship between globalization and spatial concentration. For example, Henderson (2002) found that international trade and urban primacy are negatively related. The underlying hypothesis is that a more open economy tends to promote agricultural growth in the periphery. Because exports are obviously not tied to domestic markets, firms have more locational flexibility and can avoid both the pecuniary diseconomies (for example high wages and rents) and technological diseconomies (for example traffic congestion and pollution) of the primate and other large cities. The alternative view (especially applicable to developing countries) is that, given the concentration of economic activity in the primate city combined with limited inter-urban infrastructure, an expansion of foreign direct investment and trade will reinforce primacy.

On the link between globalization and poverty, a survey by Krueger and Berg (2002) found no evidence of a link from exports or foreign investment to poverty, impacts other than the contribution of economic growth itself. In other words, openness benefits growth, and economic growth benefits everyone, including the poor. A more subtle point is that trade reforms are often associated with other economic reforms that may have impacts on poverty. In this chapter, any links between globalization and poverty are explored via the spatial nexus.

OVERVIEW

Table 4.1 presents some basic data for the major East and Southeast Asian countries. The countries are quite diverse, especially in terms of per capita incomes, ranging from Japan, Australia, Hong Kong and Singapore (all very rich by global standards) to Indonesia, China and the Philippines (all relatively poor); the differentials are narrowed to some degree when the income levels are expressed in purchasing power parity terms, that is adjusting for price and exchange rate differentials. The countries vary widely in size (whether measured in terms of gross national product or population) and population densities (with the high-density extremes of Hong Kong and Singapore contrasting with the very low-densities of Australia and New Zealand). Taiwan, Korea and Japan constitute a relatively high-density cluster (sizeable populations crammed into a small land area). China, Thailand and Indonesia form a relatively low-density group, with large urban concentrations outweighed by sparsely populated rural peripheries. Only four countries are currently receiving significant amounts of official development assistance (that is, foreign aid), namely Indonesia, China the Philippines and Thailand. China (\$52.3 billion) and Hong Kong (\$22.8 billion) dominate in terms of FDI (foreign direct investment), with sizeable amounts (\$8-9 billion) also found in Korea and Singapore. The share of gross domestic capital formation

Table 4.1 Basic data of selected cities in East and Southeast countries, 2002

	GNP (\$b)	GNP per capita (\$)	PPP per capita (\$)	Pop (m)	Pop density (per km)	ODA (\$m)	FDI (\$b)	GDCF (% of GDP)	Male employment in services (%)	Foreign Asian workers as % of LF 2,000
China	1,209.5	940	4,390	1,281	137	1,460	52.344	41.0	na	na
H Kong	16,716.0	24,750	26,810	7	6,300	4	22.834	24.2	71.4	9.2
Taiwan*	286.9	12,630	na	23	622	na	4.109	17.2	na	4.0
Singapore	8,601.0	20,690	23,090	4	6,826	1	8.609	20.6	66.8	27.7
Thailand	122.2	1,980	6,680	62	121	281	5.792	23.8	na	1.9
Malaysia	86.0	3,540	8,280	24	74	27	3.549	24.4	45.9	10.9
Philippines	81.5	1,020	4,280	80	268	577	1.621	19.3	35.8	na
Japan	4,265.6	33,550	26,070	127	349	na	na	na	na	1.1
S Korea	473.0	9,930	16,480	48	483	(111)	8.893	26.0	56.0	1.7
Australia	386.6	19,740	26,960	20	3	na	na	na	na	na
N Zealand	53.1	13,710	20,020	4	14	na	na	na	na	na
Indonesia	149.9	710	2,990	212	117	1,501	(1.446)	14.3	38.6	na

Source: World Bank, 2002, except for Taiwan (Asian Development Bank 2001 data).

(a proxy for investment) in gross domestic product is much higher in China (41 per cent) than elsewhere, and averages about one-quarter in South Korea, Malaysia, Hong Kong and Thailand (the shares are somewhat lower than a decade earlier, reflecting the after-effects of the Asian financial crisis of the late 1990s). The services share of male employment can be interpreted as an indicator of the extent of the transition to a service-based economy; not surprisingly, Hong Kong and Singapore lead the pack, but the South Korea data also reflect a significant shift from manufacturing to services. The final column of Table 4.1 shows how much some Pacific Rim economies depend on imported labour from other Asian countries, particularly Singapore with foreign Asian nationals accounting for almost 28 per cent of its labour force, but also Malaysia (10.9 per cent) and Hong Kong (9.2 per cent). The foreign Asian contributions to the labour force in other countries were minor.

Table 4.2 presents data on the geographical origins and destinations of exports and imports for the countries that we are examining. This provides evidence of how globalization impacted upon these Pacific Rim countries. The most interesting fact is the extent to which their trade remains intra-Asian rather than global in scope. Typically, more than one-half of merchandise trade is with other Asian countries; the outliers are Hong Kong (63.6 per cent of exports and 79.2 per cent of imports) and South Korea (46.1 per cent of exports and 46.3 per cent of imports). Probably, the extent of trade with North America is a measure of the degree to which a particular country is globalized. The leaders here are China (32.1 per cent of exports), the Philippines (30.7 per cent of exports; in this case, perhaps more a reflection of historical and traditional ties than of globalization *per se*) and South Korea (27.9 per cent of exports). At the other extreme, Hong Kong (15.8 per cent of exports), Indonesia (16.2 per cent of exports) and Singapore (17.3 per cent of exports) are much less involved in trade with North America. The involvement with Western Europe is more or less the same for all countries (somewhat less than 15 per cent of trade). The Middle East is a major supplier of oil to South Korea, and to a lesser extent to Thailand, Singapore, the Philippines, Taiwan and Indonesia. Trade with South America, Africa and the 'rest of the world' residual category is minimal, while Oceania is a little more important (topping out with Indonesia, accounting for about 5 per cent of its trade). Overall, the important facts from Table 4.2 are the importance of intra-Asian trade and of North America (somewhat selectively).

International immigration (especially with respect to the labour market) has been a neglected consequence of globalization in Asia, yet the number of migrants within Asia has probably tripled since the early 1980s. The neglect reflects the greater emphasis on capital rather than labour mobility and on trade flows as catalysts in international economic integration. An interesting question is whether the financial crisis of the late 1990s affected migration trends, such as the continued reliance of some countries affected by the crisis (for example Malaysia, South Korea) on unskilled immigrant labour and the

Table 4.2 Direction of trade in Asian cities, 2002 (%)

	Asia		W Europe		N & C America		M East		S America		Oceania		Africa		Rest of the world	
	Ex	Im	Ex	Im	Ex	Im	Ex	Im	Ex	Im	Ex	Im	Ex	Im	Ex	Im
China	43.4	57.7	15.6	14.3	32.1	11.1	2.2	3.3	1.1	2.3	2.0	2.2	1.4	1.7	2.3	7.5
H Kong	63.6	79.2	14.7	10.6	15.8	7.0	1.8	1.0	1.2	0.5	1.0	1.1	0.9	0.3	1.0	0.4
Taiwan*	56.9	56.9	14.2	13.0	23.0	17.3	1.8	6.4	0.9	1.3	1.5	2.9	0.9	1.9	0.8	0.2
Singapore	61.8	58.2	13.0	13.7	17.3	15.2	2.0	8.6	0.3	0.5	3.4	2.0	1.0	0.5	1.3	1.4
Thailand	51.5	59.0	15.7	12.2	21.9	10.5	3.6	8.8	0.6	1.3	2.8	2.7	1.9	1.4	2.1	4.1
Malaysia	56.3	66.4	13.0	11.5	23.7	15.2	2.0	2.2	0.3	0.7	2.6	2.0	0.7	0.4	1.3	1.7
Philippines	48.6	58.4	17.4	8.4	30.7	20.8	0.5	7.8	0.2	0.7	1.3	2.5	0.2	0.2	1.2	1.2
S Korea	46.1	46.3	13.2	11.5	27.9	17.4	3.9	15.8	2.3	1.9	2.0	4.4	2.3	1.3	2.5	1.4
Indonesia	59.6	62.6	13.9	13.0	16.2	8.6	2.7	6.2	0.9	1	4.0	5.7	1.3	1.7	1.5	1.2

Notes: *2001 data.

Source: Asian Development Bank.

increased pressure on labour exporters (such as Indonesia and Myanmar) to solve their unemployment problems abroad. On the other hand, the receiving countries have become much stricter in accepting illegal migrants, even to the extent of forceful repatriation. At the same time, economic recovery was assisted in some cases by the migration of professionals (for example from Japan, South Korea and Taiwan) in support of FDI flows.

As economic growth accelerated in the early 1990s, several former labour-abundant countries ran into labour supply problems. They faced three choices, or a combination of these: importing unskilled labour, investing in cheap labour countries via FDI, or substituting capital for labour at home by upgrading technology (Athukorala and Manning, 1999). The first choice results in more international immigration, but can result in long-term social and political problems.

These choices have changed over time and by location. Between 1970 and 1990 contract labour from the rest of Asia became more important in Japan and the NICs as labour scarcities began to emerge. Of course, Hong Kong and Singapore were based on migrant labour. Flows from Indonesia to Malaysia became important, as did migrants from Myanmar to Thailand. In fact, about 1 million Indonesians work abroad, the majority of them unskilled women accounting for substantial remittances back to rural Indonesia. Japan, South Korea and Japan began to import non-negligible labour migrant numbers from the mid-1980s, although these remained small in comparison with the overall labour force. Malaysians migrated to Singapore in the 1990s, while unskilled Thais left for other countries in East and Southeast Asia. Even Japan exported labour, but largely professional workers outside the region (to the United States).

Table 4.3 compares some background data on densities and travel behaviour for major East Asian and Southeast Asian cities. Given the diversity of definitions, these figures are necessarily rough indicators only. Bangkok is the least dense. For example, Hong Kong is 6.3 times denser and Seoul is 5.6 times denser than Bangkok. Bangkok's public transit share is very low (30 per cent); only Kuala Lumpur (exceptionally auto-oriented) and Beijing (bi-cycle-oriented) have lower shares. If commuting speeds are a traffic congestion indicator, only Manila has a lower average speed (9.2 vs. 10.4 kilometres per hour). The vehicle density measure mingles two variables: the number of automobiles and the area of land used for roads. Bangkok's measure of 559 vehicles per kilometre of road is comparable with that of Jakarta, but it is twice as high as in Beijing, Seoul and Hong Kong and 2.5 times the level in Singapore and Tokyo. However, the Bangkok measure reflects the limited roads more than the number of automobiles. Kuala Lumpur is an outlier, but primarily because it has considerable road space. We use Bangkok as an overall benchmark. The importance of the traffic congestion issue is that traffic speed is one of the determinants of global urban competitiveness. One

Table 4.3 Comparative data for Asian cities

City	Density	Public transit share	Commuting speeds	Vehicle density
Names	Persons (/ha built-up area)	(%)	(Km/hour)	(Number of vehicles/km)
Bangkok	58	30	10.4	559
Hong Kong	367	74	14.9	273
Jakarta	127	36	12.5	579
Seoul	322	60	16.3	282
Singapore	107	56	16.3	222
Beijing	145	24	12.9	280
Manila	198 ^a	54	9.2	435
Tokyo	64 ^b	63 ^c	18.5 ^d	202 ^e
Kuala Lumpur	59 ^a	26	19.9	97 ^e

Sources: Density: Bertaud and Malpezzi (2002), except for ^(*) which are from Newman and Kenworthy (1999) and ^(b) which is for the Tokyo Metro (Prefecture) from <www.chijihonbu.metro.tokyo.jp>. The ^(*) numbers are underestimates because the denominator is the metropolitan area not the built-up area, while the ^(b) may be an overestimate because a broader definition of the Tokyo metropolitan region yields a population density estimate of 33 persons per acre.

