UNU/IAS Working Paper No. 40

Globalization and Urban Transformations in the Asia-Pacific Region

Fu-chen Lo and Peter Marcotullio*

*Dr. Fu-chen Lo, Deputy Director and Dr. Peter Marcotullio, Research Associate, United Nations University, Institute of Advanced Studies, 53-67 Jingumae, 5-chome, Shibuya-ku, Tokyo 150, Japan
1.0 Introduction

During the past few decades the world economy has experienced structural adjustments affecting production, resource utilization, and wealth creation. Cross-border functional integration of economic activities and growing interdependency of regional economic blocs define “Globalization,” the new catchword for the trends. Growing networks of flows in goods and services, capital, finance, people and information are increasingly linking nations through the activities performed in their major urban centers.

The logic of globalization driven growth has privileged some regions and cities over others. In general, the developed world and some developing and Newly Industrialized Economies (NIEs) have benefited, while many developing countries have been marginalized. Within developed countries the centers of finance and advanced business services as well as high tech industries have benefited while cities dominated by traditional blue-collar employment have stagnated. Among developing nations, the resulting sets of economic arrangements has been particularly beneficial to East and South East Asian countries.

Important elements in the evolution of the global system are the expansion of trade, capital flows (particularly direct investments) and a wave of new technologies. Cities have become the nodes in the global web of economic flows and linkages. The result, particularly evident in the Asia-Pacific region,\(^1\) is the emergence of a functional city system (Yeung and Lo, 1996).

This paper attempts to place the economic growth and increasing interdependence of countries in the Asia-Pacific region in the context of the developing global economy.
and in the process highlights the importance of cities. Further, the emerging character of the urban system and the pattern of urban development within cities in the region will also be presented. The first part of the paper outlines the processes of globalization by underscoring how uneven development and interdependency has grown over the last few decades.² The second part of the paper focuses on the role and characteristics of cities in the region by describing the emergence of an Asia-Pacific urban corridor and the development of a functional city system. Among cities integrated in this system, these changes have contributed to a new process of urban development that has been referred to as world city formation (Friedmann and Wolff, 1982).

1.1 Uneven Global Development

There have been three general ways in which regions and nations have experienced uneven economic adjustments associated with globalization. First, the structure of production within advanced economies of the North has changed from one based on industrial manufacturing growth and employment to service dominated economies. Second, a manufacturing belt has emerged in East and South East Asia. Third, those regions, nations and localities unable to take part in the global integration of production have been marginalized.

For the past few decades there has been considerable growth in the service sectors of the economies of the OECD countries (Table 1). The increases of service activities have occurred rapidly and correspond to economic structural changes in the

¹ The Asia-Pacific Region includes those nations bordering the South China Sea and the Western Pacific Ocean excluding Oceania.
affected nations. While industrial production has not disappeared from these economies, the service sector now plays a more dominant role in the growth of national outputs. A result of this change has been higher levels of unemployment, as jobs lost in the manufacturing sector have not been replaced adequately with growth in service employment.3

While most of the world’s manufacturing production is still located in the OECD countries like the United States, Japan and nations in Western Europe, there have been significant changes in the geography of manufacturing output (Table 2). The flip side of rapid growth in services in economies of the developed countries was a substantial loss in manufacturing activities. In all of the G7 countries the share of manufacturing in GDP dropped significantly from 1960 to 1993. In the United States, from 1979 to 1995, 24.8 million “blue-collar” jobs were extinguished and the new employment created was not in the manufacturing sector (NY Times, 3-9 March 1996). This decrease in manufacturing employment has translated directly into lower production levels. In terms of world share, the manufacturing output from the USA has declined from 34.4 percent in 1965 to 25.7 percent in 1992.

At the same time an industrial belt has been emerging in the Asia-Pacific region marking the second uneven development consequence of globalization processes. The Asian NIEs followed by the ASEAN countries were able to take

---

2 While not attempting to downplay the significance of a variety of social and political processes associated with globalization, this paper concentrates largely on economic changes and impacts.

3 Notwithstanding fluctuations and the recent drop in unemployment in the US, among 17 OECD members, unemployment levels as a percent of the labor force have risen during three periods from 1950-73 to 1974-83 and then to 1984-1993 (Maddison, 1995). In the USA, despite the total gain of 27 million jobs from 1979 to 1995, the loss of 43 million jobs during the same period prompted the New York Times to run a 7 article series on “The Downsizing of America” (NY Times, 3-9 March 1996). As one observer has noted, within the new global economy, employment and production have become “uncoupled” (Drucker, 1986).
advantage of the shifting location of industrial manufacturing jobs while other
developing nations have not. The Asian NIEs experienced spectacular manufacturing
sector driven growth during the last few decades. The percentage of South Korea’s
GDP output accounted for by manufacturing increased from approximately 14 to 29
from 1960 to 1993. Singapore’s manufacturing component jumped from 12 percent
to 37 percent of the city-state’s GDP during the same period.

