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Globalization, Foreign Direct Investment, and Urbanization in Developing Countries

Victor F. S. Sit, University of Hong Kong, China

Since the early 1980s, urbanization has taken on new dimensions as a result of increasing globalization. The latter embraces an emerging global production system in what has been referred to as the new international division of labor (NIDL), and increasing participation by foreign capital and transnational corporations (TNCs) in constructing, running, and financing major urban infrastructure and services (Blackbourn 1982; Cohen 1981; Dicken 1986; Friedmann and Wolff 1982; Gilbert 1993; King 1990; McGee 1997; Sassen 1998; Timberlake 1985; UNCTAD 1991). These globalizing trends are the outcome of many new developments, including

- A strong recovery of the world economy from the recession of the early 1980s
- The emergence of Japan as the world's largest international investor because of the rapid appreciation of the yen
- An increase in cross-border mergers and acquisitions driven by technological and competitive forces, such as new means of communication and production and the formation of regional markets like the European Union (EU)
- The rise of the service sector in the world economy, particularly in producer services, whose value added is increasing in proportion with the contribution of labor, raw materials, and energy in the final goods
- The increasing liberalization and deregulation of countries for foreign direct investment (FDI) and cross-border economic activities (UNCTAD 1991).

The economic activities involved in this new round of globalization can be measured largely by the inflows and outflows of FDI and the mushrooming of TNC affiliates in cross-border mergers and acquisitions, joint ventures, and greenfield foreign investments. The World Investment Report 1991 (UNCTAD 1991) reported a number of FDI features that reflected the magnitude and nature of this globalization and its increasing impact on home and host countries. In 1983–90 FDI inflows had grown at an average annual rate of 29 percent, about triple the growth of exports and four times the growth of world production output. The report concluded that "As a means of international economic integration, FDI is in its take-off phase"(UNCTAD 1991, p. 3) It also noted that FDI plays a much greater role in the economies of developing countries than industrial countries: the ratio of FDI to total domestic investment in the developing countries was 6 percent in 1985–87, compared with 3.4 percent for the industrial countries. Indeed inflows of FDI into the developing countries had picked up substantially since the mid-1980s, rising from 3 percent per year in 1980–84 to an annual increase rate of 22 percent in 1985–89. A record increase for the developing world of 37 percent was recorded in East, South, and Southeast Asia. The 1986–90 boom of FDI for the developing countries meant more in terms of inflow into manufacturing than into the primary and service sectors. Within manufacturing, the most important sectors for FDI were electronics and electrical equipment and motor vehicles and other transport equipment, underlining the significance of both import substitution and export-oriented industries as target sectors for FDI.

To a large extent, the increasing trend of inflows and outflows of FDI was maintained in 1991–97 (table 2.1). The year 1995 in particular was a boom year (UNCTAD 1998).

Table 2.1. *Selected Indicators of FDI and International Production, Selected Years*

Item	*Value at current prices (US$ billions)*		*Percentage change*	*Annual growth rate (percent)*		
	1995	*1997*	*1986–90*	*1995*	*1997*	*1991–96*
FDI inflows	317	400	24.4	32.6	18.6	17.1
FDI outflows	339	424	27.0	34.9	27.1	11.8
FDI inward stock	2,866	3,456	18.7	18.2	12.7	11.7
FDI outward stock	2,811	3,541	19.8	11.1	15.1	13.7
Cross-border mergers and acquisitions[a]	141	236	21.0[b]	28.8	45.2	27.1
Sales of foreign affiliates	5,933	9,500	17.3	12.5[c]	7.3	13.4[d]
Cross-product of foreign affiliates	1,363	2,100	19.1	–2.9[c]	7.7	6.2[d]
Total assets of foreign affiliates	7,091	12,606	19.9	13.1[c]	13.0	24.4[d]
Memorandum						
GDP at factor cost	264	30,551	10.7	9.5	6.0	6.4
Gross fixed capital formation	6,088	5,393	10.7	12.4	5.0	4.5[e]
Royalties and fee receipts	48	61	21.9	16.4	15.0	12.0[e]
Exports of goods and nonfactor services	5,848	6,432	14.3	16.2	3.0	7.4

GDP Gross domestic product.
a. Majority-held investments only.
b. 1987–90.
c. 1993.
d. 1991–95
e. 1991–95.
Source: UNCTAD data.

In 1997 the stock of FDI was 64 percent of the world's gross fixed capital formation, while the sales of foreign affiliates were 31 percent of the world's gross domestic product (GDP). During 1991–97 the developing countries improved their share of the world's total inflow of FDI. In 1989 their share was 19 percent (US$30 billion), but by 1997 it had grown to 37 percent (US$149 billion). In absolute terms, the FDI inflow to the developing countries had roughly quadrupled in eight years. In 1989, the 10 largest recipient economies were Singapore (12 percent); Brazil (12 percent); Mexico (11 percent); China (10 percent), Hong Kong, China, henceforth referred to as Hong Kong (7 percent); Malaysia (6 percent); Egypt (6 percent); Argentina (4 percent); Thailand (3 percent); and Colombia (3 percent). In 1997 the largest 10 recipient economies were China (27.8 percent), Brazil (7.6 percent), Singapore (6.4 percent), Mexico (5.6 percent), Indonesia (4.2 percent), Argentina (3.5 percent), Malaysia (3.2 percent), Chile (2.8 percent), Peru (2.4 percent), and Hong Kong (1.7 percent). While in 1989 the five economies in East and Southeast Asia accounted for 38 percent of the developing countries' total, by 1997 their share had increased to 43.3 percent. China stood out as the largest FDI host country among the developing countries, and was the second largest FDI inflow recipient in the world, following the United States.

Various studies on FDI in 1991–97 further confirmed a number of significant features (for example, U.N. 1991, 1993, 1997, 1998). On average, US$1 in FDI stock generates US$0.64 in value added, with more value added contributed in developing than in industrial countries. In the industrial countries sales of foreign affiliates in the host country outweigh exports, whereas in the developing countries their sales are dominated by exports. In Latin America; Oceania; and South, East, and Southeast Asia, sales of foreign affiliates in the host market are higher than imports. There is also a high degree of networking between foreign affiliates and parent TNCs, for instance, more than half the exports of Japanese and U.S. foreign affiliates go to their parent TNCs and 40 percent of the latters' shipment are sent to their foreign affiliates. In short, one-third of world trade is done within the TNC corporate network. Thus, participation in global production through FDI has become an important way to integrate with the global market.

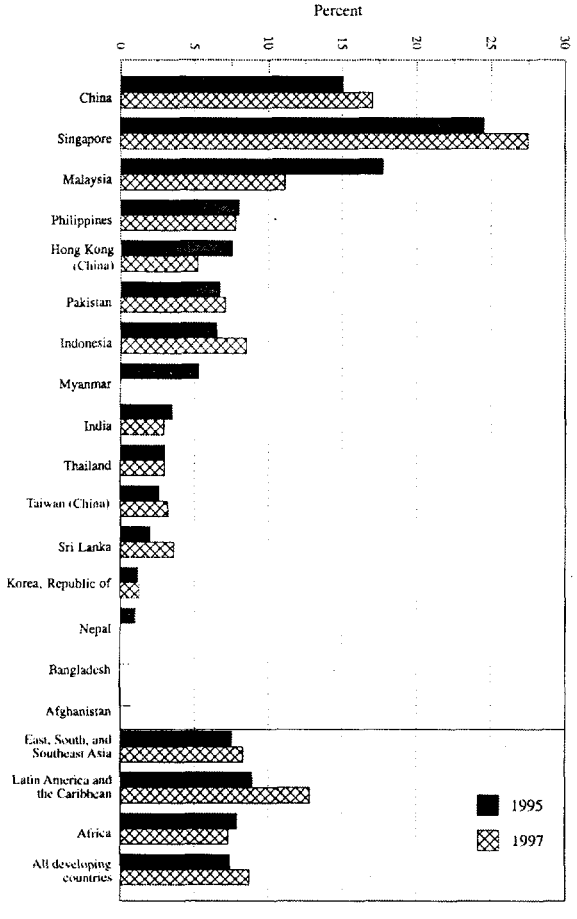
The increasing significance of FDI to host economies in the late 1990s compared with 1986–90 can also be seen in the increased proportion of FDI in gross fixed capital formation. In 1995–97 the world average was 5.3 percent, while it was 3 percent in 1985. The highest proportion registered was 30 percent (for example, Bangladesh and Rwanda), whereas the averages were 10 percent for Latin America; 8 percent for Africa; and 7.5 percent for South, East, and Southeast Asia. For China, Singapore, and Malaysia, their proportions were between 15 and 24 percent for 1995, and between 10 and 27 percent for 1997 (figure 2.1). However, FDI inflow alone is an underestimation of the economic significance of foreign affiliates or TNC influence on the host economy, as foreign affiliates usually have access to additional forms of financing besides FDI. The United Nations Conference on Trade and Development, based on its survey of U.S. foreign affiliates, concluded that foreign affiliates obtain loans from local commercial banks in amounts about equal to their FDI equity, and additional loans and other financing from third party countries of about twice of their FDI amount. Thus the adjusted FDI is about four times the FDI inflow as normally measured in official statistics. Therefore, even if we take a cautious approach by halving that multiplier to 200 percent, the actual impact of FDI to a host economy whose ratio of FDI to gross fixed capital formation is already over 10, is significant.

FDI and TNC studies on the situation in the 1980s and 1990s have identified three major host country determinants that will affect the volume of FDI inflow: (a) the policy framework for FDI, (b) economic determinants, and (c) business facilitation (UNCTAD 1997). Since the early 1990s, FDI regulatory regimes for almost all countries have looked quite similar, and are simply taken for granted. TNCs and host countries are now paying more attention to economic determinants and business facilitation measures. Business facilitation includes investment promotion, investment incentives, "hassle" costs, social amenities, and after investment services. From a spatial or locational perspective, that is, where the FDI will take place, economic determinants have the most weight. Dependent on the motives of the TNC or on the nature of FDI project, different economic determinants determine the choice of the host country and the actual location of the investment within the host country.

Accordingly FDI is classified into three types: (a) market seeking, (b) resource and asset seeking, and (c) efficiency seeking. Market-seeking FDI normally seeks large urban centers that offer market potential in terms of market size, per capita income, growth potential, and access to global markets. In resource- and asset-seeking FDI in developing countries, low-cost and unskilled labor is a major factor in export-oriented manufacturing, while skilled labor; technological and other created assets; and physical infrastructure such as airport and ports, power, and telecommunications are important for import substituting industrial projects and producer services. Thus this type of FDI tends to locate in major urban agglomerations. Raw materials, which were of great significance under the old international division of labor (before the mid-1970s), have declined as an important economic determinant. Efficiency-seeking FDI is more interested in the costs and productivity of the resources of the host country, which are often a function of its administrative system, transportation, and communication network, which invariably favors large urban agglomerations. Recently, membership of the host country in regional corporate networks, particularly trade blocs, is playing an increasing role in attracting FDI. New liberalization measures in the late 1990s have favored FDI investment in industries like telecommunications; broadcasting; energy; and producer

services like banking and finance, insurance, news media, tourism, and transport services. Such measures have further enhanced the urban bias of economic determinants, leading to increasing integration between globalization, FDI, and urban growth in the world as a whole, particularly in the developing countries, where the impact of FDI on their economies and on the growth of key cities is much more marked and intense than in the industrial countries.