Public Transit Share: Bertaud and Malpezzi (2002), except for Tokyo ^(*) which is from the Statistics Bureau, Ministry of Public Management, Home Affairs, Posts and Telecommunications (2001).

Commuting Speeds: Newman and Kenworthy, except for ^(*) which is from OKI Technical Review (2001), Special Edition on the Environment, Volume 68 (electronic).

Vehicle Density: Asia Week: <http://www.asiaweek.com/asiaweek>. Numbers with ^(*) are estimated.

important congestion relief mechanism is the decentralization of economic activities (and the suburbanization of population). We will refer in this chapter to how different cities in the region have responded to this issue.

These trends suggest several points about migration, FDI and global competitiveness. First, capital markets are much more integrated than labour

markets because capital flows are much less subject to national policy controls. Second, globalization has resulted in a significant degree of international integration of Asian labour markets. Third, countries (for example Thailand, Malaysia) may be simultaneously labour exporters and importers (although the skill mixes of each directional flow are different). Fourth, the financial crisis of the late 1990s led to some distortions, possibly temporary, in the normal patterns of international immigrant labour. Fifth, these migratory flows overwhelmingly consisted of temporary guest workers, contract employees and illegals rather than permanent migrants. Sixth, there are local spatial problems that impact upon global competition among cities (such as traffic, density and other aspects of urban congestion), and these need to be addressed.

CHINA

China has been passing through a rapid urban transition in the last two decades. By the end of 2002, urban population in China had already reached half a billion and was definitely the largest in the world by country. From 1980 to 2002, the size of the urban population increased by 150 per cent, and the percentage urban doubled from about 20 per cent to 40 per cent (NBS, 2003). Unlike other developing countries, China's urban population growth is primarily driven by net migration from the rural areas and urban aggrandizements (Chan and Hu, 2003).

In the 1990s, the Chinese urban system expanded quite significantly by adding about 200 new cities and 8,228 towns in net terms (Table 4.4). By 2000, China had already 663 cities and 20,312 towns. The newly designated urban centres were an important contributor to urbanization in that decade.

The other dimension of urbanization is the growth of the cities and towns that already existed in 1990.¹ Table 4.5 presents a summary of average population growth rates of using a sample of 414 city census populations of 1990 and 2000, based on individual cities' 'urban administrative boundary' (UAA).²

¹ 432 cities existed in both 1990 and 2000 (and, therefore, have population data for both years). The sample excludes 18 cities with a rate of decline of more than 10 per cent between 1990 and 2000 and one city with a highly unusual growth rate. A great majority of these cases experienced extraordinary large reclassifications of the 'urban administrative area' (UAA) such as splitting an existing city into two. In China, the UAA refers to the 'urban districts' or *shiqi* for prefectural-level cities and above, and the entire administrative area for county-level cities.

² Specifically, the UAA may change over time as the city grows (most of the cases in this rapidly urbanizing nation) and expands its UAA (by annexing nearby areas) or splits into two or more cities. This of course complicates meaningful comparisons of 'urban' over time. Moreover, there are many cities (although still a small percentage

Table 4.4 The number of cities and towns (officially designated) in China, 1990 and 2000

Year-end	Cities				
	Provincial-level	Prefectural-level	County-level	Total	Towns
1990	3	151	310	464	12,084
2000	4	259	400	663	20,312
Gains	1	108	90	199	8,228

Sources: NBS (1991; 2001).

Largely following the standard classification used in China, we group all the cities by size in 1990: super-large (2 million and above), and extralarge (1-2 million), large (0.5-1 million), medium (0.2-0.5 million) and small (below 0.2 million).³ The smallest and the largest cities have the highest medians or mean growth rates, followed by the medium cities, extra-large cities, and large cities (in that order) (Table 4.5, panels A and B). The growth pattern by size is clearly bipolar.

More interesting is the variation of growth rates by administrative rank. All Chinese cities have an administrative rank, indicating their status in China's unitary political and administrative system. From high to low ranks, there are five levels: (1) provincial-level cities, (2) deputy-provincial, (3) provincial capitals (excluding those in level 2 above), (4) prefectural-level (excluding those already in levels 2 and 3), and (5) county-level. The ranks not only reflect political/administrative power but also have significance in the fiscal system (Chan, Tsui and Yu, 2003).

There is an almost perfect rank correlation between the administrative rank and growth rate. The higher the rank, the faster is the growth rate (Panel C). The higher growth rates of the biggest cities also reflect the extraordinary growth of the many cities at the highest administrative ranks, and the export-processing centres on the coast during that decade. Table 4.6 shows the 20 cities with the highest growth rates within the million cities group (based on

of all cities) in China where annexations more reflect government administrative arrangements than genuine urbanization or urban expansion, creating 'over-bounded' cities.

³ To avoid confusion, we have used the term 'big city' to refer to cities of considerable population size while restricting the word 'large' to categories of cities in a specific size class as defined in this section.

Table 4.5 Average annual growth rates of cities in China, 1990-2000 (%)

	Number	Median	Unweighted mean
All cities	414	1.8	3.0
(A) By city size in 1990			
Super-large	7	5.7	6.1
Extra-large	79	1.4	2.2
Large	135	1.1	1.7
Medium	149	2.2	3.5
Small	44	4.4	6.1
(B) By city size in 2000			
Super-large	16	4.6	6.6
Extra-large	98	1.8	3.7
Large	163	1.5	2.3
Medium	114	1.8	2.4
Small	23	3.8	5.1
(C) By administrative rank in 2000			
1 Provincial	4	5.2	6.2
2 Deputy-provincial	15	3.9	5.7
3 Provincial capital	17	4.2	4.2
4 Prefectural	194	2.3	3.6
5 County	184	1.0	1.9

1990 population data, total = 93). These 20 cities consist of three provincial-level cities, 15 deputy-provincial, and provincial capitals. This shows the continuing dominance of the administrative cities in China's urban hierarchy and urban growth.

The only two cities in Table 4.6 that are below the provincial capital rank are major export-processing centres (Dongguan and Zhongshan). If one adds other cities in the Pearl River Delta region such as Shenzhen (an average annual growth rate of 23 per cent), and Zhuhai (9.7 per cent) it is clear that the export-processing centres are another major cluster of growth among big cities.

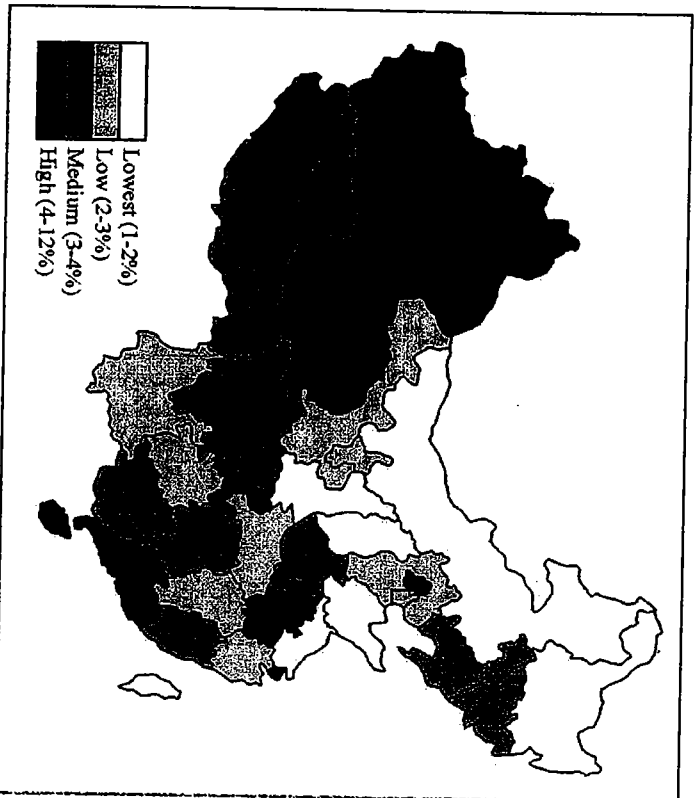
At the provincial level, the three 'hot spots' – Guangdong, Beijing and Shanghai, are in the highest growth group; so are Chongqing, Xinjiang, Qinghai, Hainan and Anhui (Figure 4.1). Interestingly, the lowest growth group is in the North and Northeast quadrant, and it is probable that it is related to the industrial restructuring under way.

Table 4.6 Million-plus cities in China: the fastest growing Top-20

City	Prov- ince	Adm rank	Population (1000)		Growth rate (%)	
			1990	2000	'90-'00	Av annual
Dongguan	GD	4	1736.9	6445.8	271.1	14.0
Chongqing	CQ	1	3122.7	9691.9	210.4	12.0
Guangzhou	GD	2	3918	8524.8	117.6	8.1
Wuhan	HB	1	3832.5	8312.7	116.9	8.1
Zhongshan	GD	4	1227.5	2363.3	92.5	6.8
Kunming	YN	3	1612	3035.4	88.3	6.5
Shanghai	SH	1	8205.6	14348.5	74.9	5.7
Hangzhou	ZJ	2	1476.2	2451.3	66.1	5.2
Changsha	HN	3	1329	2122.9	59.7	4.8
Beijing	BJ	1	7362.4	11509.6	56.3	4.6
Xi'an	SN	2	2872.5	4481.5	56	4.5
Nanning	GX	3	1159.1	1766.7	52.4	4.3
Fuzhou	FJ	3	1395.7	2124.4	52.2	4.3
Urumqi	XJ	3	1160.8	1753.3	51	4.2
Hefei	AH	3	1099.5	1659.1	50.9	4.2
Jilin	JL	4	1320.2	1953.1	47.9	4.0
Zhengzhou	HA	3	1752.4	2589.4	47.8	4.0
Changchun	JL	2	2192.3	3225.6	47.1	3.9
Chengdu	SC	2	2954.9	4333.5	46.7	3.9
Nanchang	JX	3	1262	1844.3	46.1	3.9

The trend in the 1990s is that big cities, especially those at the high administrative (provincial capital and above) grew quite fast. This is partly a function of the Chinese political-administrative system and policies that favour higher-ranked cities in terms of fiscal resources, FDI policy and transportation investment, and partly the growth of the tertiary sector

Figure 4.1. Average annual growth rate of Chinese cities by province, 1990-2000



Source: Computed from Chinese census data, 1990 and 2000.

(particularly finance and business services), which tend to locate in major cities and administrative centres (Chan et al., 2003; Henderson, 2004). Some of these big cities, along with other nearby cities, are developing into large extended metropolitan regions (EMR), with a population range of 25-40 million. One of these expanding large EMRs is the Hong Kong Guangzhou region, which already has a total population of about 30 million (Gu et al., 2002).