The expansion of manufacturing output in these countries has been responsible
for their impressive economic achievements. Taiwan, Indonesia, Hong Kong,
Singapore and the Republic of Korea were among the top 10 countries with the
highest positive change in GDP per capita in the world between 1965 and 1990
(World Bank, 1993). One of the most dramatic cases was South Korea, which
attained average annual growth rates of almost 8.6 percent in the 1960s, 10.3 percent
in the 1970s, and 9.7 percent in the 1980s (Table 3). Taiwan’s per capita income
jumped from US$ 1,518 in 1962 to US$ 3,313 in 1972 to US$ 11,590 in 1992. The
island’s economy experienced 9.7 percent annual growth in the 1970s and 7.8 percent
growth in the 1980s. However, only a small set of nations, mostly located in this
region, capitalized on the shift in manufacturing production and economic growth.

A third uneven effect of globalization has been the marginalization of a large
portion of the developing world. Both Latin America and Africa have felt the
negative affects of globalization and were not able to benefit from the positive
aspects. Historically, these regions depended on primary product exports for up to 90
percent of their total export trade. As late as 1990, for all non-Asian developing
nations, primary products accounted for over 70 percent of exports and in sub-Saharan
Africa primary products accounted for over 88 percent of total export earnings (Todaro, 1997). In the early 1980s these economies were badly hurt by the fall in world primary commodity and fuel oil prices. During the period from 1980 to 1992 economic growth per capita in Latin America and the Caribbean averaged –0.2 percent and in Africa it was –0.8 percent (Todaro, 1997).

The low economic growth in these regions was complicated by the emergence of debt crises for many nations. As countries lost income from the drop in world primary commodity prices they were unable to pay back debt from loans to both international financial institutions and private banks. By 1990, national debts in African and Latin American countries became the heaviest among the developing world. In 1989, of the 17 countries with a net external debt of 100 percent or over the national GDP, 15 were in African and Latin American and the Caribbean. For both Latin America and Africa the 1980s were a “lost decade” for development.

The pattern of global economic activity described above is arguably simplified. For example, the recent growth in the economies of Mexico, Argentina, Botswana and Brazil demonstrate that the patterns are not uniform. However, the industrial belt developing in coastal cities of the East and South East Asia-Pacific region continues to grow and strengthen as it attracts investments from Japan, the USA and Europe. Further, there is a widening gap in the adoption of new technologies that underpin economic growth between countries. While the nations that are currently networked into “globalization” processes are developing and enhancing the infrastructure necessary for the smooth functioning of global networks, both Africa and Latin America are conspicuously missing from the plans/projections for both advanced

---

telematic hookups\textsuperscript{5} and transportation super-hubs.\textsuperscript{6} These and other uneven growth conditions suggest that the pattern of development identified will not change over the short or medium term (Lo, 1994).

1.2 Spatial Integration and Interdependency

One of the most significant features of globalization is the extensive coverage of world commerce by trade, investment and new technologies that underpin development. The importance of these constituent elements is revealed in their size and growth rates. Together these flows, along with related trends, are enhancing the integration of nations and cities and promoting the spatial differentiation of economic activities.

World trade has been growing rapidly since 1950 (Table 4). From that time to 1992 the annual average growth rate topped 11.2 percent, bringing the net value of global trade from US$ 61 billion to over US$ 3.7 trillion (UNCTD, 1994). However, these growth-rates are not only unprecedented, they are also higher that than of global production. While in 1950 merchandise exports were 7.0 percent of world GDP, by 1992 global exports accounted for 13.5 percent of total world output (Maddison, 1995). The expansion of trade is a defining characteristic of the post WWII world economy.

Trade has expanded quickly in East and Southeast Asia nations after the 1950s (Table 5). The rapid increases follow a pattern that begins in Japan and is then

\begin{footnotesize}
\begin{enumerate}
\item[\textsuperscript{5}] See Peter Dicken, 1992 Figure 4.5 on page 10. Dicken cites “Developments in global telecommunciations: satellites and optical fiber networks on The Economist (17 October 1987) Telecommunications Supplement, p. 23; Warf (1989), “Telecommunications and the globalization of financial services,” Professional Geographer, Vol. 41, pp. 257-71, Figure 3; and, Sunday Times (6 December 1987), pp. 79.
\item[\textsuperscript{6}] Peter Rimmer, 1997, “China’s infrastructure and Economic Development in the 21st Century,” Futures Vol. 29, No 4/5 (May/June), Figure 12, pg 459. Rimmer cites J.G. Hoyt in the explanation of the figure.
\end{enumerate}
\end{footnotesize}
experienced by the Asian NIEs in the 1960s followed by explosive growth rates of trade in ASEAN countries. Further, while the 1970s had brought growth in trade to most countries around the world (average annual world growth rate in trade was 20.3 percent),

the Asian NIEs and the ASEAN countries experienced a particularly rapid expansion in their exports and imports. In the 1980s world trade slowed due to the fall in primary commodity prices and a global recession in the first part of the decade, among other factors, but trade for those countries in Asia continued to grow. The exceptions were Indonesia and the Philippines. Indonesian trade was depressed by the fall in demand for its agricultural and fuel-oil products (particularly in the first half of the decade) and the political instability during that period hurt Philippines economic growth.