Figure 2.1. FDI Inflows as a Percentage of Gross Fixed Capital Formation, South, East, and Southeast Asia, 1995 and 1997



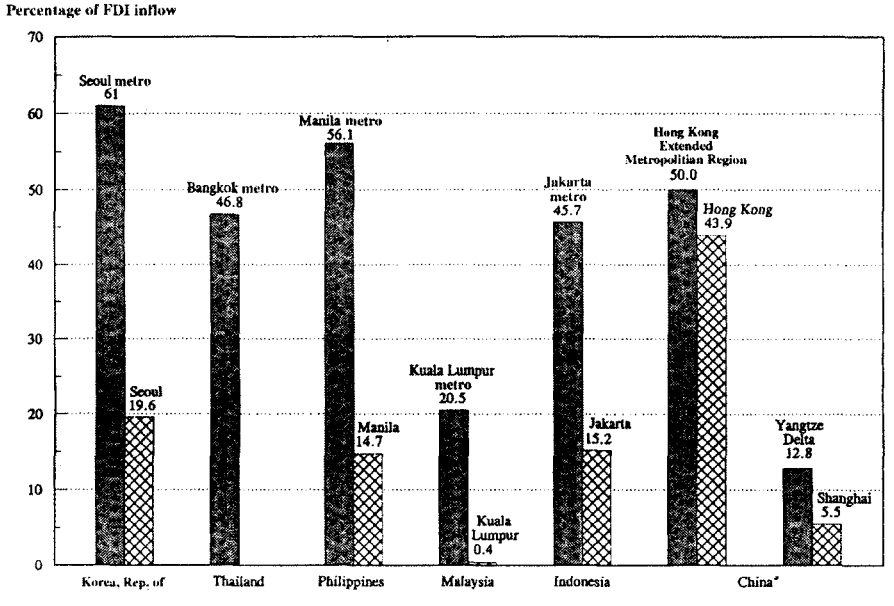
Source: UNCTAD database.

Available data for a number of East and Southeast Asian countries clearly illustrate the high degree of concentration of FDI in their largest urban agglomerations, the national capitals (figure 2.2). In the countries shown, the largest urban agglomeration accounts for 61 percent of the country's total FDI inflow. For Hong Kong, the big center bias is 100 percent. The Hong Kong Extended Metropolitan Region accounted for 50 percent (US$33 billion) of China's FDI inflow in 1997 (US$88 billion). The attraction of big urban centers for FDI in services and manufacturing in host developing countries, including newly industrializing countries, is obvious, and includes good strategic locations in the transport and communication networks within the host country, easy access to global market and global information networks, the presence of the central government and major government agencies, the better infrastructure and manpower than in the rest of the country, and the presence of amenities at international standards.

Testing the Relationship between Urbanization and Foreign Direct Investment

In the 1980s, many scholars examined the influence of external factors such as trade and FDI on urbanization (for example, Abumere 1982; Arn 1987; Blackbourn 1982; Forbes and Thrift 1987; Gwynne 1985; Rogerson 1982). Two lines of thinking have emerged. Some believe that the developing countries can actively take part in the world economy while ensuring positive outcomes to their cities (Hein 1992; Kasarda and Crenshaw 1991; Yue 1993). They see foreign investment, other international capital flows, and international production as beneficial for the national urbanization process. Others follow the earlier dependency school of the transnational approach (Castells 1972; Harvey 1975; Roberts 1976) and believe that the urban system and the pace and spatial structure of urbanization in the developing countries are increasingly dependent on their role in the capitalist accumulation process of the industrial countries (Armstrong and McGee 1985; Friedmann 1986; Fuchs and Pernia 1987; Kentor 1981; Portes and Johns 1986; Timberlake and Kentor 1983). They see little escape from dependent urbanization for the developing countries in the new global order.

Figure 2.2. *Locational Patterns of FDI in Selected Asian Economies, 1997*



a. Includes Hong Kong, data for China refers to 1996.
Source: Japan Development Bank (1996); Hong (1997).

The notion that foreign investment correlates with urban growth is also found in modernization theory. Hoselitz (1960) views urban growth as an inevitable result of development when the developing countries adopt the traits of modern nations through industrialization, because cities offer overwhelming advantages for the efficient absorption of foreign and domestic capital by allowing the widest access to the domestic market. They facilitate capital absorption through the inherent infrastructure, a concentrated pool of labor, cultural and recreational facilities, and easy access to those in political power and other decisionmakers (Crenshaw 1991; Dicken 1986; Edington 1984; Leung 1990; Mattos 1982; Sivalingam 1993).

A number of studies of developing countries in Africa, Asia, and Latin America have noted the metropolitan concentration of FDI (Armstrong and McGee 1985; Fuchs, Jones, and Pernia 1987; Gwynne 1985; Kowarick and Campanario 1986; Mabogunji 1978; Rogerson 1982). Recently, Lo and Yeung (1996,

1998) and Watters and McGee (1997) confirmed the continuing urban bias phenomenon in the 1980s and early 1990s. However, these studies tend not to be detailed spatial analyses of the relationship between FDI and urbanization. Some investigators did attempt macro-quantitative statistical correlations between these two variables for selected groups of developing countries using indirect indicators for FDI. Kentor (1981) carried out one of the earlier attempts. In his analysis of 37 developing countries in the 1970s, he found that investment dependence (measured by per capita debt on investment income, export partner concentration, and export commodity concentration) had a lagged positive effect on urbanization. He found that investment dependence stimulated growth in the tertiary and informal sectors and inhibited growth in the industrial sector, and concluded that investment dependence generated overurbanization in the developing countries. Fry (UNCTAD 1997, p. 90) carried out a more recent study on the effect of FDI on six East and Southeast Asian economies to measure its effect on their international balance of payments. While some correlations between urbanization and economic development have been carried out, such as the United Nations (1996) study of the relationship between urbanization and per capita GDP for major regions of the world, there has been no attempt to test the relationship between FDI and urbanization directly.

This chapter incorporates a correlation exercise involving 12 variables (table 2.2). In a set of 6 regressions, urbanization and FDI were used as dependent variables and the other 10 variables, which cover the gross national product (GNP), the GNP growth rate, population size, and international trade were selected as the independent variables by a stepwise regression process. For FDI, per capita inflows rather than absolute volume have been used to reflect the intensity of inflows for the years 1992 and 1997. Data for 1992 were used for testing FDI's impact on urbanization, and the 1997 values serve as a dependent variable to test the effects of economic and urbanization levels, international trade, and population size on the volume of FDI inflows. For GNP, purchasing power parity (PPP) is used because it is more representative of real GNP for international comparison. The regressions cover 18 to 136 countries for which the necessary data are available. For the lower-scale analysis, 83 developing countries and 18 Asian Pacific and South Asian economies (Bangladesh, Cambodia, China, Hong Kong, India, Indonesia, the Republic of Korea, Laos, Malaysia, the Philippines, Myanmar, Nepal, Pakistan, Singapore, Sri Lanka, Taiwan [China], Thailand, and Vietnam) have been included in an to attempt to compare the differential impacts of the independent variables on urbanization and FDI in different groups of countries. This comparison is based on the common believe that FDI has a higher impact on the developing countries, especially the Asian developing countries, and that FDI in the latter countries has been related to a high degree of export orientation and a more developed urban society and infrastructure. Table 2.3 presents simple corrections between the 12 variables. Table 2.4 summarizes the regression results.

The urbanization level in 1995 at the world (equation 1 in table 2.4) and developing world (equation 3) levels has a significant, high, positive relationship with the independent variables, with R^2 equal to 0.560 and 0.572, respectively. At the world level, the level of development of the economy (PPPGNP95), GNP growth, and import growth are major explanatory factors, while in the developing countries exports, imports, and PPPGNP95 are the more important factors. FDI inflows have also been effectively explained by the independent variables, as equations 2 and 4 have high R^2 values (0.699; 0.732). However, in the latter case, FDI inflows at the world level are satisfactorily explained by a single independent variable: exports per capita. This clearly supports the common contention that policy changes such as liberalization and increasing privatization explain changes in FDI flows. The basic economic conditions of host countries, such as their economic attractiveness as measured by the size of the market, economic stability, and growth potential (reflected by the growth of exports and imports) are important determinants of how much capital TNCs will transfer to these foreign production locations (UNCTAD 1991). In South Asia and the Asian Pacific, the situation has been much more so. Per capita 1997 FDI is successfully explained by seven independent variables, with a high R^2 of 0.99. The most important independent variables are per capita exports and imports, while PPPGNP95 and URB95 are third and fourth in significance (equation 6). In equation 5, R^2 is also high, 0.871, showing that the five independent

variables can explain as much as 87 percent of the variance of the dependent variable. Of the five, PPPGNP95, EXGNP95, and EX9095PC are more significant.

Table 2.2. *Variables Used in Regressions*

Variable	*Definition*
URB95	Urbanization level, (percent), 1995
IM9095GR	Annual growth rate of imports, (percent), 1990–95
PPPGNP95	PPP/GNP per capita [[PLEASE PROVIDE UNIT]], 1995
GNP8595	GNP per capita, Annual growth rate of per capita GNP, (percent), 1985–95
IMGNP95	Imports as a percentage of GNP, (percent), 1995
FDI92PC	Inward FDI per capita, 1992 [[UNIT?]]
FDI97PC	Inward FDI per capita [[UNIT?]] , 1997
EX9095GR	Annual growth rate of exports, (percent) 1990–95
EXPC95	Export value per capita [[UNIT?]] , 1995
EXGNP95	Exports as a percentage of GNP, (percent), 1995
IMPC95	Import value per capita [[UNIT?]] , 1995
POPMID95	Population (millions), 1995

GNP Gross national product.
PPP Purchasing power parity.
Source: Author.

Table 2.3. *Correlation Coefficients between the Variables (1-tailed Sig)*

Variable	*URB 95*	*IM9095 GR*	*PPPGNP 95*	*GNP8595*	*IMGNP95*	*FDI92PC*	*FDI97PC*	*EX90 95GR*	*EXPC 95*	*EXGNP95*	*IMPC95*
URB95											
IM9095GR	0.200										
PPPGNP95	0.660	0.038									
GNP8595	–0.003	0.350	0.301								
IMGNP95	0.199	0.099	0.181	0.196							
FDI92PC	0.437	–0.030	0.602	0.223	0.387						
FDI97PC	0.425	0.025	0.561	0.216	0.484	0.724					
EX9095GR	0.110	0.321	0.199	0.349	0.210	0.111	0.154				
EXPC95	0.471	0.032	0.692	0.235	0.601	0.686	0.836	0.210			
EXGNP95	0.292	0.042	0.369	0.147	0.780	0.479	0.547	0.272	0.693		
IMPC95	0.460	0.045	0.657	0.243	0.641	0.673	0.829	0.192	0.988	0.679	
POPMID95	–0.016	0.103	–0.037	0.167	–0.226	–0.073	–0.060	0.098	–0.077	–0.157	–0.075

Number of cases: 112–144.
Source: Author.

Table 2.4. Summary of Regression Results

Equation number	*Region*	*Regression results*
1	World	URB95 = 31.219 + 0.002PPPGN95 – 1.757 GNP8595 + 0.674 IM9095GR + 0.154 FDI92PC – 0.001 IMPC95 + 0.039 EXGNP95 (F = 20.582; Sign. F= 0.000; n = 104, R^2 = 0.560)
2	World	FDI97PC = 9.202 + 0.059 EXPC95 (F = 311.40; Sign. F = 0.000; n = 136, R^2 = 0.699)
3	Developing countries	URB95 = 26.155 + 0.004 PPPGNP95 – 1.987 GNP8595 + 0.337 IM9095GR + 0.007 EXGNP95 – 0.013 EXPC95 + 0.017 FDI97PC + 0.009 POPMID95 (F = 12.197; Sign. F = 0.000; n = 82; R^2 = 0.572
4	Developing countries	FDI97PC = –7.481 – 0.020 IMPC95 – 0.027 PPPGNP95 + 0.091 EXPC95 + 2.220 URB95 + 6.496 GNP8595 (F = 50.512; Sign. F = 0.000; n = 98; R^2 = 0.732)
5	East, South, and Southeast Asia	URB95 = 40.463 + 0.001 PPPGNP95 + 0.244 EXGNP95 – 1.359 EX9095GR – 0.001 FDI97PC + 0.001 EXPC95 (F = 16.307; Sign. F = 0.000; n = 18; R^2 = 0.871)
6	East, South, and Southeast Asia	FDI97PC = 21.152 + 1.033 EXPC95 – 0.091PPPGNP95 – 0.873 IMPC95 – 10.154 IM9095GR + 0.809 GNP8595 – 9.021 URB95 – 0.214 POPMID95 (F = 255.408; Sign. F = 0.000; n = 18; R^2 = 0.990)

Source: Author.