Globalization forces, especially seen in FDI and international trade, affected the development of the big cities and also have a significant impact on export-processing centres (including small and medium cities), where accessibility to the ports are good. They will continue to be focused on rapid growth, as China strengthens its role as the 'world's factory'. The growth of

export-processing along the coast will be at the expense of other, especially inland, industrial cities and the heavy-industry based cities in northeast and north China. Some observers believe this will gradually lead to greater spatial differentiation and perhaps even polarization of the spatial economy, especially under conditions of greater labour mobility (Henderson, 2004). There are also concerns about increasing regional inequalities as China's market economy marches forward.⁴ The future of China as a fully integrated economy depends on the economic benefits of market reform in the east spreading to the far reaches of western China. There is some hope that this will eventually happen. The question is: when? Perhaps a 20-year time horizon is a reasonable guess.

However, as pointed out earlier, urban growth in the 1990s did not merely concentrate on the large cities. Instead, there has been a significant growth of cities with populations under 200,000 (small cities in the Chinese context). The growth of some of them, mostly in the coastal region, responded to export-processing jobs generated by FDI. Others developed because of domestic imperatives (administration, tourism and commerce). Many of them were close to major metropolises, and benefited from the spillover of industrial development in nearby larger cities.

A major issue facing mainland China in a globalized world is whether it is feasible, and if so desirable, for one or more of its large cities to attain world city status. This is a much more relevant question after the entry of China into the World Trade Organization in 2001 and the rapid rise of foreign direct investment in China in recent years (see Table 4.1). Cai and Sit (2003) have addressed this issue. They acknowledge that the government is interested in world city promotion. The question is: which city (or cities) offers the best prospects? Certainly, using several standard criteria, all the Chinese cities currently lag behind New York, London, Paris and Tokyo. Within the broader Chinese urban system including Hong Kong, three major metropolises, along with their EMRs, are the major contenders. These are: Hong Kong (and Pearl River Delta (PRD)), Shanghai and Beijing (and Tianjin). Currently, the Hong Kong EMR is generally considered to be ahead of the other two, but the latter have been catching up quickly since the mid-1990s, a trend that has accelerated since China's entry into the WTO.

The Hong Kong EMR is particularly interesting because prior to the return of Hong Kong to China it spanned two countries. As the economic transformation of Hong Kong took place from a manufacturing centre to a high-order service centre, its prior manufacturing functions were, in effect, decentralized to the major cities of the PRD (for example Shenzhen and Dongguan) but also to other PRD locations (the so-called 'desakota' area). However, because of global competitive factors even the PRD industrial locations are

⁴ For a recent critique of this issue see Chan and Wang (2004).

beginning to shift into higher value-added, and even high-tech, industries (Sit, 2003). Furthermore, industrial decentralization trends were accelerated by the severe land use constraints and congestion costs of the Hong Kong core. At the same time, its world city status has been enhanced by the new airport on Lantau, the continued expansion of not only the main port but also the secondary ports of the PRD, and expansion of its telecommunications, tourist, cultural and fashion activities. Nevertheless, within the China context, there are concerns within Hong Kong (Cai and Sit, 2003) that the central government may in the long run give priority to either Shanghai (the traditional commercial capital) or Beijing (with its attraction to 'rent-seeking' corporations which need to be close to government decision makers).

There was a high rate of internal migration in the 1990s, most of it 'temporary migration'.⁵ Rural urban migration was the major form of internal migration, mainly peasants moving to cities. Two-thirds of the flows were intra-provincial, and about one-third were inter-provincial (Chan, 2001). Table 4.7 shows the regional distribution of the rural migrant labour stock originating from different provinces. The predominant trend was from the periphery (central and west regions) to the core (east region). This trend became even more pronounced in the second half of the 1990s. In 1998, for example, 87 per cent and 79 per cent of rural migrants left the central and west regions for the east region, significantly higher than five years earlier.

TAIWAN

Taiwan experienced (at least, until recently) rapid economic growth and industrialization in the post-Second World War era, transforming from an agrarian to a highly urbanized society. In the second half of the 20th century, the proportion of population living in cities and towns in Taiwan rose from one-quarter to three-quarters. In the 1950s and 1960s, because of Taiwan's special political situation and military considerations, the expansion of large and medium-size cities was subject to policy restrictions. This helped to produce a spatially more balanced pattern of development in the early decades of Kuomintang rule.

Taiwan's successful promotion of industrial-based exports from the early 1960s attracted large numbers of ruralurban migrants and fuelled the rapid growth of large cities such as Taipei and Kaohsiung. FDI flows were also attracted to Taiwan for its cheap and skilled labour. Most major foreign investors were located in the large cities. However, from the 1970s on, high land and housing costs in the cores of the major central cities drove some

⁵ Temporary migration refers to migration without official approval under the *hukou* system. Temporary migrants are not eligible for many state-provided welfare and social services for urban residents and even for certain types of jobs (see Chan, 1994, 2001).

Table 4.7 Inter-provincial rural migrants in China by region, 1993 and 1998 (%)

Percentage share	Origins (%)			
	East	Central	West	All Regions
1993 (total stock = 28.9 million)				
Regional share	29.9	45.6	24.5	100
Destinations				
East	71.4	79.2	52.2	70.3
Central	21.8	18.9	9.4	17.4
West	6.8	1.9	38.4	12.3
Column total	100	100	100	100
1998 (total stock = 37.8 million)				
Regional share	11	55	34	100
Destinations				
East	72.7	87.3	79.4	83
Central	18.2	9.1	5.9	9
West	9.1	3.6	14.7	8
Column total	100	100	100	100

Notes: Rural migrant labour refers to rural labour working outside their home township.

Regional classification:

East = Liaoning, Beijing, Tianjin, Hebei, Shandong, Jiangsu, Shanghai, Zhejiang, Fujian, Guangdong, Guangxi and Hainan.

Central = Heilongjiang, Jilin, Nei Mongol, Shanxi, Henan, Anhui, Hubei, Hunan and Jiangxi.

West = Xinjiang, Qinghai, Gansu, Ningxia, Shaanxi, Sichuan, Guizhou, Yunnan and Tibet.

Sources: Li Fan, 1994; Chan, Kam Wing, 2001

industries and people to the suburbs and urban fringes. This suburbanization process accelerated in the 1990s (Lin and Tung, 2003), and the primate city of Taipei is now a metropolitan region of about 7 million (30 per cent of the total population, compared to 20 per cent in 1970 (see Kuo, 2000)).

Many Taiwanese firms moved to mainland China in the 1990s, as it further opened up to FDI. The role of Taipei, the headquarters of many domestic and foreign firms since the 1950s, as Taiwan's premier service centre has been reinforced. In the last two decades, it has become much more involved in the 'new economy' with a major technology centre (Hsinchu Science Park) on its outskirts. Almost 80 per cent of the jobs in Taipei City are now in the tertiary sector, compared to 63 per cent in 1969 (Wang, 2003). In analysing Taipei as a global city, Wang (2003) noted that unlike Tokyo, Taipei's share of manufacturing today is small. Yet, Taipei is not Asia's New York. The share of employment in the FIRE sector (finance, insurance, real estate and business services) is very small (only 15 per cent) compared to New York. Some authors have argued that Taipei has become more of a world city closely linked to the global economy and is increasingly detached from its domestic hinterland (Chow, 2003). This has induced a spatial polarization process, with Taipei gaining greater dominance in the island's economy. Nevertheless, given Taiwan's open economy, the primacy index is relatively low (Liu and Tung, 2003). Also, in terms of social differentiation and polarization within the Taipei metropolitan region, Wang (2003) suggested that it is not on the same scale as implied by global city theorists.

SOUTH KOREA

South Korea is a country that is the epitome of the core dominating the periphery. Although Seoul City has experienced a modest population decline in the last decade, the share of the Capital Region in the national population remains very high, at 50.8 per cent. Despite, until very recently, a very insular resistance to cultural globalization, economic globalization has had a major impact on Korea; indeed, globalization was the key campaign and governing platform of President Young-Sam Kim between 1990 and 1996.

The recent economic history of South Korea is relatively simple, with its focus changing decade by decade. Prior to the 1960s, it was a low-income, labour-intensive agricultural economy. In the 1960s and 1970s, the light manufacturing sector developed and large-scale infrastructure investments were made in the Seoul region (especially in the 1970s), including bridges across the Han River, the subway, and major housing projects. In the 1980s, the focus was on medium and heavy industries, accompanied by a degree of economic decentralization (for example the steel complex at Pohang in the Southeast). In the 1990s, Korea became predominantly a service economy with an increasing emphasis on information technology. Temporarily at least, this has re-established the hold of the Seoul Metropolitan Area on the economy.

Changes in the urban hierarchy of Korea are shown in Table 4.8. In the past 40 years, the number of cities with more than 50,000 inhabitants has increased from 27 to 79. In the process many of these cities have moved up

from one city size class to another as a result of population growth. In 1960 there were only five cities larger than 250,000; by the end of the century there were 33 (accounting for 85.5 per cent of the national population), and seven of these were larger than 1 million (Seoul stood alone in this class in 1960). Much of the urban growth occurred in the 250,000–1,000,000 size range.

What this urban growth means for individual cities is shown in Tables 4.9 and 4.10. Seoul City's population peaked in 1990, but the Seoul Metropolitan Area continued to grow, reaching 21.35 million in 2000. All of the cities larger than 250,000 grew much faster than Seoul, even faster than the Capital Region. Examples include new cities such as Ulsan, Changwon, Kumi and Kimbae, industrial cities such as Pohang. Even the fourth city in the country, located within the Capital Region (Incheon), grew very rapidly. It increased its population by almost two-and-a-half times in the past twenty years. Because most of these cities are scattered throughout the country, the long established core periphery relationship in Korea at last appears to be breaking down. The growth of some of these cities, however, is distorted by the annexations of surrounding rural counties in 1995. Moreover, the reported data ignore ten other cities larger than 250,000, all of them within the Capital Region, that are a large part of Seoul's decentralization story. These cities are Sungnam, Bucheon, Suwon, Anyang, Koyang, Ansan, Kwangmyun, Pyongtaek and Euijeongbu; most of them are located south of the Han River, a tribute to the success of the decentralization strategies.

Within the Capital Region, the more peripheral location of Kyonggi Province more than doubled its share of the national population (from 11 to 25 per cent) in the last 40 years of the last century (Table 4.10). Downtown's share of regional employment has more than halved over the past two decades, while during the same period the job share of the Outer Ring increased by almost 50 per cent. As the Korean economy developed rapidly, and many New Towns and satellite cities were promoted beyond the Greenbelt (see Figure 4.2), the determinants of suburbanization changed. Also, unlike in the United States, where suburb-to-suburb commuting dominates with the result that travel times for suburbanites are similar to those of central city residents-workers (Gordon, et al., 1998; Gordon and Richardson, 1997), job decentralization in Korea has lagged. This may reflect a cultural difference between the West and Korea. Face-to-face communication remains a predominant business practice, despite the rapid expansion in cellular phone use and other aspects of the information technology revolution. It promotes physical centralization and weakens job decentralization pressures. The consequence, contrary to what might be expected in a compact metropolitan region, is that many suburbanites face longer commuting distances, apparently willingly.

Since the 1960s Seoul and the surrounding metropolitan region have dominated the spatial landscape, not only because of agglomeration econo-

Table 4.8 Changes in the national urban hierarchy in South Korea, 1960-1999

	1960			1970			1980			1990			1999		
City size pop ('000)	No. of cities	Pop ('000)	%	No. of cities	Pop ('000)	%	No. of cities	Pop ('000)	%	No. of cities	Pop ('000)	%	No. of cities	Pop ('000)	%
> 1 million	2	3,609	51.6	3	8,482	65.6	4	14,213	66.3	6	20,691	64.4	7	22,873	55
500-1,000	1	-	9.7	2	1,145	8.9	2	1,380	6.4	6	3,477	10.7	10	6,634	16
250-500	2	715	10.2	2	676	5.2	7	2,366	11.0	7	2,345	7.3	19	6,031	14.5
100-250	4	705	10.1	11	1,371	10.6	21	3,033	14.2	22	3,455	10.7	35	5,388	13.0
50-100	18	1,291	18.5	4	1,255	9.7	6	442	2.1	32	2,216	6.9	8	632	1.5
Sum	27	3,997	100	32	12,929	100	40	21,434	100	73	32,154	100	79	41,558	100

Source: Adapted from Choi, Jae-Heon, 2000.

Table 4.9 City populations in South Korea, 1960-2000 ('000)

Cities / year	1960	1965	1970	1975	1980	1985	1990	1995	2000
National population	24,989	29,192	30,882	34,707	37,436	40,448	43,411	44,609	46,125
Capital region	5,195	7,011	8,894	10,029	13,302	15,825	18,587	20,189	21,346
Seoul	2,445	3,803	5,433	6,890	8,364	9,639	10,613	10,231	9,891
Pusan	1,164	1,430	1,842	2,453	3,160	3,515	3,798	3,814	3,664
Daegu	677	848	1,064	1,311	1,605	2,030	2,229	2,449	2,480
Incheon	401	529	634	800	1,084	1,387	1,818	2,308	2,476
Taejon	229	316	407	507	652	866	1,050	1,272	1,367
Gwangju	314	404	494	607	728	906	1,139	1,258	1,352
Ulsan	-	-	157	253	418	551	682	967	1,014
Jeonju	188	221	258	311	367	426	517	563	616
Cheongju	92	124	141	193	253	350	478	531	162
Pohang	60	66	78	134	201	261	318	509	332

Table 4.9 City populations in South Korea, 1960-2000 ('000) (continue)

Cities /Year	1960	1965	1970	1975	1980	1985	1990	1995	2000
Changwon	-	-	-	-	112	174	323	481	472
Masan	158	155	187	372	387	449	494	441	358
Cheonan		71	77	97	121	170	211	330	285
Jinju	87	107	119	155	203	227	256	330	280
Iksan	-	-	-	-	-	-	-	323	247
Kumi	-	-	-	-	105	142	206	311	265
Gyeongju	76	86	90	108	122	128	142	274	151
Gunsan	90	103	110	155	165	186	218	267	220
Jeju	68	88	104	135	168	203	233	259	280
Kimhae	-	-	-	-	-	78	106	256	248

Notes: The populations of these cities have been affected by annexations in 1995, usually of part or all of the surrounding county.

Source: National Statistical Office

Table 4.10 Population in the capital region between 1955 and 2000, South Korea ('000)

Year	A	B	B/A	C	C/A	D	D/A	E	D/E
	National	Seoul	Share (%)	Kyunggi	Share (%)	Capital region	Share (%)	Urban share in ROK*	Share (%)
1955	21,502	1,569	7.30	2360	10.98	3929	18.27	6,321	62.16
1960	24,994	2,445	9.78	2750	11.00	5195	20.78	8,840	58.77
1965	29,193	3,803	13.03	3108	10.65	7011	24.02	12,303	56.99
1970	31,469	5,536	17.59	3358	10.67	8894	28.26	15,385	57.81
1975	34,709	6,889	19.85	4040	11.64	10929	31.49	20,876	52.35
1980	37,449	8,367	22.34	4935	13.18	13302	35.52	24,876	53.47
1985	40,467	9,646	23.84	6179	15.27	15825	39.11	29,983	52.78
1990	43,411	10,613	24.45	7974	18.37	18587	42.82	34,622	53.69
1995	44,609	10,231	22.93	9958	22.32	20189	45.26	39,635	50.94
2000	46,125	9,891	21.44	11,455**	24.83	21346	46.28	42,055	50.76

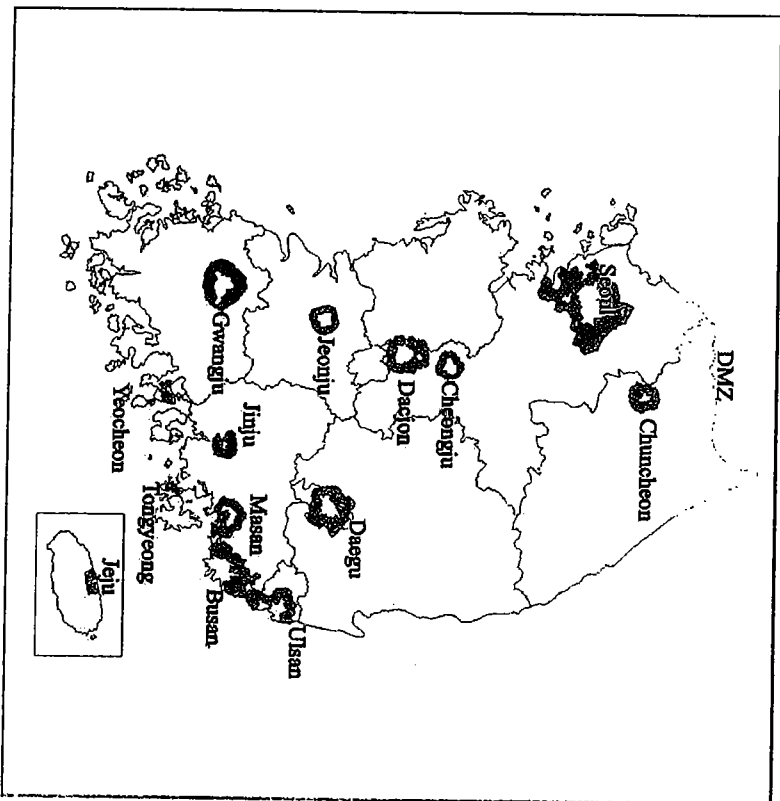
Notes: ** Includes Incheon City.

Source: Kwon, Y. W., p.68 from Table 3-2, p.70.

nies and other market influences, but also because of government policies. These include: government investments in transportation infrastructure (for example more bridges across the Han River, subways and suburban rail lines), promoting the decentralization of industry and educational facilities, a tight Greenbelts policy (see Figure 4.2 for the location of the original 14 Greenbelts), and an ambitious New Towns construction programme. As a result of the New Towns policy, five New Towns (Sanbon, Bundang, Pyongchon Jungdong and Ilsan) were constructed from 1989 to 1992, accommodating 1.18 million people in total.

The tight Greenbelt policy in a rapidly growing metropolitan region also played a role in these adverse impacts because the Greenbelt interfered with continuous urban development, inhibited close-in suburbanization and there-

Figure 4.2. Restricted development zones in Korea



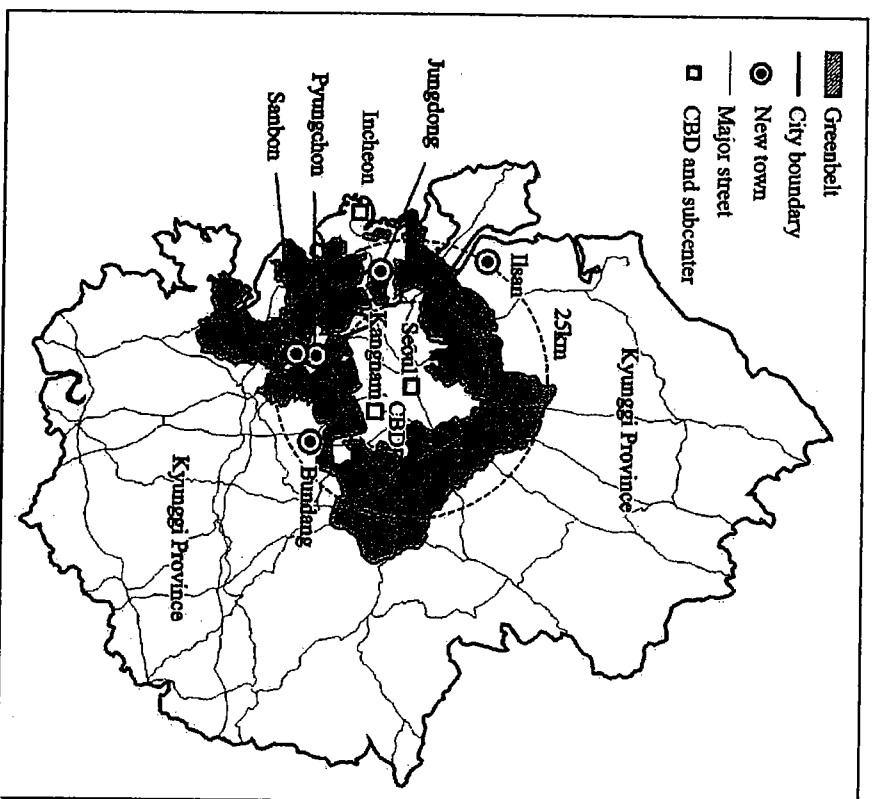
by promoted more urban sprawl⁶ (Bae and Jun, 2003; see Figure 4.3 for Seoul's Greenbelt area and the location of the New Towns). Overall, average commuting times and distances would have been shorter, although some commuters would have experienced longer commuting distances. Jobs and people would have been more equally distributed throughout the region, to the benefit of a greater jobs-housing balance (Jun and Bae, 2000). The government also helped to promote industrial decentralization by developing satellite industrial towns at Banwol and Kuro. Nevertheless, job decentralization has been catching up on residential suburbanization, at least at the macro level. Yet the economic dominance of the Capital Region has remained untouched, hosting 95 per cent of the country's largest 100 firms.

Overall, job decentralization has not kept pace with population suburbanization. The government has been heavily involved in spatial issues in recent decades, but prioritized residential location (which is reflected in the programme for New Towns and other satellite communities) rather than workplace location. This helps to explain the jobs-housing imbalances that have resulted in longer commuting distances. On the other hand, government policies have enabled the Capital Region to adapt its spatial structure to continuing growth forces without significant interregional decentralization. Yet, in time, the liberalization of the economy, the reduction in central control, the declining influence of the *chaebols* and more emphasis on small-firm growth may result in more decentralization of economic activity than in the past; this would have important repercussions on the future distribution of population.

An intriguing recent development is the controversial decision to relocate the national capital, and much of its central administrative functions, to the Chungcheong region. There is a strong case, especially from the globalization perspective, however, to keep the capital just where it is, in Seoul.⁷ A major reason is that the large mega-cities of East and Southeast Asia are in a race to the top in the global urban hierarchy. Tokyo is already there; Hong Kong, Shanghai and Beijing are vying for supremacy in China; Singapore is in a

⁶ The growth of Pusan is strangled by the huge Greenbelt within the city boundaries, and abolishing the Greenbelt in Seoul could have reduce commuting times and land (and housing) prices (Bae, 1998). Although the Greenbelts have been abolished in the seven smallest cities in recent years, it is more of a symbolic gesture because in these cities the Greenbelt has not been a binding constraint.