Thus, in the 18 countries, a high urbanization level seems to reflect a higher level of economic attractiveness in terms of local market potential as well as globalization in economic linkages through trade, but the relationship between urbanization and FDI is not as obvious. In general, there is a significant and strong relationship between urbanization, FDI, trade, population size, and economic growth. However, because FDI and urban population are both localized within developing countries, particularly in South Asia and the Asian Pacific (except the city states), macro-quantitative analyses based on the whole country as the unit of measurement may not be able to bring out fully their close relationship. We therefore need to pursue regional or much more localized analyses.

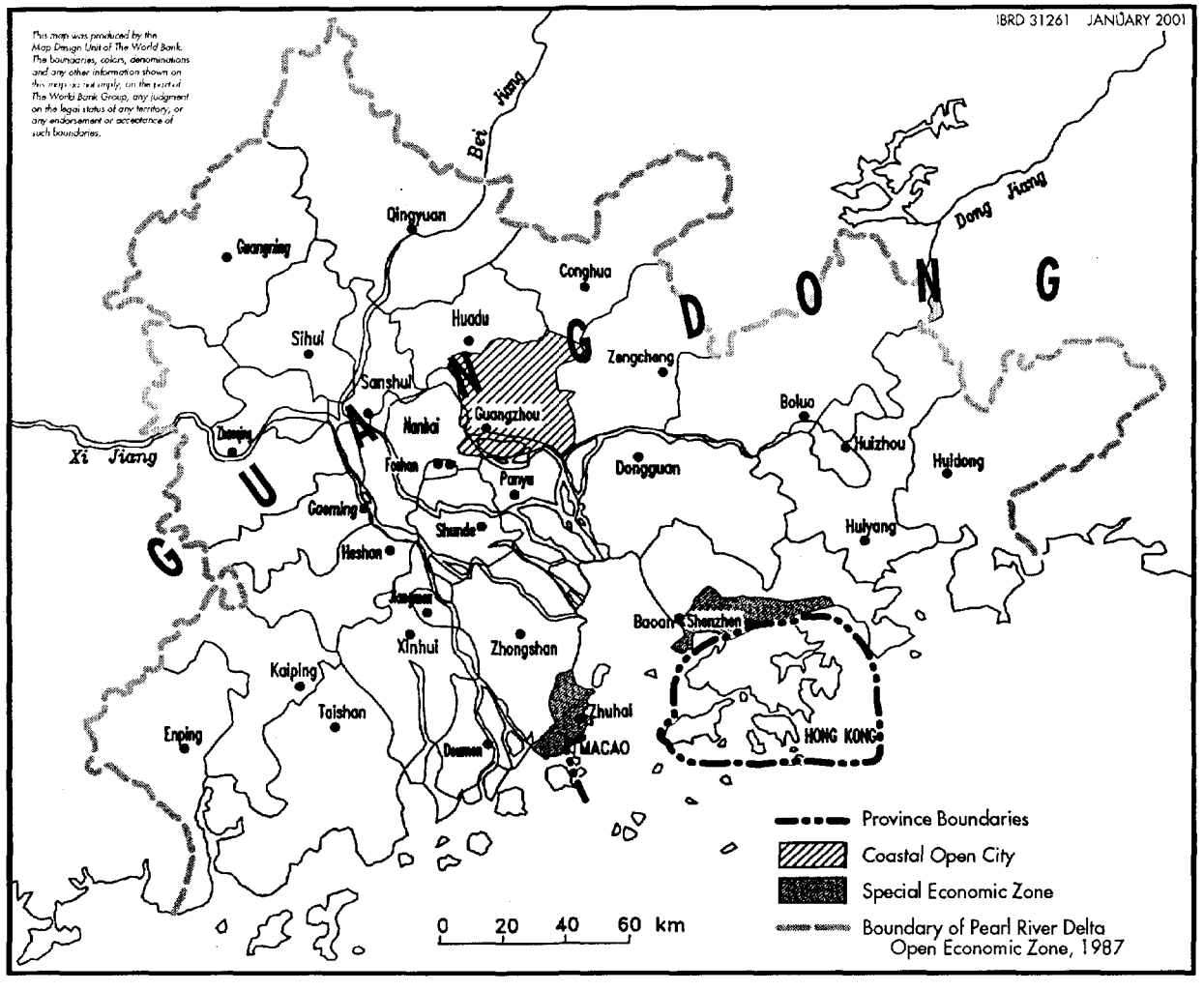
The Case of Exo-Urbanization

A detailed study lays out the relationship among globalization, FDI, and rapid urbanization in the Pearl River Delta of south China (the delta). They showed how FDI in predominantly export-oriented and labor-intensive manufacturing rapidly changed the economic structure of a formerly peripheral community, leading to a high rate of economic growth, intensive integration with the global economy, and a rapid process of exo-urbanization.

The delta comprises 28 cities and counties around the mouth of the Pearl River (figure 2.3). After China adopted its opening and reform policy in 1978, the delta soon became a test ground for economic and administrative reforms, including new FDI policies; labor hiring regulations; sales of land by private contract and auction; and a drastic devolution of economic, planning, and executive powers from the central and provincial government levels to the city and township levels. In 1979 two special economic zones were designated in the delta. In 1984 Guangzhou was given preferential status as an open city, one of 14 along the coast intended for wooing FDI. In 1987 the whole delta was turned into a large open economic zone with more favorable FDI core policies and local administrative and fiscal power. Thus the delta was opened to FDI under the NIDL much earlier than the rest of China and most other developing countries. Combined with local initiatives, it has also been the most successful in attracting FDI and in attaining rapid economic growth. In 1982 the delta was still backward in terms of development. The population of almost 16 million had an urbanization level of about 15 percent, much lower than the national average. Its gross agricultural output was Y 6 billion (using an exchange rate of Y 8.34 to the U.S. dollar) and gross industrial output was Y

15 billion. Since then the delta has been able to transform itself rapidly by exploiting the new liberalization and opening policies and its geographical proximity to Hong Kong in actively participating in the NIDL. By 1996 the delta's industrial output values had soared to Y 797 billion and industrial value added accounted for 42.6 percent of its GDP. An equally hectic increase in FDI inflows, a structural transformation, a massive in-migration of labor, and rapid urbanization have accompanied this drastic economic growth.

Figure 2.3. *The Pearl River Delta and Its Different Open Areas*



Source: World Bank data.

Table 2.5 shows FDI inflows into the developing countries, China as a whole, and the delta. The average annual rate of increase of FDI inflows into the delta was 31.2 percent in 1980–95, faster than the rate for China as a whole and about double the rate for the developing countries. The annual share of the delta in China's total inflows ranges from one-sixth to a quarter, although it makes up less than 1 percent of Chinese territory and has less than 2 percent of the population. In 1995 the inflows of US$8.6 billion to the delta were 8.9 percent of all the inflows to the developing countries. Thus, since the early 1980s, the delta has stood out not only within China, but in comparison with the developing countries, as a successful, FDI-oriented economy.

Table 2.5. FDI Inflows into Developing Countries, China, and the Pearl River Delta, Selected Years

Year	Developing countries (US$100 million)	China (US$100 million)	Delta ($US100 million)	Pearl River Delta as percentage of China
1980	130	—	1.0	—
1986	250	46.5	7.5	16.1
1988	280	102.3	13.9	13.6
1990	310	102.9	15.8	15.4
1991	390	115.5	21.3	18.7
1992	510	192.0	32.4	16.9
1993	800	338.0	64.3	16.5
1994	870	375.0	83.0	22.1
1995	997	481.3	85.8	17.8
Average growth, 1986–95 (percent)	16.6	29.7	31.3	—

— Not available.
Source: U.N. data and official Chinese statistics.

FDI inflows into the delta accounted for 95 percent of all forms of foreign capital inflow and have been the major source of total investment. For the Shenzhen special economic zone it was as high as 78.8 percent for 1981–95 (Shen, Zhu, and Wong 1998). As noted earlier, foreign affiliates are usually able to raise substantial additional funds both locally and from third party countries, so the actual contribution of foreign affiliates to total investment in the delta should be much larger than the already high percentages shown in table 2.6.

Table 2.6. Foreign Capital as a Percentage of Total Investment, Selected Locations in China, Selected Years

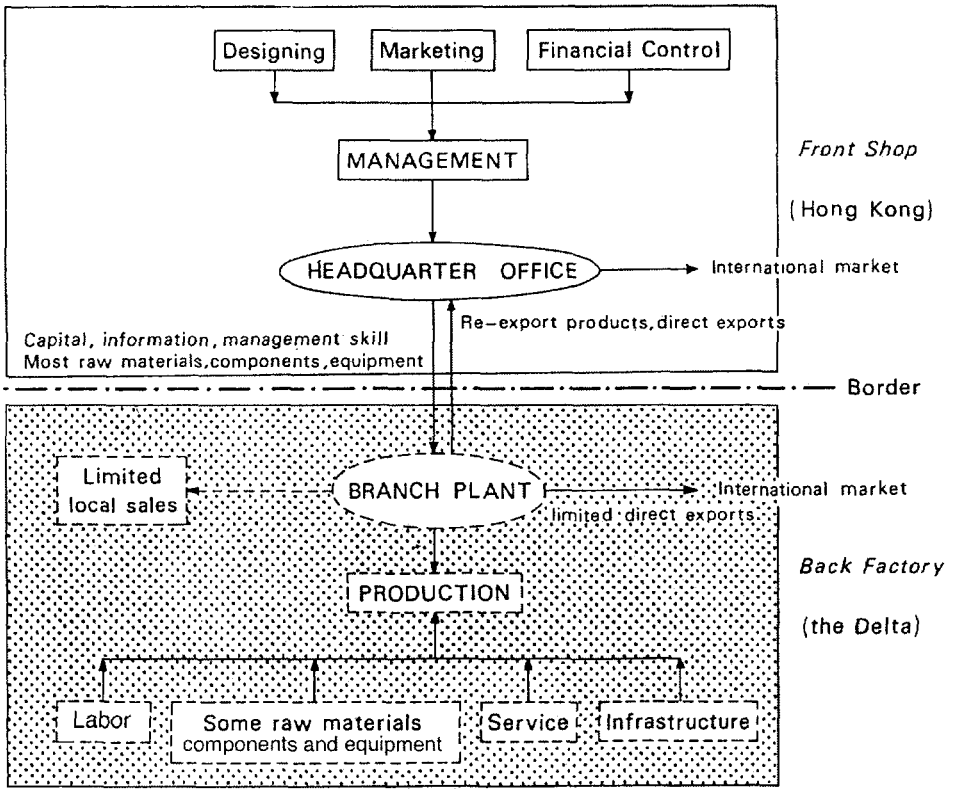
Location	1980	1985	1990	1994
Delta	5.5	8.0	18.5	30.7
Guangzhou	3.0	6.0	8.7	23.7
Shenzhen	16.1	13.8	23.7	34.6
Zhuhai	24.9	14.5	23.1	34.4

Source: Shen, Zhu, and Wong (1998).

Sectorally, FDI is predominant in manufacturing. Data for 1979–92 show that 70.2 percent of FDI went into the secondary sector, 27.2 percent to the tertiary sector, and only 2.6 percent to the primary sector, although figures for 1995 indicate a large increase of FDI into the tertiary sector (to 34.1 percent), with a slight dip for the secondary sector (to 65 percent). Of the FDI stock in the secondary sector, 70.5 percent (US$35.5 billion in 1995) originates in Hong Kong. Hong Kong–sourced FDI is mostly for "out-processing" projects seeking cheap labor and other costs. The type of manufacturing and the scale of operation follow the basic characteristics of Hong Kong industries of the 1980s, that is, labor-intensive light manufacturing of toys, garments, watches, footwear, and electrical and electronic consumables for export to the international market. Details of this expanded global production system in the NIDL have been dubbed as "front shop, back factory" in a new spatial division of labor (figure 2.4). Within that mode of cooperation, Hong Kong retains and expands the front shop or most of the producer services, while the

assembling or production process, or the back factory role, takes place in the delta. Of course, most of the parts, components, and raw materials required are sourced from the industrial countries (Hong Kong Trade Development Council 1997; Sit 1989, 1993).