⁷ Indeed, the government has been taking steps over the past two decades to expand Seoul's international functions, from sporting events (the Asian Games of 1986, the Summer Olympics of 1988, and the World Soccer Cup of 2002) to major and costly infrastructure projects (the Incheon International airport and the nearby container port of Gwangyang). This image-building was costly; the new and refurbished stadia for the World Cup alone cost \$2.7 billion, resources that had a high opportunity cost in terms of responding to more pressing local needs (Choe, 2004). Relocating the national capital is hardly consistent with these developments.

Figure 4.3 *Seoul's greenbelt and New Towns*

Source: Bae and Jun (2003).

strong position, despite its smaller size; and Taipei, Bangkok, Kuala Lumpur, Jakarta and even Manila have high hopes. In this competition, the national capital role is important, perhaps even determining. It is hardly the time for Seoul to undercut itself, given South Korea's globalization goals.

Table 4.11 summarizes a generation of inter-regional migration in Korea. The story is almost uniformly the same: the Capital Region pulls in migrants from all other regions of the country. The numbers vary from year to year,

but a downward trend does not emerge until the 1990s. A particularly notable change is the emergence of the West Central region (Chungcheong) as an area of net in-migration. Tables 4.12-4.13 shed further light on migration trends. As the data in Table 4.12 demonstrate, a major shift has been the replacement of dominant rural-urban migration flows (more than one-half of migration in the late 1960s) by an overwhelming share of urban-urban flows (four-fifths of the total) by the late 1990s. In addition, rural-rural flows have almost disappeared, a reflection of the urban character of South Korea's settlement pattern. Table 4.13 presents information on migration flows within the Seoul Metropolitan Area and between the SMA and elsewhere. There are major changes in origins and destinations over time. The dominant flow up to the 1990s was from the SMA to outside the SMA, dwarfing the flows in the other direction, although the gap is narrowing. Both tables demonstrate how a main migration stream, over time, can subside to become a substream while a former under current can become a dominant migration trend in the process of differential urbanization.

Three of the six largest cities (Seoul, Pusan and Taegu) are now experiencing negative net migration, while net migration into Incheon, Kwangju and Taejeon are positive. However, negative net migration from the core cities implies intra-regional decentralization much more than dispersion throughout the country. In the late 1960s, migration into the Capital Region from the rest of the country was very high, and intra-regional suburbanization was limited. By the early 1990s, however, although the Capital Region continued to gain from the rest of the country, the migration flow from Seoul to the rest of the Capital Region was 3.5 times larger than the flow in the opposite direction. Seoul acted like a funnel pulling in migrants from the rest of the country and then spilling them out into suburban neighbourhoods, satellite cities and other nodes within the Seoul Metropolitan Area (Kwon, 2001). Migration within Seoul City has risen steadily over the decades, and is now the largest flow, although there are significant outflows from Seoul both to the SMA periphery (Kyunggi Seoul) and outside the SMA itself. The high level of Seoul Seoul migration reflects, in part, manoeuvring by households to take advantages of opportunities in a rapidly changing metropolitan housing market. Finally, migration's share in the Capital Region's population growth peaked in the late 1970s (at 83.6 per cent), but both natural increase and migration dropped off significantly in the 1990s.

Migration streams in South Korea have been affected by external shocks more than by endogenous forces. The end of the Korean War was the most important of these shocks. However, another important influence was the centralization of higher educational institutions and the better-quality high schools in Seoul in the 1960s and 1970s. Migration surveys revealed that during this period concern for childrens' education was the primary motivation for moving to Seoul. However, in recent decades, the Korean government has implemented a strategy of building up universities and other

Table 4.11 Interregional net migration in South Korea, 1970-1995

Year	Capital region	North East (Kangwon)	Central West (Chung Cheong)	South West (Cholla)	South East (Kyung Sang)	Jeju Island (Jeju)
1970	389,412	(36,222)	(95,137)	(177,642)	(77,257)	(3,154)
1971	373,916	(34,994)	(95,033)	(160,144)	(79,833)	(3,912)
1972	173,874	(30,734)	(47,328)	(78,019)	(18,444)	651
1973	240,385	(35,802)	(72,079)	(112,527)	(17,060)	(2,917)
1974	347,011	(49,300)	(92,078)	(155,619)	(44,437)	(5,577)
1975	587,653	(60,210)	(158,772)	(270,638)	(88,132)	(9,901)
1976	365,916	(41,882)	(100,984)	(157,851)	(58,157)	(7,042)
1977	336,615	(45,713)	(99,762)	(158,238)	(24,507)	(8,395)
1978	362,857	(50,777)	(122,100)	(185,220)	4,876	(9,636)
1979	331,825	(50,280)	(101,426)	(169,826)	(5,440)	(4,853)
1980	288,203	(24,510)	(77,307)	(153,997)	(31,041)	(1,348)
1981	270,432	(22,376)	(88,779)	(112,461)	(45,372)	(1,444)
1982	311,714	(29,808)	(89,453)	(126,389)	(62,933)	(3,131)
1983	398,095	(44,683)	(102,747)	(159,137)	(89,618)	(1,910)

Table 4.11 Interregional net migration in South Korea, 1970-1995 (continue)

Year	Capital region	North East (Kangwon)	Central West (Chung Cheong)	South West (Cholla)	South East (Kyung Sang)	Jeju Island (Jeju)
1984	371,792	(42,202)	(100,566)	(154,469)	(70,353)	(4,202)
1985	297,590	(28,504)	(69,543)	(121,463)	(74,646)	(3,434)
1986	272,659	(33,499)	(61,768)	(120,374)	(53,453)	(3,565)
1987	321,035	(45,132)	(77,314)	(162,505)	(33,226)	(2,858)
1988	314,362	(52,482)	(75,099)	(145,586)	(39,465)	(1,730)
1989	317,233	(57,933)	(63,465)	(138,261)	(57,343)	(231)
1990	276,204	(47,637)	(37,862)	(124,933)	(68,900)	3,128
1991	220,581	(38,030)	(19,960)	(106,831)	(58,536)	2,776
1992	169,368	(24,845)	(4,132)	(85,757)	(56,339)	1,705
1993	151,529	(24,586)	15,455	(76,864)	(63,805)	(1,729)
1994	54,027	(18,471)	6,288	9,207	(48,906)	(2,145)
1995	69,172	(9,350)	23,436	(33,300)	(46,663)	(3,295)

Source: Bureau of Statistics, Migration Statistical Yearbook, 1970-95.

Table 4.12 Migration flows and patterns among urban and rural areas in South Korea ('000)

Period	1965-70	1970-75	1975-80	1985-90	1990-95	1995-99
Rural to urban (%)	1,827 (50.1)	1,754 (44.3)	2,524 (44.9)	2,424 (39.7)	2,329 (33.4)	1,232 (12.2)
Urban to urban (%)	787 (21.6)	1,087 (27.4)	1,856 (33.0)	2,318 (38.0)	3,527 (50.6)	8,009 (79.4)
Urban to rural (%)	387 (10.6)	558 (14.1)	681 (12.1)	889 (14.6)	743 (10.7)	694 (6.9)
Rural to rural (%)	649 (17.8)	563 (14.2)	558 (9.9)	469 (7.7)	368 (5.3)	153 (1.5)
Total	3,650 (100)	3,962 (100)	5,619 (100)	6,100 (100)	6,967 (100)	10,086 (100)

Source: Kwon, 2000.

Table 4.13 Migration in the Seoul metropolitan area ('000)

Period	1965-1970	1970-1975	1975-1980	1980-1985	1985-1990	1990-1995
Seoul[A] - Kyunggi/Incheon	251	242	311	393	504	425
[B] Seoul-Seoul	122	299	436	722	984	1,473
Seoul[C] - out of M.A.	940	852	944	952	829	624
[D] Out of M.A - Seoul	126	225	317	358	392	455
Kyunggi/Incheon[E] - out of M. A.	224	296	469	578	719	662
Out of M. A[F] - Kyunggi/Incheon	70	90	126	166	229	336
M.A.[from C+E] - out of M.A.	1,164	1,148	1,413	1,530	1,548	1,286
Out of M.A.[from D+F] - M.A.	196	315	443	524	621	791

Source: Kang, 2000.

educational institutions in the provinces. Even though the best institutions are still found in Seoul, the decentralization programme has had an impact. Now, educational reasons are an almost trivial reason for migration to Seoul compared to the search for economic opportunities (Kwon, 2001).

In addition, industrial location policies since the 1970s have been proactive in promoting export-oriented industries in the southeast and labour-intensive industries in the southwest as a means to slow down migration to Seoul. Historically, Seoul was the key employment and education destination for all migrants. But economic development, information technology, the decentralization of educational institutions, and many other changes have transformed the provincial landscapes of Korea. At the same time, housing and other living costs, traffic congestion, air pollution and other large city externalities have revised opinions about life in Seoul. Job opportunities and quality-of-life considerations are making cities other than Seoul somewhat more attractive as migrant destinations, although Seoul retains its appeal, especially to elite groups. For example, Taejon's Science Park has had difficulty retaining scientists and technologists, although Taejon is a pleasant, amenity-rich metropolitan region only 45 minutes south of Seoul via the new high-speed train. On the other hand, Taejon, Incheon (although it is close to Seoul), and Kwangju are now attracting net migrants, and there is potential for this to happen in other secondary cities in Korea too.

To the untrained eye South Korea may appear to be an outlier because the standard spatial sequence of urban development (according to the differential urbanization model) of first urbanization, followed by polarization reversal and then counter-urbanization, is not easy to detect. It is only when one sees how main and sub-stream migration patterns replace one another over time that the differential urbanization patterns become apparent. The urbanization phase dominated migration trends in the country over a long period. As a consequence polarization reversal took a long time to show itself, at least over a broad range of secondary cities. Indications are that counter-urbanization will take place slowly. If it does occur, it is only likely to manifest in the restricted sense of urban development in areas freed up by Greenbelt relaxations. The core-periphery model also remains relevant.

Korea is different for many reasons. It is very small, its longest axis, from Seoul in the far northwest to the port of Pusan on its southeastern tip, is less than 400 km; at its widest point, the country is 240 km wide. Moreover, about 80 per cent of the country's land area is mountainous and cannot be developed. Furthermore, for historical, nationalistic (that is, food security), rural nostalgia and even irrational reasons, the government is very protective of the remaining rice paddies.

There is very little land available for urban development, a problem aggravated by the effects of the long-established Greenbelts policy that covered 5.4 per cent of national territory (Bae, 1998; see Figure 4.2). For example, at-

most one-half of the land within the City of Pusan was within the Greenbelt. This meant that development was severely constrained, pushing residential development up the mountain slopes and spoiling ridgelines. It became much more difficult for Pusan to grow. Its size and its location made it an ideal counter-magnet, but land constraints have prevented it from fully playing this role; thus, in a sense the Greenbelt policy reinforced the core-periphery relationship. Another important point is that South Korea is a distorted national urban system because of the historical accident of the separation of the North and the South. Since the Second World War, the Pyongyang-Seoul axis has withered, and development in the South north of Seoul was constrained on national security grounds.