Figure 2.4. *Hong Kong-Pearl River Delta Cross-border Multinational Corporation Model*



Source: Author.

At the end of 1995 the delta had 8,044 foreign industrial affiliates that directly employed 2.14 million people. A large number of local small and medium factories were also engaged in subcontracting for this export sector, with a total of 44,571 establishments and 2.46 million employees. Thus by this time this huge "production bench" of the NIDL had provided 5.2 million job opportunities, with a total gross output value of Y 253 billion, or 30 percent of the total gross industrial output value of the province and 71 percent of its total exports. This sector represented 34.4 percent of the delta's total employment and 68 percent of its industrial gross output. It has formed the backbone of the delta's export-oriented industrial economy since the early 1980s.

Many of the productive activities are located outside officially recognized urban districts, leading not only to a structural transformation of the urban economy, but to an equally rapidly changed rural economy and rural labor force (table 2.7). The huge labor demand generated by these labor-intensive productive activities had largely consumed the excess agricultural hands by the mid-1980s, and had thence attracted a huge influx of migrants within and between provinces. The 1990 census reported a floating population of 1.7 million in Guangdong Province engaged in productive enterprises, 70 percent of whom were between 17 and 24 years old and predominantly female. Another 2 million worked in

agriculture, construction, and services. This floating labor force made up 37.5 percent of employment in the secondary sector and 15 percent of employment in the tertiary sector of the delta. In parts of the delta where foreign affiliates proliferated, for instance, in Baoan, Dongguan, and Shenzhen, the floating population was substantial, and even larger than the local permanent population.

Table 2.7. *Composition of Rural Products and the Rural Labor Force in the Pearl River Delta, Selected Years* (percent)

	Rural products			*Rural labor force*			*Annual*
Sector	*1978*	*1985*	*1993*	*1980*	*1985*	*1993*	*growth*
Agriculture	68.4	56.2	27.8	89.5	76.4	59.6	–0.8
Industry	20.6	23.3	53.4	4.4	7.8	13.2	11.2
Construction	4.1	10.7	8.3	3.0	5.0	6.8	9.0
Tertiary	6.9	9.8	10.5	3.1	10.8	20.4	17.6
Total	100.0	100.0	100.0	100.0	100.0	100.0	2.4

Source: Guangdong Agricultural Statistical Yearbook (1993).

The salient features of FDI-led exo-urbanization of the delta are as follows:

- The nonagricultural population increased from 4.8 million in 1980 to 9.1 million in 1993, and the delta's urbanization level increased from 27.4 to 42.4 percent during the period, that is, the rate of urbanization was 5.5 percent per year, much higher than the national average of 3.5 percent.
- Urbanization in the delta has been marked by faster growth of small cities and towns, which grew at an annual average rate of 14 to 23 percent, whereas large centers like Guangzhou registered a slower growth rate of around 2 percent.
- Growth was border-oriented, reflecting the source of FDI, Hong Kong, and the importance of the pull of the front shop function in the location of FDI projects.
- "Invisible" urbanization has occurred as FDI-led industrialization has partly taken the form of a mushrooming of small factories in villages, whose residents and floating population have not been officially classified as urban.
- FDI has played a significant role in the delta's transformation from a closed, self-reliant, and slow-growth agrarian region into an industrialized, urbanized, export-oriented, and rapidly growing economy integrated with the global economy.
- FDI has produced a dispersed pattern of industrialization and urbanization, leading to immense losses of prime agricultural land and serious harm to the environment. In addition, the extensive immigration of labor from other regions has posed a sociopolitical issue of a short-term floating population.

Exo-urbanization in the delta is part of the process involved in the extension of Hong Kong's role in the intensification of globalization, as well as the consequent spatial expansion into the delta, turning it into the ring of the new Hong Kong Extended Metropolitan Region (table 2.8). As the regional focal point of TNCs and international finance, Hong Kong has been increasing its producer services to cover the Asian Pacific region, particularly as a major storehouse and transaction floor for ethnic Chinese capital from the entire world. Since 1993 it has ranked among the world's top five FDI outflow sources. In 1997 it was the fourth largest FDI source area in the world with an absolute FDI outflow of US$26.4 billion (UNCTAD 1998). Its outflow that year amounted to about half of the total outflow from developing Asia, and two-thirds of it went to China. Thus Hong Kong plays an important role in integrating parts of developing Asia,

particularly southern China and ethnic Chinese capital worldwide, into the global economy, and contributes to these territories' rapid economic growth and their unique process of urbanization.

Table 2.8. Characteristics of the Hong Kong, China, Extended Metropolitan Area, 1996

Characteristic	*Hong Kong*	*Macau*	*Shenzhen*	*Pearl River Delta*	*Extended Metropolitan Region*	*Extended Metropolitan Region as a percentage of China*
Population (millions)	6.3	0.4	3.6	26.6	33.0 (23.4)[a]	2.6
Urban population (percent)	100.0	100.0	76.4	32.8	63.8	29.9[b]
Territory (square kilometers)	1,095	21	2,020	45,005	46,119 (2.3)	0.5
GDP (HK$ billion)	1,199	58	95	450	1,677 (71.4)	26.4
GDP per capita (HK$)	189,985	116,107	26,051	20,889	58,924 (322)	5211
GDP growth rate, 1990–96	5.4	5.0	23.4	22.1	—	—
Industrial output as a percentage of GDP (percent)	7.8	n.a.	41.0	42.6	—	—
Industrial output (HK$ billions)	300.0	13.4	193.4	745.2	10455.2 (28.7)	11.2
Manufacturing workers (thousands)	325	48	427	6116	6489 (5.0)	6.8
FDI (US$ billions)	33.0	n.a.	2.4	10.9	43.9[c]	50.0[c]
Imports and exports (US$ billions)	376	3.7	52.2	n.a.	—	—
Exports (US$ billions)	179	1.9	21.2	46.0	225.0 (79.6)	68.2
Exports per person (US$)	28,398	4,863	8,498	2,476	—	—
Retail sales per person (HK$)	30,552	n.a.	9,559	7,900	—	—
Revenue per person (HK$)	33,015	19,203	3,675	1,401	—	—
Savings per person (HK$)	389,519	n.a.	16,242	17,929	—	—
Actualized FDI per person (US$)	5,361	n.a.	676	409	—	—
Fixed capital investment per person	7,420	n.a.	9,137	6,724	—	—

a. Figures in parentheses are percentage shares of Hong Kong.
b. Excludes Macau.
c. Level of urbanization in percent.
— Not available.
n.a. Not applicable.
Source: Guangdong Agricultural Statistics Yearbook (1996).

Mega-Urban and Extended Metropolitan Regions

Exo-urbanization in the delta may be seen as an integral part of the growth of mega-urban regions or extended metropolitan regions (EMRs) that were increasingly investigated in urbanization studies of the 1990s. Ginsberg (1991) has defined mega-urban regions as large urban agglomerations comprising core cities, their fringe exurbs, satellite towns, and extensive intervening areas of dense population and traditional agricultural uses. Similar spatially spread out patterns of urbanization were found in numerous areas in South and Southeast Asia in the 1980s, prompting McGee (1995, p. 10) to infer that "operating in Asia is the emergence of what can be described as *regional-based urbanization*, as opposed to city-based urbanization."

This superficial conclusion is linked to McGee's (1991) concept of "desakota." These are rural-urban transitional areas with an intensive mixture of agricultural and nonagricultural activities that often stretch along transport corridors between large urban centers and exhibit some common features: a densely populated agricultural area with a long history, often based on wet rice; a recent rapid increase of nonagricultural activities and increasing fluidity of population; an intense mixture of land uses, with agriculture, cottage industry, and new industrial estates; an increasing participation by women in nonagricultural labor; and gray zones from the point of view of the state in administration and planning. McGee initially explained his desakota area in terms of local dynamics, including increased availability of transport to nearby large urban centers that allows the dispersal of some industrial activities from such centers and the possibility for some members of rural households to commute to these centers to work in nonagricultural activities. Added reasons for the development of desakota are the higher land and labor costs in the large urban cores and population-land pressure in the rural-urban transitional zone. Although McGee's derivation of desakota areas came from his study of the rural-urban transition zones around Jakarta, Indonesia, he had not linked the area's growth and development to the processes of globalization of and FDI in that core city, which had already been unfolding, nor had he integrated it into the emerging mega-urban region or EMR of Jabotabek (Jakarta and the neighboring Botabek area).

The enlarged urban entity or agglomeration that results largely from globalization and FDI has been labeled as a megacity (MC) or EMR by different authors. The megacity, defined by Fuchs and others (1994) as an urban center with a threshold population of 8 million, occasionally appears in the literature. It does not, however, include the notion of a large (much larger than the administrative territory of the city) rural transitional zone that contains many nonagricultural activities, and is also part of the functional system of that core city in terms of economics, culture, politics, and potential for future growth. The MC is flexible enough to include such a zone, yet it is unable to convey the relative functionality of the core and the rural-urban transitional zone. In any case, the MC may be easily confused with the general concept of urban agglomeration. Thus the term EMR is currently generally accepted. As a special form of urban agglomeration, the EMR is closely linked to globalization and FDI and needs to be seen as a new dynamic in urbanization in the developing countries, as already evident in Asia. It is different from the megalopolis in a number of ways. The megalopolis, proposed in the 1960s to describe the situation of the United States (Gottman 1961), is composed of a number of urban centers, and so is the EMR, but the interstitial areas of the megalopolis are sparsely populated and generally underutilized. In addition, the megalopolis may be seen as a large, extended commuting zone of a number of urban centers with related functions held together by convenient modern communications and transport systems based largely on the truck and private car. In EMRs, the interstitial areas are intensively used for residential, industrial, and institutional functions, in addition to having high-intensity agricultural areas. They are, above all, areas undergoing rapid economic transformation and urbanization coordinated by the invisible hand of globalization and FDI based in the core city.

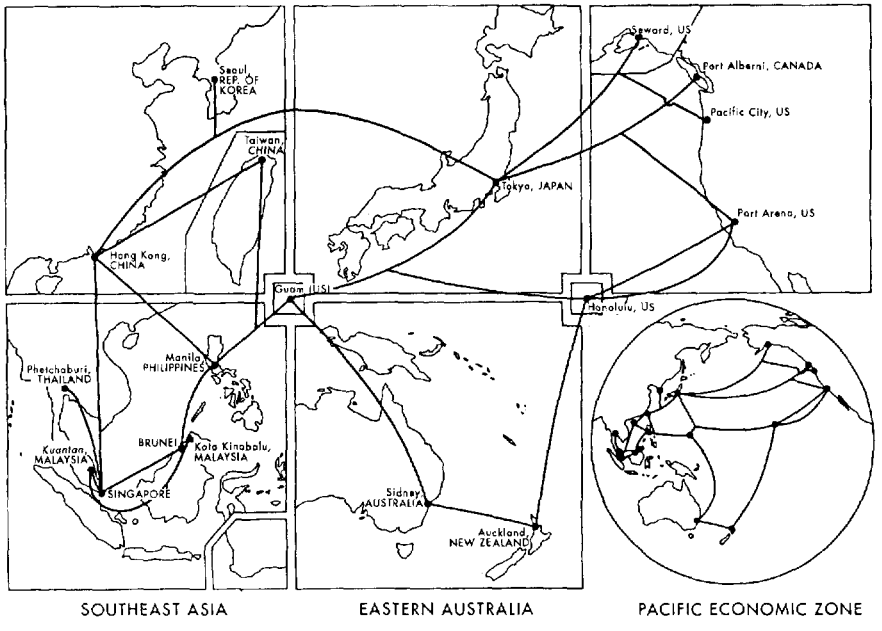
Since the mid-1990s, many studies have regarded the EMR or mega-urban region as one of the most outstanding urban phenomena. Even McGee (1998) finally recognized that the 1980s were dominated by globalization and the emergence of the EMR and directly linked the two together, acknowledging the exogeneity of forces in the latter's formation. He maintained that central to the creation of the EMR is a constant series of transactions of people, commodities, capital, and information nationally and internationally. It is a process of centralization in the urban system. Clearly, this is an important amendment to the concept of regional urbanization.

Rimmer (1995) believes that EMRs of the Association of Southeast Asian Nations are best understood as network hubs of transnational links and flows, for example, networking using optical fibers (figure 2.5). These hubs are embedded in a competitive, Asian, functional, urban hierarchy focused on Tokyo, the product of rapid economic growth and closer economic integration driven by FDI and industrialization.

Choe (1998) also points out that cities are increasingly transnational in character and that they grow by competing for mobile capital; employment; institutions; and even events, for example, major trade expositions or the Olympic games. He also notes that FDI, globalization of finance, real estate, and

international migration of labor are shaping the changing pattern of the urban system in Pacific Asia into a functional hierarchy of EMRs.

Figure 2.5. Network of Fiberoptic Cables and Dates of Completion, Pacific Economic Zone



Source: Rimmer (1995).

Lo and Yeung (1996), though labeling the phenomenon "world city formation," agree that one of the ways to understand the rapid and interdependent changes that have been occurring in Pacific Asian centers is to look at the emerging and critical roles cities have played in the new global economy. These EMRs (which they called world cities) have emerged to be important as network cities, because of various key infrastructure and important global economic functions, such as airports, banking, capital flows, technological innovations, and TNCs' regional decisionmaking and coordinating activities that serve the regional and global economy.

Calling the phenomenon mega-urbanization, Webster (1995) catalogued some of the features of the large-scale, integrated, and complex systems of EMRs: the presence of rapid regional transit systems; greater interdependence among the component geographical areas, such as industrial estates, business districts, tourist areas, education complexes, government areas, and high-volume airports; a large, dense, ordered, and integrated public utilities system; the trend toward reliance on services that is more regional and international than local; and a more developed communications and media network.

Hamer (1994) directly addresses the question of why mega-urban regions exist in developing countries. His explanation is that they exist by focusing activity in a relatively small proportion of the nation's landscape when national income is low, and thus developing country governments reap urbanization economies of scale. These EMRs conserve investments in regional infrastructure for transportation, communications, power, and water supply, and cost effectively gather a labor force with an array of skills as well as a large number of suppliers of diversified finance, community services, and venture capital, and provide access to information on foreign markets and technology and the social amenities needed to attract talented managers.

In short, the formation of the EMR can be seen as a twofold process:

- The centralization of producer services in the core city, which serves as the contact point to the global economy. Such a process of concentration is dictated by the network hub status of individual cities, which is determined by their infrastructure, human resources, FDI regime, and other economic determinants, as well as the regional and international networking in terms of all these elements.
- The forces that led to outward expansion of globalization and related activities of the core into the periphery, turning it into the ring of the EMR. These decentralizing forces include increasing land and labor costs in the core, the change in nature of economic activities in the core, industrial decentralization policies of most municipal governments, growing demand for middle-class housing around the core, and increasing demand for leisure activities. These deconcentration forces are needed to support the changed nature of the core in intensifying globalization, leading to demands for expanded spatial and nonspatial resources in the functional urban system.

Hong Kong has served as the core city of the Pearl River Delta, which may be seen as the ring of an EMR. Similar EMRs can be found in India, Indonesia, Korea, and Thailand. In the same vein, we may see the Singapore growth triangle as an EMR, as southern Johore, Malaysia, and Batam, Indonesia, are functionally and structurally very much the ring of the Singapore EMR, which straddles national boundaries and water (Macleod and McGee 1996). However, although many of these EMRs are megacities in terms of population size (except Singapore), it is not size that underlines the nature and status of EMRs. Rather, it is their function and the way they network into the regional and global economy that define them as EMRs. The latter has led to the growth of some of them as burgeoning world cities in Asia (Douglass 1995). They are a marked contrast to the megacities of Latin America, which are more or less equated with problems of unemployment, lack of infrastructure and services, crime, health problems, and social and political instability (Gilbert 1996).

Detailed case studies of EMRs are still few. In addition to the Hong Kong EMR already presented, we shall briefly introduce three others in the Asian Pacific region: the Bangkok EMR, the Seoul EMR, and the Jakarta EMR.

The Bangkok, Thailand, EMR

The Bangkok EMR comprises the Bangkok Metropolitan Area (1,565 square kilometers) and the nearby five provinces (6,193 square kilometers). The EMR seems to be expanding further to incorporate the eastern provinces into an urban corridor, the Extended Bangkok Metropolitan Region (EBMR). In 1995 the EMR's population was 11.3 million, 19 percent of the nation's total population or about half of its urban population, and accounted for some 40 percent of its GNP.

The EMR's primacy in service value added, bank loans, deposits, and FDI is high (table 2.9). However, within the EMR spatial restructuring of the economy has been increasing. During 1983–93, banking, finance, and real estate had the fastest growth in Bangkok's GDP—150.4 percent—and attracted 83 percent of services investment of the EBMR (table 2.10). Manufacturing investment was concentrated (67 percent) in the outer ring of the EBMR, that is, in the eastern provinces. For electronics industries, 64 percent were concentrated in the inner ring. During 1983–93, the Bangkok Metropolitan Area attracted only 23 percent of all manufacturing investment in the period. The spatial restructuring of the EMR's economy is also reflected in figure 2.6, which shows that for the Bangkok Metropolitan Area, the share of services in local GDP was 63 percent in 1995, while that of industry was only 36 percent. By contrast, in the inner ring the share of services in GDP was 28 percent and of industry was 66 percent. As concerns population growth, in the inner ring it was extremely fast in 1990–95, growing at an annual rate of 19.3 percent, while growth in the core had slowed to 2 percent. Growth in the outer ring was also rapid, at 6.7 percent. Thus in 1990–95 population in the EMR and EBMR had grown faster than the national rate of 5 percent. In addition, both will reach a much higher level of urbanization in 2010. By then the EMR will be 93.7 percent urbanized and the EBMR will be 82.1 percent urbanized. The spatial pattern of investment also reflects a spatial shift to the inner ring. While the EMR accounted for 59.9 and 62.1 percent, respectively, of the nation's domestic investment and FDI, the Bangkok Metropolitan Area

accounted only for 19.6 and 15.7 percent, indicating a spatial shift toward the ring. If the EMR rather than the Bangkok Metropolitan Area is considered as the main city, its primacy had increased, indicating that globalization and FDI had strengthened its primacy or tendency toward polarization.

Table 2.9. The EBMR and Its Extension

Item	*Bangkok*	*Inner ring*	*EMR*	*Outer ring*	*EBMR*
Area (square kilometers)	1,565	6,193	7,758	51,242	59,000
Population (thousands)					
1970	3,804	884	4,688	2,774	7,462
1980	5,701	1,133	6,834	3,503	10,417
1990	7,227	1,363	8,590	4,199	10,289
1995	8,000	3,300	11,300	5,800	17,100
2010 (estimated)	11,500	5,000	16,500	7,200	23,700
Level of urbanization (percent)					
1995	100.0	56.1	89.8	39.3	71.0
2010	100.0	79.2	93.7	64.2	82.1
Percentage national urban population					
1995	36.5	9.8	46.3	9.1	55.4
2010 (estimated)	32.5	11.3	43.8	11.3	55.1
Percentage of national population					
1995	15.5	3.5	19.0	9.8	28.8
2010 (estimated)	17.1	7.4	24.5	10.9	35.4
Annual population growth rate (percent)					
1970–90	3.26	2.19	3.07	2.09	2.73
1990–95	2.05	19.34	5.64	6.67	5.98
1995–2010 (estimated)	2.45	2.81	2.56	1.45	2.2
Board of Investment approved investment (amount, percent)					
1986	16	29	45	22	67
1989	30	10	40	29	76
1979–90					
Domestic	19.6	40.3	59.9		
Foreign	15.7	52.1	67.7		
Primacy index (1995)					
Service value-added			49.7 (48)		
Industrial value-added			76.8 (43)		
Deposits			74.1 (60.5)		
Loans			74.6 (70.7)		
GDP			37.3 (40.5)		
FDI (1996)			46.8		

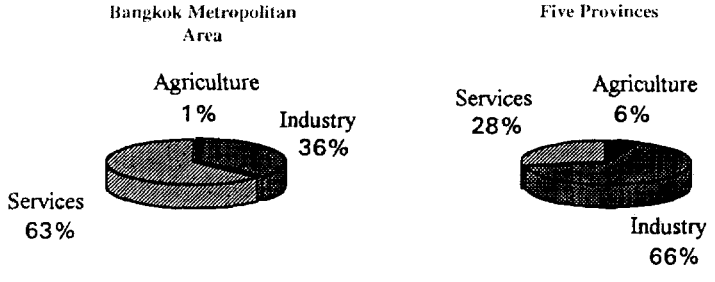
Source: Douglass (1995); Kaothien (1995); Kittiprapas (1998); Krongkaew (1996).

Table 2.10. Board of Investment Approved Investment, 1988–93 (B millions)

Sector	*Bangkok*	*Vicinity*	*Eastern*
Textiles and garments	45,424	19,135	18,411
Light industry	116,685	29,476	30,709
Electricity	6,641	58,533	26,068
Fabricated metals	5,656	27,169	106,792
Chemicals and paper	1,861	16,844	274,197
Ceramics and glass	77	1,671	34,441
Agroindustry	1,749	11,720	22,953
Services	388,582	27,167	53,731
Total	566,675	191,715	567,282

Source: Kittiprapas (1998).

Figure 2.6. Structure of GDP Share for the Bangkok Metropolitan Area and the Five Provinces, 1995



Source: Author.

The Seoul, Korea EMR

The Seoul EMR has a total area of 4,415 square kilometers, embracing Seoul (615 square kilometers) and the two adjacent provinces of Incheon and Kyunggi (table 2.11). In 1995 its total population was 20.2 million, shared almost equally between Seoul and the ring. While Seoul's growth had slowed down since 1980, and even declined absolutely in 1990–95, the ring had been gaining population faster than the nation's urbanization rate. Thus superficially, primacy reversal has occurred (Richardson 1980), but in reality, the primate city attained further growth through expansion into the ring. With 42.7 percent of the total population and 61.2 percent of the urban population of Korea, the growth of the Seoul EMR to a large extent represents the urbanization of the nation. The growth in population in 1980–90 was faster than the national population growth rate of 1.5 percent and the national urban population growth rate of 3.3 percent. In 1990–95, these rates further exceeded the national figures of 0.4 and 1.8 percent, respectively. Again, the EMR has witnessed rapid and concentrated growth of producer services, particularly business services, semiconductor products, and tourism, whereas manufacturing and industrial research and development have been increasingly decentralized into the ring. In 1990–96 the EMR attracted 46.6 percent of the nation's FDI inflow, which was roughly equally split in terms of manufacturing (52 percent) and service sectors (47 percent). However, 86.2 percent of the service sector FDI inflow was concentrated in Seoul, underlining the increasing opportunity for Seoul to develop services as it plugs more into the global economy through liberalization (Kwon 1998).