There are many factors that will affect future urbanization trends in Korea. Globalization is one of the major influences. Since the 1960s, rapid economic development and urbanization in South Korea have gone hand in hand. However, some degree of liberalization of the Korean economy in the 1990s opened it up to globalization trends. However, 'in Korea's economic transformation, globalization has two aspects: one is externalization (internationalization) of the Korean economy and the other is internalization of global challenges and pressures within the Korean economy. Even though Korea has been successful in the first aspect, it has been not as successful with respect to the second' (Choe, 2004, p. 60). In the long run globalization may have overwhelmingly beneficial effects, but the financial crisis of 1997 was a short-run consequence. By 2000 the economy had undergone a substantial recovery, but in 2001 it temporarily faltered again. Several of the *chaebols* (Korea's giant conglomerates) underwent financial restructuring and disposal of some assets. The impact on urban development was noticeable. As revealed in a case study of the City of Daegu in the late 1990s, there was a significant decline in employment (especially in manufacturing and construction) and a flattening of employment density gradients (because of differential employment losses in the central city and the suburbs). This finding is not surprising: central cities perform badly in recessions but do better in economic booms. Globalization influences in Korea imply more cyclical fluctuations than in the past, and the safest locations to weather the economic storms are found in the suburbs of large cities.

Decentralization is reinforced by the information technology (IT) revolution. There is an unresolved debate about whether telecommunications and transportation are complements or substitutes. In the United States, there is an emerging consensus that they are complements. But the Korean situation is less clear because of the severe traffic congestion in Seoul, Pusan and other large cities. Yet the opportunities for the growth of telecommuting are problematic (despite Korea's leadership in the use of IT, for example cellular phones) because of the quasi-authoritarian tradition of the close supervision of employees and the higher priority given to face-to-face communications in Korea than in the West. On the other hand, decentralized workplaces offer

the opportunity for shorter commutes while taking advantage of the IT revolution to sustain close inter-firm business contacts. Employment decentralization will be much more rapid than in the past.

The great unknown with respect to Korea's future urbanization trends is the reunification issue. South Korea's urban system is truncated because of the extremely limited degree of contact, both physical and telecommunication, between the South and the North. In the absence of preventive action, reunification with open borders will result in a flood of migrants to the Seoul region (estimates range between 3 and 5 million) with massive consequences for housing and labour markets. Preventive measures include infrastructure and industrial investments in the North, building low-income housing, perhaps in New Towns, just north of the demilitarized zone (DMZ), and a partial closure of the border after reunification for a transitional period. After a transitional period, the national urban system could change dramatically, in part to promote increased connectivity with Russia and China. This would require a reorientation (more accurately, an extension) of the transportation system on a North South axis with significant implications for future urban growth repercussions. In addition to new cities near the DMZ, the Seoul-Pyongyang axis would be reinforced. Also, if a new capital for a unified Korea were to be located in the north close to the border (at Kaesong, the capital of Korea during the Koryo Dynasty centuries ago), this would affect the long-term spatial gravity of a unified Korea. If reunification occurs in the relatively near future, the dominance of Seoul could be reinforced even more, partly because of heavy immigration from the North and partly because of the revival of the Seoul-Pyongyang axis.

To sum up, despite faster population growth rates in some of the secondary cities and the beginnings of a decline in Seoul City's population, the Seoul Metropolitan Area has remained remarkably resilient. Its dominance as the core is unchallenged, and despite the small geographical size of South Korea some areas in the periphery have languished. Migration has become an interurban phenomenon, and flows associated with the Capital Region (both in and out) have been substantial. The economy has entered the era of globalization with some vigour. Yet trade liberalization, market opening, and foreign direct investment have resulted in a too-slow transformation of the economic structure to producer services (the international environment has been too competitive) and a reinforcement of the top of the urban hierarchy. South Korea is somewhat less orientated towards Asia than its neighbours, with greater involvement on the export side with the United States and Western Europe and a heavy reliance on the Middle East for imports. It has become an important foreign direct investor in many parts of the world, but there is little international migration (either in or out, except for family-related immigration into the United States). Policy makers have been ambivalent about the role of Seoul: seeking world city status on the one hand and acting in the in-

terests of relieving core-periphery asymmetry (for example capital relocation) on the other.

JAPAN

As is well known, despite many attempts to decentralize both population and economic activity out of Tokyo, the build-up in the National Capital Region (NCR) has continued unabated under the influence of globalization, although the pace of change has fluctuated during the recession years. The NCR consists of the Tokyo Metropolitan Area (TMA) and seven surrounding prefectures (stretching up to 100 km away). The TMA is the area controlled by the Tokyo Metropolitan Government. One-third of the TMA land area consists of 23 special wards (a spatial aggregation commonly used in analysis of Tokyo), of which three central wards form the urban core. Of the NCR's total jobs (more than 21 million), about 11 per cent are in the three central wards and 36 per cent in the 23 wards (Kidokoro et al., 2001). Globalization has resulted in a modest increase in the number of corporate headquarters offices nationwide, and an increase in the NCR share (to about 70 per cent), although the share of the TMA (apart from the more peripheral Tama area) has slightly declined (now about 58 per cent). The number of foreign companies operating in Japan has remained relatively stable over the past decade and a half, but the share in the three central wards has now dropped to less than one-half. The continued absolute growth in employment has been associated with a decline in core population densities because of the conversion of land uses from residential to commercial, a trend closely associated with the major shifts in economic structure from manufacturing to services (especially information technology and other producer services).

The decentralization strategy pursued by the Japanese government has had only limited success because the newer type of economic activities have much more locational flexibility and were less influenced by decisions about the supply of public infrastructure. Thus, the preference for NCR locations continued, although sites outside the 23 wards, for example at Yokohama and Chiba City, have become more popular. Under globalization, there have been offsetting forces: decentralization of economic activities often within the NCR, but also abroad, but with a continued concentration of headquarters and other high-order functions in Tokyo.

In the mid-1990s, for the first time since the Second World War, the metropolitan region of Tokyo experienced negative net migration (Fielding, 2002). However, even since the late 1960s there had been net migration out of Tokyo offset by net in-migration into the contiguous prefecture of Saitama. There are three major migration streams: from all prefectures, but especially from the northeast, to Tokyo; to Osaka; and to other provincial cities such as Sendai, Nagoya, Hiroshima and Fukuoka. Since the 1950s there have been major changes in net migration patterns in the three largest metropolitan

regions of Tokyo, Osaka and Nagoya. Net in-migration rates were high in all three regions in the earlier period, peaking in the early 1960s and remaining positive (although declining) to the mid-1970s. After that, net migration turned negative, except in the wider Tokyo region which did quite well in net migration terms in the 1980s before losing net migrants in the mid-1990s (as pointed out above). Fielding (2002) argues that these changes primarily reflect economic factors of several kinds (business cycle effects, economic restructuring, and long-term globalization impacts). The short-term business cycle effects dominate the changes over time while the long-term globalization influences help to explain the stronger resilience of the Tokyo metropolitan region. Economic restructuring also played a role, for example rural-urban migration in the earlier period, and the shift from manufacturing towards global-oriented producer services later on. In terms of economic functions, Tokyo continues to tower above all the other cities. Osaka is a distant second, while Nagoya ranks third (Abe, 2000). Other relatively important provincial cities in economic terms include Sapporo, Sendai, Hiroshima and Fukuoka.

Historically, Japan has been a country of low mobility. However, in the past two decades an increase in the number of working wives combined with declining land prices (residential land prices fell by 33 per cent between 1991 and 2002) has resulted in many younger households moving to certain urban areas, and increasing their population growth rates in a context of overall population stability. An interesting question examined by Idee (2002), using data on 46 prefectures for 1980-98, is how well prepared these receiving areas were in terms of infrastructure and services. The supply of economic overhead capital was closely associated with in-migration in several prefectures (including Hokkaido and Fukushima) but not in Tokyo and Osaka. As for social overhead capital, there was no relationship in the 1980s and a negative relationship in the 1990s. The latter suggests that high rates of immigration into many cities overwhelmed their capacity to provide education, health services and other welfare services. In an attempt to deal with this imbalance, Japan has shifted its distribution of public infrastructure investments towards social overhead capital (now about 30 per cent on average, but much higher in some urban areas). This has implied inter-urban welfare transfers, however, because households in high-income urban areas pay high national taxes despite their currently low per capita infrastructure.

In many respects, except for investing in other countries (initially in Asia, later elsewhere), Japan has retained many characteristics of a closed economy. However, in recent years (after 1998) there has been a sharp rise in FDI flows into Japan (averaging about \$2.2 billion per year, 1999-2002). This rise clearly reflects changes both in the globalized world and in Japan itself. There was a 6-fold increase in global FDI outflows between 1991 and 2000 from \$200billion to \$1,200billion, while cross-border mergers and acquisitions rose from \$13billion and peaked at \$184billion in 2000.

Japanese policymakers are committed to increasing the FDI flow into Japan, and in the last 15 years there have been important changes that have made FDI more attractive: deregulation in business, financial and retail services; relaxation of oligopolistic restrictions on foreign access (facilitated by the unprofitability of cross-shareholding among Japanese companies); changes in accounting practices facilitating mergers and acquisitions; declining costs (for example commercial land prices fell about 60 per cent between 1991 and 2002); companies with cheap share prices (still only about 40 per cent of their 1991 peak); more favourable attitudes to foreign companies and their business practices (for example Renault's turnaround of Nissan); and labour market flexibility.

On the whole, however, these changes in the domestic economy and policies were less important than the global shifts in favour of more FDI. The time path of FDI in Japan directly mirrors the global time path. Moreover, although Japan's share of global FDI increased from 0.2 per cent in 1986-90 to 1.8 per cent in 1996-2000, it remains small compared to the 23.8 per cent share of the United States (1996-2000) or even China's 5.2 per cent share (which had been higher in 1991-95 at 9.9 per cent and could increase in the future; Paprzycki, 2004). FDI in Japan accounts for only 1.1 per cent of GDP compared with 12.4 per cent in the United States, and out and in-mergers and acquisitions were only 7.9 per cent of the Japanese total in 2002.

These macroeconomic and global shifts will eventually have an influence on settlement patterns and the spatial distribution of economic activity because the expansion of FDI and greater involvement of foreign companies will reduce ossification. For example, plant closures (such as three assembly plants at Murayama, Kyoto and Nagoya and two engine factories at Kuritama and Kyushu closed down by Nissan) will have a differential geographical impact and foreign owners and participants are more likely to be locationally flexible. This may promote more decentralization, but it is too soon to judge. An alternative scenario might result in more relocation of manufacturing plants (and even the outsourcing of service functions) from Japan to cheap-labour countries, but whether this would reinforce centralization or deconcentration in Japan is uncertain, depending on the original location of the functions moved abroad.

THAILAND

Population growth in the Bangkok Metropolitan Region accelerated in the first three-quarters of the twentieth century, from around 550,000 in 1900, to 1.2 million around 1950, then soared to 4.69 million in 1970 and 6.83 million by 1980. The population pressure has been alleviated in the core areas by a modest decline in population since the late 1980s in both the CBD and within a 10-mile ring. Table 4.14 shows the basic data for population in the Bang-

Table 4.14 Basic data for Bangkok, the Central Region and Thailand, 2000

	Bangkok metropolis	Central region	Thailand
Population (million)	6.32 (10.4)	7.782 (12.8)	60.607 (100)
Household size (Persons)	3.2	3.5	3.6
Monthly household income (pounds sterling)	364	196	180
Gross Regional Product (pounds sterling m.)	25,323 (37.2)	3,064 (4.5)	68,110 (100)
Manufacturing employment (thousands)	433	1,286	2,008
Business services employment (thousands)	(21.6)	(64)	(100)
%	647 (60.8)	162 (15.2)	1,065 (100)

Sources: National Statistical Office and National Social and Economic Development Board

kok region for 1990 and 2000. They show the typical pattern of higher growth rates and lower densities with declining distance from the urban core.