Table 2.11. *Seoul EMR*

Item	*Seoul*	*Incheon, Kyunggi*	*EMR*
Area (square kilometers)	615	3,800	4,415
Population (thousands)			
1970	5,433	3,358	8,791
1980	8,364	4,934	13,298
1990	10,613	7,974	18,587
1995	10,231	9,958	20,189
Annual population growth rate (percent)			
1970–80	4.3	3.8	4.1
1980–90	2.4	4.8	3.3
1990–95	–0.7	4.4	1.7
Manufacturing employment (percent)			
1973	70.6	29.4	100.0
1983	45.7	54.3	100.0
1995	26.8	73.2	100.0
Percentage of national total			
Population, 1995	24.4	18.3	42.7
Urban population, 1995	31.0	30.2	61.2
International call, 1989	64.4	11.9	75.3
Producer services , 1986	—	—	49.7
Business services , 1989	59.8	8.2	68.0
FDI, 1989 (percentage of national total)			
Manufacturing	9.3	29.1	38.4
Services	90.9	0.8	91.7
FDI, 1990–96 (US$ millions)			
Manufacturing	608 (10.9)		
Services	4,328 (86.2)		
Total	4,936 (46.6)		
Tourist hotel rooms, 1989	46.5	4.3	50.8
Research and development, 1989			
Semiconductor production	60.0	—	—
Hi-tech products	—	—	50.0
Industrial research and development institutions	25.0	41.0	66.0

Figures in paratheses are the percentage of the national total.
— Not available.

Source: Hong (1996); Kwon (1998).

The Jakarta, Indonesia EMR

The Jakarta EMR comprises Jakarta and three nearby administrative units that together are 10 times as large as Jakarta (table 2.12). This large ring of the EMR is known as Botabek. Jabotabek, as the EMR is locally called, had a population of about 20 million in 1995, 10 percent of the national total or about 25 percent of the national urban population. The rate of population growth of the EMR again exceeded the national average in both total and urban growth rates. Within the EMR, Jakarta had grown slowly, whereas the ring had grown much faster. In one of the three constituent units of the ring, the average

annual growth rate of population in 1980–95 exceeded 8 percent. The rapid pace of urbanization transformed the ring from a largely rural area with a level of urbanization of only 7.8 percent in 1971 to about 60 percent urbanized in 1995. This growth was particularly rapid in 1980–95, when a total of 5 million people were added, accounting for a substantial increase in the EMR's urban population. Its structural transformation from a rural to a mixed rural-industrial economy can also be seen in table 2.12.

Table 2.12. The Jabotabek (Jakarta) EMR

Item	*Jakarta*	*Botabek*	*EMR*
Area (square kilometer)	661	5977	6639
Population (thousands)			
1971	4,579	3,761	8,340
1980	6,503	5,414	11,917
1990	8,254	8,878	17,132
1995	9,100	10,800	19,900
Level of urbanization (percent)			
1971	90.0	7.8	58.3
1980	93.7	24.1	65.5
1990	100.0	54.8	76.6
1995	100.0	—	—
Percentage of national urban population			
1971	—	—	—
1980	19.8	4.0	23.8
1990	14.9	8.8	23.7
1995			
Percentage of national population			
1971	—	—	—
1980	4.4	3.7	8.1
1990	4.2	4.5	8.7
1995	4.6	5.4	10.0
Annual population growth rate (percent per year)			
1971–80	3.97	4.13	4.05
1980–90	2.41	5.07	3.70
1990–95	2.09	4.59	3.03
Employment (percentage share)			
1971			
Primary	4	44	—
Secondary	18	14	—
Tertiary	78	42	—
1990			
Primary	2	29	—
Secondary	28	25	—
Tertiary	71	45	—

— Not available.
Source: Dharmapatni and Firman (1995); Soegijoka (1996a, b); Soegijoko and Kusbiantoro (1998).

In 1995 the EMR accounted for 21.8 percent of Indonesia's GNP. In 1997 it accounted for 60 percent of the country's air passengers, 40 percent of its exports, 59 percent of its imports, 80 percent of its bank loans, 35 percent of its FDI, and 27.5 percent of its international tourists. The concentration of finance,

utilities, services, trade, transport, and manufacturing in the EMR had been noted as early as the late 1980s (table 2.13), and the trend was maintained through the late 1990s. However, like the other EMRs discussed, there has been an obvious spatial division of labor, with trade, transportation, communications, warehousing, other services (mainly finance), and hotels and restaurants concentrated in Jakarta, and manufacturing industries in the ring. This is reflected by the spatial choices for FDI and domestic investment. It is also evident that FDI inflows into the EMR have gone mainly into two categories of activities: in the core, more than 85 percent was invested in producer services and tourism, closely related to Jakarta's specialization in financial and high-level business services as the national capital and the national headquarters for FDI. By contrast, about 80 percent of the FDI that went into the ring (Botabek) or the desakota area was invested mainly in labor-intensive manufacturing.

Table 2.13. Jabotabek in Relation to Indonesia's Economy, 1985 and 1989

	Jakarta		*Botabek*		*EMR*
Category	*1985*	*1989*	*1985*	*1989*	*1989*
Share of the national economy (percent)					
Finance	43.9	41.9	0.9	0.8	42.7
Utilities	40.5	39.7	5.9	6.3	46.6
Construction	19.4	19.5	5.6	6.1	25.6
Services	12.0	11.7	3.2	3.4	15.1
Transport	18.8	21.1	5.3	5.2	25.3
Trade	15.9	13.4	4.1	4.9	18.3
Manufacturing	13.0	13.6	5.1	5.0	18.6

Source: Dharmapatni and Firman (1995); Soegijoka (1996a, b); Soegijoko and Kusbiantoro (1998).

Generalizing the Causes and Impacts of the EMR Phenomenon

The foregoing EMR cases show that they have led their respective countries in population growth, urbanization, globalization, and FDI inflows. Their share of their countries' total and urban population and their significance in the national economy have increased. However, congestion, environmental issues, and high land and labor costs have led to a dispersal of labor- and land-intensive activities from the core city into its expanding rural-urban transitional zone. In the process, the core city has become increasingly specialized in high-level tertiary and high value added manufacturing, taking advantage of its developed infrastructure; higher-quality labor; global networking convenience, such as the presence of an international airport and port, telecommunications facilities, and regional TNC headquarters; and its national capital status.

This, however, is not genuine primacy reversal, as the decentralized activities, mainly industrial activities, have congregated in the former rural fringe rather than in lesser cities some distance away, particularly the second or third largest cities. This indicates the continual presence of a strong polarization tendency in urbanization in many developing countries in East, South, and Southeast Asia and increased inflows of FDI, in which the largest urban core remains the most attractive location for both foreign and domestic capital.

At the micro level, congestion and high costs have led to a spatial division of labor between the core and its rural-urban adjunct. In the future, polarization economies of the big city in developing countries will still be crucial, and hence will continue to exert a strong pull on the national pattern of urbanization. Those cities that enjoy the convenience of networking in the global economy because of their modern infrastructure and nodal location in the transactional space of the new economic order will enjoy faster growth in the form of an EMR. However, diseconomies resulting from congestion, cost inflation, and environmental problems in the cores of these big centers have caused simultaneous and micro-level dispersal.

For small or medium countries like Korea and those in Southeast Asia, the largest city tends to be the national capital and the sole economic hub for networking into the global economy. However, a vast country like China can have several economic and network hubs, and hence several EMRs may develop. We have referred to the Hong Kong, cross-border EMR, which incorporates Hong Kong as the core and the delta as the ring. Zhou (1991) believed that a similar phenomena is present in China in six locations, all of them along the coast, and with a good transportation and communication infrastructure for plugging into the regional and global economy. They are referred to as metropolitan interlocking regions (MIRs). They are the Yangtze Delta MIR, the Pearl River Delta MIR, the Liaoning MIR, the Beijing-Tiranjing-Tangshan MIR, the Shandong MIR, and the Fujian Coastal MIR. Each MIR includes several major metropolises and a large number of small and medium towns and cities with vast desakota areas in between. There is division of labor and specialization among the constituent metropolitan centers. The desakota areas are rapidly urbanizing, serving as reception areas for dispersed economic activities from the metropolitan centers. Most of the MIRs have developed on the basis of internal dynamics that spread out among a few centers in the region, while a few, notably the Pearl River Delta MIR, the Fujian Coastal MIR, and to some extent the Yangtze Delta MIR, are centered around a key coordinating core city, namely, Hong Kong, Xiamen, and Shanghai. For these latter cases, their economy has been significantly integrated with the global economy through FDI, and they exhibit many functional and spatial features of an EMR and may be appropriately considered as EMRs. Some even regard the National Capital City Region around Tokyo as an EMR in an industrial country (Kidokoro 1998; Takahashi and Sugiura 1996). Further research is therefore needed to chart the spread of such urbanization in and beyond developing Asia.

Cities as Centers for New Opportunities and Competitiveness

The end of the Cold War has been one of the major reasons for countries' increased openness and their participation in the global economy. Since the early 1990s, many countries have devoted substantial and consistent efforts to creating more favorable conditions for FDI, both in the form of bilateral treaties and regional initiatives. The number of bilateral investment treaties totaled 1,513 by the end of 1997 (UNCTAD 1998). Many countries have also been amending or introducing regulatory changes in order to be more competitive in attracting FDI (table 2.14). As many as 90 percent of these changes are in the direction of streamlining approval procedures, adding new promotional measures, and decreasing tariffs. One notable feature is the liberalization of industries like telecommunications; broadcasting; energy; tourism; and major urban infrastructure services, such as water supply, transportation, and education.

Table 2.14. *Regulatory Changes, 1991–96*
(number)

Item	*1991*	*1992*	*1993*	*1994*	*1995*	*1996*	*1997*
Number of countries that introduced changes in their investment regimes	35	43	57	49	64	65	76
Number of regimes	82	79	102	110	112	114	151
Moved in the direction of liberalization or promoting investment[a]	80	70	101	108	106	98	134
Moved in the direction of control[b]	2	—	1	2	6	16	17

a. Including measures aimed at strengthening market supervision and incentives.
b. Including measures aimed at reducing incentives.
— Not available.
Source: UNCTAD data.

In international trade, the 1990s also witnessed a general reduction in average tariffs and nontariff barriers. In the mid-1980s East Asia had an average tariff rate of 22 percent, the lowest among the major world regions (Sandrey 1997; UNCTAD 1987). At that time Latin America and the Caribbean had tariffs of 34 percent. By 1993 some East Asian countries, such as Indonesia and Malaysia, had already lowered their average tariff to about 10 percent, while many Latin American countries had narrowed the gap by lowering their tariffs from 15 to 4 percent. In East Asia, China's effort was commendable. China's average tariff in January 1992 was 47.2 percent. Through a series of five downward adjustments, by October 1997 it had been lowered to 17 percent. The effective tariff was actually lower than the nominal 17 percent rate, because 62 percent of China's imports in 1997 were not taxed, a product of numerous tariff concessions provided to export processing activities, foreign industrial enterprises, and industries promoted by the government. As concerns nontariff barriers, since 1992 China has reduced the number of products that require import licenses from 1,247 to 374 (June 1997) and reduced the number of products subject to import quotas from 26 to 13. Except for 14 price-sensitive raw materials and products that remain under state control, trade for all products has been liberalized (Hong Kong Trade Development Council 1998). These changes, coupled with more liberal entry and operation rules and guarantees against privatization, have improved the macroeconomic environment for FDI.

In the 1990s, the opening of domestic markets to products of foreign affiliates and of service sectors to foreign participation have also been significant developments in fostering increased globalization and FDI inflows into the developing countries. Taking China as an example, in the 1980s, with rare exceptions, foreign affiliates in China had to export all their products. This requirement was gradually relaxed during the 1990s (Hong Kong Trade Development Council 1998). By 1998 a foreign firm in China was generally allowed to sell 30 to 40 percent of its goods in the domestic market, and municipal authorities are entrusted with flexible implementation of this policy. Since 1997, Shenzhen has been used as a pilot case to test the possibility of complete national treatment status for foreign affiliates, that is, they can decide what percentages of their output should be sold domestically and abroad.