We divide the metropolitan region into three sub-areas: the core BMA; the surrounding five provinces (*changwats*); and an extended metropolitan region that adds another eight provinces. As shown in Table 4.15, the core (Bangkok and Thon Buri) grew at an annual rate of only 0.72 per cent between 1990 and 2000, from 5.88 million to 6.3 million. Adding the five adjacent provinces (that is, Samut Prakan, Samut Sakhom, Nakhon Pathom, Nonthaburi and Pathum Thani), this intermediate region grew faster but relatively modestly at 1.16 per cent per annum, representing an increase from 8.59 million in 1990 to 10.08 million in 2000. Broadening out to the extended region, the rate of population growth rate remains low, at 1.55 per cent, an increase from 12.1 million in 1990 to 14.1 million in 2000 (Table 4.15).

Official densities in the BMA region are 4,038 persons per km² (or 10,423 persons per square mile), about double those in Los Angeles, but quite low

Table 4.15 Population growth and densities in the extended Bangkok Metropolitan Region, 1990-2000 (million)

Area	1990	2000	Annual Growth Rate 1990-2000 (%)	Density (sq. km)
BMA (Bangkok and Thonburi)	5.882	6.32	0.72	4,038
BMR (BMA + 5 Provinces)	8.59	10.079	1.16	1,299
Central Region (Extended BMR: BMA + 13 Provinces)	12.076	14.102	1.55	138 (excluding BMA)

Source: National Statistical Office of Thailand, Population and Housing Census 2000. <http://www.nso.go.th>.

by developing country city standards. However, gross population density in the core area (within a 10 km radius) is much higher (14,738 per km² or 38,128 per square mile), and is similar to that in central Tokyo: metropolitan area traffic congestion is much worse in Bangkok (travel speeds are only 56 per cent of those in Tokyo; Table 4.3). A more accurate measure of densities is persons per hectare of built-up area in the metropolitan region (Bertrand and Malpezzi, 2003). Table 4.3 shows some comparative data for selected Asian cities; Bangkok is the least dense among the group.

Thailand is an example of extreme primacy, although the primacy of Bangkok itself (as opposed to the extended metropolitan region) has declined substantially over the past two decades (Kittiprapas, 2001). Even the core region accounts for 10.4 per cent of the national population (Table 4.14), while the extended metropolitan region accounts for 23.3 per cent. However, household size is very low by developing country standards (3.2 in the BMA region and 3.6 in the country as a whole). Despite the success in reducing fertility rates, Thailand remains under population pressure and there are few signs of decentralization over the country as a whole. There has been significant economic activity in the Eastern Seaboard region (less than 100 miles from Bangkok) in the last decade or so, but (if anything) globalization has reinforced the hold of the extended Bangkok metropolitan region on the national economy. Industrial decentralization has occurred over a wide region, into Petchaburi, Chachoengsao and Chonburi (including other areas in the Eastern Seaboard region), but the population growth in these outer *changwats*

has been very modest. Although the Laem Chabang port shows promise as a second port to Bangkok's Klong Toey Port, its share of traffic remains much smaller. There are also major jobs housing imbalances. For example, in the Central Region as a whole Bangkok accounts for only 29 per cent of the manufacturing jobs, but for 44.8 per cent of its population. Business services are more concentrated (Bangkok has 80 per cent of the Central Region's jobs), but these tend to be distributed relative to the population. The data suggest that the rate of suburbanization has not been fast enough to alleviate the pressure in central Bangkok; the manufacturing sector is twice as large as the business services sector (although establishments with less than five employees are not recorded in the official data). Apart from the close-in North-aburi and Sanut Prakan, all the other *changwats* had very low population densities; the BMR has an average density of about 1,300 persons per km² while the Central Region average (excluding the BMA) is less than 140 persons per km² (Table 4.15).

To the extent that population is an issue with respect to Bangkok, it is a question of scale not growth. Despite its recent decline, the high primacy of Bangkok remains a problem primarily because of the huge concentration of population and wealth there. For instance, the country's automobiles are overwhelmingly concentrated in Bangkok (more than three-fifths of the nation's private cars), with an estimated 1.61 million automobiles in Bangkok in 1999 and a motorcycle fleet of 1.66 million.

Bangkok is dominant in all economic dimensions (Table 4.14). Its gross regional product accounts for 37 per cent of national output. Its household income is double the national average. Most of the country's universities, and certainly the best ones, are located there. Its manufacturing share, however, is relatively modest (a little more than one-fifth of national jobs) because many manufacturing firms have moved out to the surrounding *changwats*. For example, two-thirds of output in both the five surrounding *changwats* and the Eastern Seaboard Region are in manufacturing.

MALAYSIA

Malaysia is highly urbanized by developing country standards with only 15 per cent of the labour force in agriculture (and agriculture accounts for less than one-tenth of the economy's output). Apart from an interruption during the financial crisis of the late 1990s (especially in 1998), Malaysia has experienced rapid economic growth over the last decade or more (GNP at current market prices more than tripled between 1990 and 2002). It has the third-ranked per capita income in Southeast Asia (more than \$4,000 per year, out-ranked only by Brunei (an oil-based economy) and Singapore, and the poverty rate has dropped from 50 per cent to about 6 per cent in the past 30 years. External trade (both exports and imports) has increased more than five-fold since 1990 (with the United States, Singapore and Japan as its main trad-

ing partners) and the trade surplus is now \$100 billion-plus trade surplus, so Malaysia is closely integrated into the global economy.

Malaysia has undoubtedly benefited in macroeconomic terms from globalization by transforming a former resource-based economy (predominantly tin and rubber) into an export-oriented manufacturing economy, including a significant electronics and other relatively high-tech industries. An important characteristic of Malaysia is its ethnic diversity (two-thirds Malay Bupinatra, 26 per cent Chinese, and 8 per cent Indian). There has been a long history of ethnic dissension between the urban Chinese entrepreneurial population and the ethnic Malays (Bupinatra), who were originally rural but are now almost equally urban. One result was the New Economic Policy (NEP) of 1970 which was basically a preference system for native Malays. Rapid economic growth and the 'raising of all boats' have assuaged this problem.

The total population of Malaysia in 23.3 million in 2000 compared to 18.4 million in 1991 means an average annual population growth rate of 2.6 per cent between 1991 and 2000, similar to that in the previous decade. At the state level, Selangor, the most populous state (where Kuala Lumpur is located), grew fastest (6.1 per cent, 1991-2000) followed by Sabah (4.0 per cent), although some States (such as Perak, Perlis and Kelantan) grew at negligible rates. The three largest states (Selangor, Johor and Sabah) account for close to one-third of the national population. Urbanization continued to proceed at a rapid pace, from 50.7 per cent of the population in 1991 to 62.0 per cent in 2000. Of course, there is much regional variation from 100 per cent in Kuala Lumpur, 87.6 per cent in Selangor and 80.1 per cent in Pulau Pinang down to urbanization rates in the 30-plus per cent range in Kelantan, Perlis and Kedah.

The metropolitan region of Kuala Lumpur is one of the most dynamic cities in Southeast Asia. Interestingly, it began on a 'muddy estuary' (the translation of Kuala Lumpur) in 1857, a primate city built on a wetland then but not now! The new suburban capital (Putrajaya) formally established in June 1999, by the way, has a nicer translation - 'successful prince.' It is located less than 30 km. from the urban core and 20 km from the airport. It is a planned city including a Grand Mosque designed by a renowned architect from Mecca. It was very expensive to build and a showcase, an update of the Brasilia prototype, but more eco-friendly (with adjacent wetlands of 1,528 acres, the largest in the tropics).

Like Hong Kong and Singapore, Kuala Lumpur is much more of a planned city than Bangkok, Jakarta and Manila, which could be described as unplanned cities. Rimmer (1998) argues that redevelopment of the core distribution network should focus less on roads and more on telecommunications and public transportation infrastructure. This is paying off in Kuala Lumpur. There is now an MSC (Multimedia Super Corridor), a \$5 billion project based on a high-speed fibre-optic network, which began in 1995. It is based

on information technology activities on a corridor 15 km wide and 50 km long, starting downtown at the well-known Petronas Towers (formerly the tallest buildings in the world) through Putrajaya to the airport (with a current capacity of 25 million passengers and ultimate planning for 90 million). However, at the other end of the spectrum, there is a significant illegal immigrant population (especially from Indonesia, the Philippines and Bangladesh) living in peripheral squatter settlements, hidden from the global business and tourist community.

Kuala Lumpur has relied heavily on automobiles, given its income level (there is approximately one car per household, and carpooling fails there as almost everywhere). In recent years, the government has implemented a relatively ambitious public transportation network to combat the city's traffic congestion. Now, Kuala Lumpur has a two-line (STAR and PUTRA) light rail system managed by a government-backed company (SPNB-Syarikat Prasarana Negara Berhad). It has experienced significant passenger growth since 1997 and 1998, especially on the PUTRA line (accessing the new administrative capital). There is also a high-speed express train (at 162 kph, a 28 minutes trip) between the airport and the central rail station and a short 8.6 km elevated monorail with a capacity of 18,000 passengers per hour in each direction. It is unclear how these investments will affect the modal split in the long run.

Despite its moderate size (less than 1.5 million), Kuala Lumpur exhibits global city characteristics. It is buying into the information technology revolution with the MSC and the related Cyberjaya. It is relatively liberal for a predominantly Islamic city: alcohol is available if a little expensive; the gay and lesbian community is active; illegal drugs, on the other hand, are a no-no with possible execution for trafficking and jail and whipping for possession. Of course, Kuala Lumpur is not New York or Los Angeles, but it is closely integrated into the global economy. Malaysia is transitioning into a developed economy, and is a model for the success of a predominantly Muslim economy that can match tradition with modernity. In this context, Kuala Lumpur should climb rapidly up the world urban hierarchy.

SINGAPORE

With the second largest port in the world (behind Hong Kong), its leadership in international financial services (third behind Tokyo and Hong Kong) and its Changi Airport among the top ten in the world, Singapore is the epitome of a global node (Yue, 2001). However, because of its small size as a city-state it is not a particularly interesting case for an analysis of the relationship between globalization and core periphery trends. As the economy has expanded, both population and economic activity have decentralized out of the urban core (except for port-related activities), but the distances involved are short and population has spread out along a spine determined by the rail sys-

tem and the government-supported housing developments along the rail line. On the other hand, a single centralized government has facilitated the planning of its infrastructure network while permitting the market economy to function in relative freedom. With a population of around 4 million (one-sixth of them non-citizens) and a very small land area (only 648 km²), Singapore had to go to extreme lengths (for example land reclamation, promoting high-rise residential development via its Housing and Development Board, importing one-half of its water from Malaysia) to accommodate its population, not to mention finding land to expand its port, its office stock and its large manufacturing sector (almost one-quarter of total output). In the macro sense, Singapore is well located in Southeast Asia for the distribution of just-in-time shipments and its port facilities are backed up with an impressive telecommunications network. Its involvement in international trade and services is very high (imports plus exports are more than three times its national income) with almost two-thirds of its trading activity with Asia. Much of its growth has been based on ease of entry for multinational corporations, literally several thousand companies with almost three-fifths of corporate assets. It also invests heavily abroad, although the FDI outflow is only about one-half of the inflow. However, the outflow is largely regional to the rest of Asia, while the inflow is global. Given its high per capita income and wage levels, there is the question of cost competitiveness. This has been partially relieved by importing labour from outside, but is unlikely that in the long run Singapore will be able to retain much of its manufacturing base (at least in Singapore itself).

A brief mention should be made of the Indonesia-Malaysia-Singapore growth triangle (IMS-GT), a mechanism for promoting cooperative economic development across national frontiers. Begun in 1994, it matches Singapore's financial resources and managerial expertise with the land, natural resources and labour pools of Malaysia and Indonesia. However, progress has been spotty, especially during and after the financial crisis. While it represents an interesting example of regional (potentially global) cooperation, it is more of a gimmick than a model for other cross-national ventures.

INDONESIA

The Jakarta metropolitan region's population in 2000 was 24.7 million, 12 per cent of Indonesia's population. About 8.4 million was in Jakarta itself (known as DKI Jakarta), 12 million in the surrounding provinces (known as Botabek) and 4.3 million in the peripheral fringe. This reflects significant decentralization in the past two decades, with the metropolitan region extending about 70 km in every direction (except to the north, where it abuts the Pacific Ocean). However, its population growth rate (in its individual subregions as well as in the region as a whole) is decelerating much faster than that of the country as a whole (Widiarto, 2002). The region is much richer than

the rest of the country, accounting for almost 30 per cent of gross domestic product, with a gross regional product per capita more than three times the national average. Its transportation infrastructure is far superior, the country's main seaport is Tanjung Priok in North Jakarta (accounting for two-fifths of non-oil exports and three-fifths of non-oil imports) and the main international airport is in Botabek (accounting for about one-half of arrivals and departures). Also, most of the new manufacturing facilities are the result of FDI (more than one-third of FDI is in Jakarta) and are located in suburban Jakarta (about 55 per cent of its output is in manufacturing, compared with DKI Jakarta's two-thirds share in services). Many of the important foreign investments are in natural resource sectors (oil and gas, mining and lumber) and are in outer Java or on the other major islands (although the local headquarters remain in Jakarta). Also, given Indonesia's recent emphasis on decentralization, many of the investments in social overhead capital and primarily financed by the international agencies have been directed to high-poverty regions away from Jakarta.

Two-thirds of Indonesian exports are manufacturing products (traditionally plywood and other lumber products and textiles, but electronics are becoming more important), 23 per cent are oil and natural gas, with the balance divided between other mining and agricultural goods (especially seafood). As pointed out in Table 4.2, more than three-fifths of exports are Asian-bound, while the US and Europe account for almost one-seventh each. Indonesia has large trade surpluses with Japan, the United States, Singapore and South Korea amounting to a total of about \$20 billion.

The traditional centralized government system combined with the inflows of foreign investment into Jakarta has recently been reversed by the decentralization programme (involving the transfer of block grants to local governments) and by the decline in investment from overseas (reinforced by capital flight) during and after the economic crisis. It is likely that a decline in the role of the central government in regional development projects can have favourable impacts in reducing interregional disparities. Some local jurisdictions, but not all, have already been successful in acquiring relatively high revenue shares of national resources (Silver, 2003). The central government has to be careful in a balancing act between central control and promoting local autonomy to minimize the risk of local opposition (perhaps even acts of secession) when some regions are growing much faster than others.

On the other hand, it would be premature to write off the core. Jakarta retains a substantial infrastructure and urban services advantage, and its capacity (almost a monopoly) in supporting producer services means that there will be favourable ripple effects on the capital, even from successful decentralized development. Also, none of the other regions can compete with Jakarta's international connections that remain very important because of Indonesia's heavy involvement in the globalized world.

THE PHILIPPINES

Metro Manila continues to dominate the national spatio-economic landscape, though economic dispersal, especially to nearby regions, is taking place. Global economic forces such as exports and investments benefit economic growth throughout the regions and, indirectly, promote poverty reduction. However, globalization alone cannot bring about balanced regional development, an important policy objective in almost all developing countries. Spatial development patterns are strongly influenced by domestic market forces and public policy, and globalization tends to reinforce rather than offset these patterns.

Urban primacy is a continuing characteristic of the Philippines, reinforced by global trends in capital and trade flows and in improved communications (Solon, 1996). Of course, the focus of FDI on East and Southeast Asian metropolises is not peculiar to the Philippines. However, some regional centres such as Cebu in Central Visayas, Davao-General Santos in Southern Mindanao, and Subic-Clark in Central Luzon are growing faster than Metro Manila, and these areas have benefited from more investment and from export growth.

The spatial imbalances continue. Metro Manila has a per capita income 2.5 times that of the second-highest region (Cordillera, which benefits from tourism and the export processing zone at Baguio, clearly global influences) and more than 5.5 times more than in the poorest region (Bicol, which suffers from recurrent annual tycoons). Also, Metro Manila's share of GDP increased from 30 per cent in 1988 to 36 per cent in 2000. The other regions that increased their share are those adjacent to Metro Manila (Table 4.16).

Although the regions close to Manila remain important in other indicators, the changes in export shares are significant. Metro Manila's share dropped from one-half to a quarter between 1988 and 2000. During the same period, the share of Southern Tagalog soared from 4 per cent to one-half, and there were also increases in the shares of Cordillera and Central Luzon. The explanation was a growth in agricultural exports. On the other hand, the shares of regions in Mindanao fell sharply.

One interesting aspect of globalization, especially in developing countries, is its impact on poverty. In general, globalization trends have reduced poverty. Its incidence (based on per capita consumption) in the Philippines fell from 41.5 per cent in 1985 to 32 per cent in 1994 and 25 per cent in 1997. However, when events in Asia turned for the worse, that is, in the post-1997 financial crisis, poverty increased (back to 27 per cent in 2000). Regional differences were wide, ranging from 5.6 per cent in Metro Manila and less than 20 per cent in the other nearby regions to more than 50 per cent in Bicol and Western Mindanao. Recurrent problems are an inequitable income distribution and poverty in the agricultural sector (despite export expansion). There were 'trickle down' effects, although less strong than in other

Table 4.16 *Gross Regional Domestic Product (GRDP) per capita, regional shares, and growth of GRDP (constant 1985 prices) in the Philippines*

Region	GRDP per capita (pesos)		Regional share of GDP		GRDP growth rate (ann. %)		
	1988	2000	'88 (%)	'00 (%)	1988- 1994	1994- 2000	
A	Metro Manila (NCR) Cordillera Auton.	26,090	29,577	29.95	35.68	2.4	4.55
B	(CAR)	11,066	14,952	1.85	2.3	4.55	5.75
I	Iloocos	5,675	6,873	2.92	3.06	2.49	5.26
II	Cagayan Valley	5,942	7,150	2.12	2.15	1.64	5.77
III	Central Luzon	10,546	10,673	9.39	7.42	3.36	2.99
IV	Southern Tagalog	12,784	13,179	14.93	13.92	1.12	5.5
V	Bicol	4,789	5,227	3.05	2.72	2.33	1.95
VI	Western Visayas	8,586	9,869	7.09	6.53	3.4	2.72
VII	Central Visayas	9,696	11,118	6.55	6.81	2.39	4.6
VIII	Eastern Visayas	5,334	5,828	2.63	2.47	1.02	3.77
IX	Western Mindanao	6,393	7,494	2.97	2.85	3.36	4.02
X	Northern Mindanao	10,356	11,659	5.41	4.65	1.84	3.02
XI	Southern Mindanao	11,784	11,181	7.39	6.19	1.29	3.23
XII	Central Mindanao	8,800	7,786	3.74	3.25	0.56	3.68
Philippines		11,215	12,178	100	100	2.56	3.73

Source: Philippines Statistical Yearbook.

countries. Pernia and Quisong (2004) estimate that the growth elasticity of poverty was about 0.39 (that is, an increase in economic growth of 1 per cent reduced poverty by 0.39 per cent) compared with a cross-sectional estimate across countries of around 1.0 (Dollar and Kraay, 2001).

CONCLUSIONS

The spatial effects of globalization, both within and among countries, are complex and are not easy to simplify and understand. There are offsetting forces at work, some centrifugal and others centripetal. Both can be simultaneously operating within the same national economic and demographic space. The net outcomes are unclear and vary from country to country.

However, a few preliminary conclusions can be drawn. First, over the Pacific Rim as a whole, economic activity has increased faster than elsewhere in the world during the globalization era (approximately the last two decades). Hence, Pacific Rim countries have become much more important economically. Of course, this change has been strongly affected by the rapid growth of the Chinese economy, but the transformations have not been limited to China alone.

Second, several aspects of globalization, not merely economic (such as the internalization of high-order services) but also social and cultural, have reinforced the large metropolitan regions near the top of the global urban hierarchy. This consequence was presaged by Hågerstrand (1967) several decades ago in his research on the international diffusion of innovations.

Third, this concentration trend runs counter to the metropolitan and inter-regional decentralization forces that are universal in almost all countries in the recent past. These forces reflect the weakening of agglomeration economies and the strengthening of congestion costs that undermine the strength of the primate city and its core region. When market trends and globalization forces run counter to each other, the net outcome is uncertain.

Fourth, in the very long run, globalization should result in the decentralization of economic activities out of core into peripheral countries, and out of core regions in all countries into their peripheries. However, this will take time and the rates of decentralization will vary from place to place and region to region. These variations may be exceptionally wide in the Extended Pacific Rim region because the level of development covers the global spectrum in different parts of the region. For example, the low levels of development in parts of the region not examined in this chapter, such as the small South Pacific countries, will limit their exposure to globalization forces (at least, in terms of impact upon settlement and spatial economic activity patterns) for a very long time to come.

Finally, although this chapter by necessity has had to be selective in its coverage of countries, the question of whether the concept of an Extended-

Pacific Rim makes sense in a globalized world merits a brief discussion. The answer is probably not. The region is too broad and too amorphous, and subject to a variety of definitions. For example, the Latin American Pacific coastal countries ought to be considered part of the Pacific Rim, but almost never crop up in discussion. This may be correct because Chile, to take one example, as a strong export-oriented economy, is more oriented towards North America and Western Europe than to Asia. Also, it is difficult to embrace the sub-regions of Japan and Oceania within the same macro-region. Japan is oriented towards North America and to a lesser extent Europe in trade, but is heavily involved throughout Asia in terms of FDI. Australia and New Zealand are truly global in reach, but have important migration and investment links with the smaller South Pacific countries. Several Pacific Rim countries, especially in Southeast Asia (for example Vietnam, Laos, Cambodia, Myanmar), have hardly had a regional, not to mention a global, impact. Thus, as a key and cohesive global player, an Extended Pacific Rim region which includes the entire area from Japan and Korea in the north to Australia and New Zealand in the south, is not a reality yet.

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