Privatization of infrastructure industries is another important new development that has boosted globalization and FDI, although this was a slow process in the 1980s. Because infrastructure investment involves high costs, long gestation periods, possible price ceilings and other regulations on operations, and a much higher political risk than investments in other industries, it was still not widespread in the developing countries in the 1990s. However the development of new technologies and their increasing application have led to rapid expansion of the demand for most such industries and services. The vast amount of firm-specific and untradable elements of the technologies and management involved have changed the attitudes of governments of developing countries somewhat, leading to increasing liberalization in these sectors to allow active participation by TNCs on their home turf. A 1996 survey indicated that in 1991–95, a total of 25 developing countries had introduced measures to liberalize FDI in infrastructure (UNCTAD 1997). For Asia, they include China, India, Indonesia, Pakistan, the Philippines, Taiwan (China), and Vietnam. For 1988–95, of the total revenue derived from infrastructure privatization in the developing countries, 51.1 percent came from FDI (UNCTAD 1996). Although FDI remains a small fraction of the total investment in infrastructure industries in most developing countries, for example, in 1992 only 0.3 percent in Korea, 4.1 percent in Pakistan, and the highest level of 7.4 percent in Kenya, the potential of foreign participation (direct investment and portfolio investment) is great.

Since 1990, realizing the great importance of modern telecommunications, transportation, and power industries in China's drive for modernization and economic development, and aware that TNCs can not only see China through a short-term capital deficiency, they can also build and operate such facilities much more cost-effectively and allow China to realize quicker benefits from the technology transfer involved, China has quickly expanded the scope for foreign participation in infrastructure and services. By the end of 1996, China had signed contracts for such projects involving contractual FDI amounting to US$190 billion, which was 36.3 percent of the contractual FDI amount for the year (Hong Kong Trade Development Council 1998). The sectoral distribution of FDI in Chinese service industries in 1997 is shown in table 2.15.

Table 2.15. FDI in China's Service Sector, 1997

Industry	*Contract amount (US$ millions)*	*Invested amount (US$ millions)*
Construction	3,120	1,438
Real estate	5,113	3,844
Wholesale, retail, and catering	1,839	1,402
Transportation, warehousing, and telecommunications	2,622	1,655
Hotels	200	507

Source: Hong Kong Trade Development Council (1998).

To further liberalize investment in these sectors, in 1996 China announced its liberalization plan that would see it into the next century (Hong Kong Trade Development Council 1998):

- *Banking*—1997–2000: increase the number of foreign banks and allow renminbi business in key cities on a trial basis; 2001–10: allow the spread of foreign banks and trials of renminbi business in a wider geographical area
- *Insurance*—1997–2000: increase the number of designated foreign firms in pilot cities; 2001–10: increase the number of pilot cities and allow more foreign firms
- *Securities*—1997–2000: allow more foreign firms; 2000–10: allow foreign firms to trade A-shares on a trial basis
- *Retail*—1997–2000: allow joint ventures to operate in 11 designated cities and wholesale joint ventures on a trial basis; 2000–10: allow joint ventures in all provincial capitals and enlarge the scope for joint venture chain stores and wholesale enterprises
- *Tourism*—1997–2000: allow 5 joint venture travel agents in 12 national-level tourist resorts; 2000–10: permit more pilot projects
- *Transport*—2000–10: open water and road transport markets after China enters the World Trade Organization
- *Energy*—raise the ratio of foreign equity in energy
- *Communication*—2000–10: ensure that trade in value-added communication services conforms with international norms.

As an illustration of the potential size of the demand for FDI in infrastructure in East Asia during 1995–2004, the *Far Eastern Economic Review* (1995) estimated that the total investment required for power, telecommunications, transport, and water and sanitation could amount to US$1,477 billion (table 2.16). If 20 percent of the investment were to come from FDI, this would amount to US$295 billion, or 3.4 times the total FDI inflow into Asia and the Pacific in 1997.

Obviously, most infrastructure projects and investment in services by FDI in the developing countries have been and will continue to be concentrated in their key cities. This is not only where the demand is, but such projects will enhance the producer services of these cities, making them more competitive in the global economy as focal points for global services and production, and strengthening their economic and network hub function and status. Many of the liberalization measures, such as those concerning local versus foreign sales ratios in China, have been left to individual municipalities to decide and to implement. Similarly, liberalization of services in China takes on a clear urban bias in the form of the pilot cities. Investment and FDI in these important sectors will forge better links between these cities and important nodes in the larger region, as well as with world cities, while their links with their hinterlands and the rest of the country will also be improved.

Table 2.16. Indicative Investment Requirements in Infrastructure in Developing East Asia, 1995–2004

Country	*US$ billions*	*Percentage of GDP*
China	744	7.4
Indonesia	161	8.1
Korea, Rep. of	269	5.6
Malaysia	49	4.8
Philippines	48	6.6
Thailand	145	7.1
Others	61	7.5
East Asia	1,477	6.9

Source: Far Eastern Economic Review (1995).

An examination of the export propensity of Japanese and U.S. investment in five East Asian countries provides further support for this view (table 2.17). Some FDI manufacturing, for instance, electrical engineering and primary activities, are highly export oriented. These activities usually seek cheap labor, cheap land, and low-wage locations. They also tend to locate close to the port city for convenient transport. Chemicals and transport equipment manufacturing are mostly import substitution activities, best located at or near the port city for convenient access to import shipments and to be close to the nation's largest market and distribution center. Investment in services is mainly in producer services, real estate, hotels, and modern retailing facilities. For them location in the largest port city is also a logical choice.

Table 2.17. Export Propensity of Investment by Japanese and U.S. Affiliates in Selected Asian Countries, 1995

		United States	
Sector and industry	*Japanese*[a]	*Republic of Korea*	*Other*[a]
Primary	76.0	14.0	—
Manufacturing	39.9	4.0	42.0
Chemicals	18.5	19.0	4.0
Electrical engineering	70.7	—	—
Transport equipment	8.1	1.0	—
Services	25.3	6.0	2.0
Total	35.9	10.0	34.9

— Not available.
a. Indonesia, Malaysia, Philippines, and Thailand.
Source: Author.

The message derived from the foregoing discussion about the increasing trend toward liberalization and privatization, as well as new developments in technology, product design, and product nature, is clear. There will be increasing globalization in production and consumption and FDI will continue to expand its role in developing economies. Spatially, this will be manifested in the increasingly global nature of the economies of major cities of the developing countries, particularly in East, South, and Southeast Asia. This is currently where most FDI inflows into the developing countries have been concentrated, and where a process of concentrated exo-urbanization and EMR formation is present and is shaping the urbanization and economic development of many of these countries.

More specifically, opportunities will exist in the following:

- Producer services in the core city, such as finance; insurance; accounting; legal, audit, and business services; data processing; design; research and development; trade; and engineering
- Hotels and tourist facilities in the core; superinfrastructure such as mega-airports, container ports, and infoports for regional and international links
- Infrastructure in the ring of the EMR in energy, regional optical fiber networks, and regional transportation facilities
- Land- and labor-intensive productive activities, as well as trading and warehousing facilities in the ring.

In East, South, and Southeast Asia, such opportunities have been boosted by regional cooperation that intensifies the flow of information, enhances long-term regional commitments in developing mutually beneficial relationships, and eases domestic capacity constraints in local policies and infrastructure. The Association of Southeast Asian Nations Investment Area, Asia-Pacific Economic Cooperation, and the EU's European Investment Promotion Action Plan, which were revised or created in the late 1990s, provide new and significant avenues to coordinate legal and regulatory measures and further investment liberalization; maintain a constant information flow and contact; and provide training, promotion, facilitation, and networking activities to enhance the flow of FDI into the region from within the Pacific Rim as well as the EU.

Future opportunities for key cities, especially the EMRs, which have already charted two decades of success and accumulated experience, may be seen as lying in the following three areas:

- They will be the telematic gateways of the host countries' drive toward modernization and increasing globalization in the 21st century. In 1991–95 China spent US$7 billion on telecommunications infrastructure (Rose and Tang 1998). China plans to spend a further US$20 billion in 1996–2005, which would imply huge domestic and FDI inflows into such key cities as Shanghai, which enjoys geographic, market, and policy advantages for winning such investment. Besides telematics, super-airports, in particular, cargo airports known as global transparks, will become important gateways for cargo movement in the 21st century when just-in-time production and retailing and logistics play a crucial role in globalized production and consumption (Kasarda 1998; Kasarda and Rondinelli 1998). Pharmaceuticals will become significant market-seeking FDI industries located in these cities catering to an expanding market as people live longer and are willing to spend more to stay healthy.
- The outflow of FDI from the newly industrializing economies will be maintained, particularly from Hong Kong, Korea, Singapore, and Taiwan (China). Part of this will be investment in services, an outcome of the created assets of these sources and the role of Hong Kong and Singapore as financial and regional TNC headquarters. Others will be in industries following the so-called flying geese pattern, seeking global, low-cost, production bases for capital- and technology-intensive industries, such as electronics, automobile manufacturing, petrochemicals, and oil refining. These industries will be increasingly moving up the skill ladder and looking for cost savings in skilled labor and created assets.
- For most national governments, when many of the host country determinants mentioned before are applied, they are subject to local modification because of the attitudes and initiatives of metropolitan governments. In the case of China, exemptions from tariffs, local taxes, and fees are a significant part of local initiative packages for attracting FDI. The privileges given to various types of open areas, for example, Pudong in Shanghai, which has granted renminbi business to foreign banks, and the pilot city of Shenzhen, which treats foreign affiliates like national firms, form a significant macroeconomic milieu of centers for globalization and FDI. In China there is a correlation between high-priority open areas and coastal cities (table 2.18), as well as between coastal cities and the concentration of FDI. The record of growth and increasing economic significance of the open areas has been well documented,

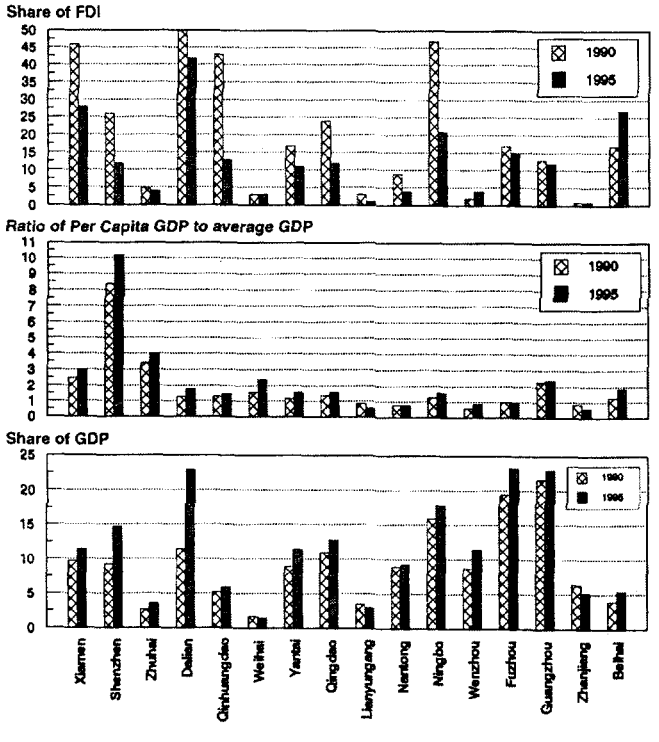
another testimony to the significant positive relationship between liberalization, globalization, FDI, and metropolitan location (figure 2.7).

Table 2.18. Distribution of Open Areas and FDI Inflow into China, 1996
(number of areas)

Open areas	*East China*	*Central China*	*West China*
Bonded area	13	0	0
Special economic zone	5	0	0
Economic and technological development zone	25	4	1
Coastal open city	14	0	0
Coastal open area	260	0	0
Riverside open city	0	5	1
Border open city	2	5	6
Provincial capital	2	8	8
High-tech enterprise zone	29	14	9
National tourist area	10	0	1
Total	360	36	26
FDI inflow share (percent, 1987–93)	88.5	7.6	3.9

Note: Open areas are ranked in descending order of attractiveness of incentives and infrastructure.
Source: Jin and Chen (1996).

Figure 2.7. Significance of Special Economic Zones and Open Cities in Their Provinces, 1990 and 1995
(percentage share in the province)



Source: Author.

Thus, in China, and equally so in other developing countries, the policy bias toward the metropolitan centers is likely to continue. It will create for these countries new opportunities for FDI and domestic investment, and is an important dynamic in affecting the nature and spatial pattern of the countries' urbanization.

In the future, key cities in the developing countries and the newly industrializing economies will increasingly compete against each other as regional centers in the global economy in attracting FDI in producer services and high-tech industries. This trend will also spread to megacities in other developing countries outside Asia, particularly in Central and Latin America. The EMRs and emerging EMRs in Asia will be looking for high-quality investments and will adopt a selective approach to FDI for upgrading their skill levels, technology, and value added of their economic activities. As Choe (1998) said, in the future, the source of a city's growth will remain global. There will be no hierarchical functional roles; each will be in direct competition with others. Economic competition will thus likely be between cities across national borders, not between countries, and cities will represent countries in the global economic system. They will rely substantially on global capital transfers and the way they plug into the new economic order. In short, the growth strategy of many countries will, to some extent, be city based.

Although it is common to rank order the attractiveness for investment of countries and cities based on conventional factors, such as financial and political reforms, consumer confidence, and enterprise performance (table 2.19), the new competitiveness of cities in the global economy will lie mainly in the following:

- Removing the constraints that inhibit efficient functioning of the regional urban system, that is, the EMR
- Developing super-infrastructure, such as airports, seaports, and teleports that will enhance a city's logistical position to minimize costs and maximize quality and market coverage
- Marketing to enhance the city's image through prestigious projects and business facilitation.

Table 2.19. Foreign Bank Loans to Selected Economies in Asia, 1996

Economy	*Short-term loan (percent)*	*Public loan (percent)*	*Private loan (percent)*	*Total amount (US$ billions)*
China	48.9	15.4	43.1	55.0
Korea, Rep. of	67.5	5.7	28.3	100.0
Indonesia	61.7	12.5	60.2	55.0
Malaysia	50.8	9.0	61.8	22.0
Thailand	65.2	3.2	59.6	70.1
Taiwan, China	84.4	2.1	40.0	22.4
Philippines	60.4	12.2	42.6	19.7
Asia total	61.5	9.0	47.6	367.0

Source: The Financial Daily, Hong Kong (December 3, 1998).

In the sphere of super-infrastructure, competition in the construction of container ports and super-airports was already keen in the 1990s. The rivalry between Hong Kong and Singapore, and to a lesser extent Kaoshiung, in container port development is well known. Each has worked hard to increase productivity, lower unit costs, and add capacity. Hong Kong has completed the new Cheklapkok Airport, which will have an annual passenger capacity of 89 million people and cargo capacity of about 9 million metric tons. The new Seoul Airport will be completed in 2001 and will have an annual passenger capacity of 100 million people and a cargo capacity of 7 million metric tons. There are, in addition, the new Singapore Airport, Kuala Lumpur Airport, Kansai Airport, Zhuhai Airport, Pudong Airport, and Guangzhou Airport, all professed to have final full capacity of 20 to 60 million passengers per year.

Attention to the significance of logistics and time saving in production and marketing have led to a new wave of plans to construct specialized air cargo airports, which will also serve as sites for FDI in high-tech industries. Thailand has approved the plans for such a global transpark south of Bangkok. There are plans to convert Zhuhai Airport in south China and Subic Bay Airport in the Philippines into global transparks. There is also interest in converting part of the new Seoul Incheon Airport for such a purpose; and preliminary planning for a global transpark is under way in Taiwan, China. Singapore has been active in winning the role of the Asian Pacific logistics hub. In addition to having a modern airport and container port, it is making the investment so as to become the Asian Pacific junction of the optical fiber highway for business information and data. In 1996 Shanghai, the largest of China's three designated nodes in telematics started a 15-year program to build an infoport. The first phase of investment alone (1996–2000) cost US$5 billion (Rose and Tang 1998).

The new competitiveness, however, is unlikely to be achieved within the traditional administrative confines of cities. Efficient producer services and global production will lead not only to the growth of the EMR in space, but also to the coalition of major nearby cities. Rimmer (1995) believes that in the Asian Pacific region, as the international economy changes, even EMRs will develop into vast metropolitan regions of urbanization linking large cities and metropolitan areas into development corridors straddling international borders.

Thus the key words for the new competitiveness are nodality, density, efficiency, logistics, access, and connectivity. The future of key cities in the developing world will be strongly influenced by the right FDI policy, as well as by regionally and globally competitive transportation and communication infrastructures. The success of these cities or alliances with nearby cities will further enhance the globalization of urbanization in the 21st century.

Conclusion: Response to the Asian Financial Crisis and Policy Suggestions

The Asian financial crisis of 1997–98 disrupted the spatial cost surface of the global economy, particularly for East and Southeast Asia, and calls for policy responses that impinge on metropolitan competitiveness and governance. The devaluation of local currencies of 53 to 231 percent against the U.S. dollar and rapid hikes in interest rates raised international doubts about the possibility of the region's quick recovery and shook confidence in globalization and FDI as major dynamics in economic and urban growth.

An examination of the actual inflow of foreign capital in selected countries in the Asia Pacific region provides some explanation from the point of view of structural and policy flaws and the popular cause of the crisis: attacks by foreign speculators. In 1997, among the private inflows into Korea and Thailand, FDI accounted for a very small portion, as the inflows were overwhelmingly dominated by loans and portfolio investment, many of which are short-term loans. In 1996 borrowing from overseas banks in Korea amounted to US$100 billion and in Thailand to US$70 billion, compared with their FDI of US$2.32 billion and US$2.27 billion, respectively. While the ratio of FDI to overseas borrowing was almost 1:1 for China, it was 1:43 for Korea and 1:30 for Thailand (table 2.20). Korean corporations tend to borrow huge sums to finance their outside expansion, as indicated by the country's large FDI outflow and negative net inflow. Korea's collapse during the crisis was clearly financial in nature, as creditors called back loans, leading to insolvency and bankruptcy. In Thailand, the inflow of large volumes of short-term borrowing went mainly into real estate and trade. This is also reflected in Thailand's FDI statistics for 1988–97 (Kittiprapas 1998). In 1988, 58 percent of FDI inflows were in industrial projects, while real estate accounted for only 5 percent. The turnaround came in 1994, when 33.5 percent of FDI inflows went to real estate, and industry obtained only 16 percent. Since then, real estates' share was maintained at least one-third of the total inflows. Together with trade, real estate accounted for about 60 to 64 percent of FDI inflows in 1994–96, building up a huge bubble in some three years.

Table 2.20. Economic Competitiveness of Selected Asian Economies, 1998

Economy	Financial reform	Political reform	Consumer confidence	Enterprise performance	FDI
Hong Kong, China	B+	B–	C+	A–	A–
Singapore	B+	C	B–	A	C+
China	C+	D	B–	C–	B+
Taiwan, China	B	A–	B	A	B
Japan	C	C	D	B–	B+
Thailand	B+	A–	C–	C	C
Korea, Rep. of	B	B–	D	C	C–
Indonesia	D	C–	D	D	C–
Malaysia	D	F	C+	F	C
Philippines	B+	A	C–	C	B–

Source: Business Week (1998, October).

In terms of the volatility of the flows and short-term balance of payments, short-term loans and portfolio investment are potentially much more risky than FDI. They need a satisfactory international reserve position to balance them and to serve as a safety net in times of balance of payments difficulties. The Asian financial crisis has revealed the different nature of FDI and short-term loans and portfolio investments. Such a lesson will enhance the future efforts of the developing countries (including the newly industrializing economies) to woo FDI. In 1997 the combined FDI inflows of the five Asian economies most affected by the crisis remained at much the same levels as in 1996.

Another obvious reaction to the crisis is for countries to become more cautious in liberalizing finance. In October 1998 member governments of Asia-Pacific Economic Cooperation agreed to study ways to avoid excessive speculation in currencies, shares, and stocks by international hedge funds. There are at least two areas in which action may be taken:

- Monitor the flow and sectoral distribution of international capital and device measures to regulate some of the flows.
- Set up quantitative targets for real estate development for the entire EMR as a way to avoid building up a bubble, as most of the bubble that led to the crisis was located within EMRs.

Clearly these measures may mean cutting back some of the liberalization efforts for the financial market and the construction and trading sectors and extending planning and administrative jurisdiction of core city metropolitan governments to the EMR ring.

The devaluation of local currencies will also decrease FDI outflow from the region, which in 1997 amounted to 40 percent of FDI inflow into the developing countries. However, such a decline will likely be compensated by increased inflow from the United States and the EU. The latter's share of FDI inflow into the Asia Pacific region has already increased and the share of mergers and acquisitions is rising rapidly, reflecting the inflow of capital from core countries to buy up cheap assets. Thus the Asian cities' networking with Tokyo in the functional hierarchy of globalization in the 1980s and 1990s may change. Asian Pacific cities may need to extend their networking to key cities in the United States and EC to improve their competitive position in the postcrisis new global economic order.

In the new round of competing for FDI and improving infrastructure, the developing countries need to pay more attention to and increase the pace of liberalization of their services, implementing national treatment to FDI and removing nontraditional barriers, such as state monopolies. National governments also have to realize the logic of and need to frame FDI policies in the context of not only national, but also regional and EMR levels, and coordinate them with technology, international finance, and trade policies.

At the city level, the building of super-infrastructure has already been a commonly adopted strategy, although a few countries, like Thailand, have been forced by economic depression to put off their global transpark project (Kittiprapas 1998). Municipal governments are also engaging in new and increased efforts to improve internal and external infrastructure, engage more actively in place-marketing activities, and help cut the cost of operation. Singapore enforced an across-the-board wage cut of 15 percent from January 1999, while the government of Hong Kong froze pay increases for civil servants for 1999 and the utilities companies there also froze or lowered their charges. Both governments too have lowered taxes, including the basic corporate profit tax rates, and cut or eliminated some government service fees.

Other FDI-dominated urban economies, such as Fuzhou and Xiamen in China, are implementing a package of measures to improve their economic conditions and business facilitation, as well as place-marketing efforts. They too have extended their promotion focus to the United States and EU. For example, in 1998 Xiamen started a system of annual updating of the city's investment guide and FDI target projects, and the information has been posted on the Internet for worldwide distribution. Urban district authorities are given the responsibility of promoting FDI and have to follow up with postinvestment facilitation and progress monitoring. The Saturday Complaints Meeting system was established in 1998 for efficiently dealing with complaints by foreign affiliates, and was chaired by the mayor. It is complemented by a regular luncheon attended by city government officials and members of the foreign enterprise association. The increased pace of patching up legal loopholes in the operation of foreign affiliates, the added transparency, and the decreased government service fees and "one-window" handling of executive fee payments was also implemented in 1998. The Xiamen September 8 Investment Expo was raised to national status from 1997, and increased the city's link to the world (Chen 1998).

Douglass (1995) described five major dimensions of restructuring due to globalization of the urbanization process: (a) the polarization of development in a limited number of urban regions, (b) the emergence of mega-urban regions, (c) the development of world cities and international urban links, (d) the formation of transborder regions, and (e) the significance of international networking and development corridors in development. Despite the Asian financial crisis, the nature and tendency of globalization and FDI in the future will likely reinforce these dimensions.

Within the EMR or enlarged metro system, Dharmapatni and Firman's (1995) suggestions still deserve attention when formulating detailed local policies (in addition to suggestions already mentioned), that is:

- Implementing new city management arrangements
- Decentralizing legal authority to the local level
- Devising policy to deal with losses of farmland
- Taking measures to take advantage of the increasing role of the private sector
- Coping with environmental deterioration
- Increasing local government income
- Introducing mechanisms for flexible spatial plans
- Setting up information systems to cope with rapid change
- Providing skill training so that labor can cope with rapid economic and social changes.

Clearly, these policy suggestions are not simply for redressing the problems of management, finance, and environment of existing EMRs, some of which are proactive in fostering the future capability and competitiveness of the mega metro system in an increasingly globalizing economy. The future prospects of the developing countries, both in economic and urbanization terms, will thus increasingly hinge on existing and emerging EMRs. The management of EMRs or globalization of urbanization will therefore be a critical task for development in many developing countries at the dawn of the century.

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