Notwithstanding its magnitude and rapid expansion, an important aspect of global trade during the past few decades, is the growing complexity of international goods and services commerce. The cross-country arrangement of production processes and the global relocation of their different components have not only helped to expand the importance of this flow, but has also led to increased intra-firm trade. The movement of goods and services between the same company that has plants and offices in different nations has helped to create and sustain international economic linkages.

A significant trade-related phenomenon has been the development of the global finance system. While the world finance system developed to keep the global trade system working smoothly, the flows of global finance alone have subsequently taken on unique importance. Peter Drucker (1986) has suggested that this
development represents a separation of the ‘real economy’ of the production and trade of goods and services from the ‘symbol economy’ of credit and financial transactions. This separation is significant in that each ‘economy’ has since then operated independently.

The importance of the international finance system can be seen in the absolute size and increases in foreign currency trade. For example, in mid-1980s, foreign currency trade exceeded US$ 150 billion a day, which annually amounted to 12 times the value of world trade in goods and services for that year. By the late 1980s the total was up to US$ 600 billion a day, no less than 32 times the volume of international commercial transactions world wide (Drucker, 1986; Strange, 1994). Transactions in the Eurocurrency markets have risen from US$ 3 billion in the 1960s to US$ 75 billion in 1970 to US$ 1 trillion in 1984 (Strange, 1994). These transactions have been encouraged by a global network of twenty-four hour capital market transactions concentrated in cities such as New York, London and Tokyo (Sassen, 1991).

The institutional structure of the emerging global financial system contributes to its importance. Since the global financial system is a hybrid of states and markets it is therefore not solely within the command of governments. As the “symbol” and “real” economies have separated, the influence of global markets for money has grown and the power of governments to influence or control these markets has diminished. This system is vulnerable and considered to be the “Achilles’ heal” of the global economy (Strange, 1994). If confidence in the system fails, decades of achievement can be wiped out in a relatively short period of time. Further, since the financial system is embedded in international transactions, “shocks” in one place are quickly felt in another. While the Mexican financial crisis raised questions for
investors and policy makers, it was the 1997 currency and capital market crises that provided evidence of the inter-connected nature of the global finance system. Within a period of days, the stock markets of Bangkok, Kuala Lumpur, Hong Kong, New York, London, Tokyo, Frankfurt and Paris, New Zealand, Brazil, Argentina and Mexico fell. The current climate within the global financial system demonstrates that given impetus, the reaction on the part of investors to reduce their exposure, even in well-managed economies, can be translated quickly around the world.

While the growth of trade and financial flows is linking the nations of the world, one of the dominating forces of the global integration is the rapid increase in flows of foreign direct investment (FDI). The major channel of FDI is the transnational corporation (TNC). This institution may be the most important force creating “global shifts” in economic activity (Dicken, 1992). The growth of FDI has been an integral part of the general economic growth in the world economy (UNCTD, 1997).

TNC activity was relatively unimportant until the late 1950s. The total accumulated stock of foreign direct investment rose from US$ 14.3 billion in 1914 to US$ 26.4 billion in 1938 before soaring to reach US 66$ billion at the end of the 1950s (Dunning and Archer, 1987). However, during the 1960s FDI inflows began to explode and grew at twice the rate of growth of world gross national product and 40 percent faster than world exports. In the late-1980s FDI inflows to countries around the world grew at the rapid annual average growth rate of over 24 percent (Table 6). In subsequent years the rate of growth of FDI more than doubled that for world trade.

---

7 “Foreign Direct Investment” is defined as an “investment involving a long-term relationship and reflecting a lasting interest and control of a resident entity in one economy (foreign direct investor or parent enterprise) in an enterprise resident in an
By 1996, FDI inflows had reached US$ 3 trillion, FDI stocks reached approximately US$ 3.2 trillion, rising from US$ 1 trillion in 1987 and the sales and assets of TNC foreign affiliates (US$ 6.4 trillion) was higher than total world trades of goods and services (US$ 6.1 trillion). The growth of the international production system reflects rapid changes in corporate structures and is being pursued through foreign investment channels (UNCTD, 1997).

FDI has been overwhelmingly dominated by TNCs from developed countries. The resultant investment transactions have been described as mainly limited to a “triad” including the EU, North America and East and South East Asia (focused on Japan) as the dominant regional blocs (Ohmae, 1985). While transnational investment is primarily concentrated in the developed market economies, developing countries are increasingly playing an important role (Table 7). Cross-investment between the major developed market economies has increased substantially. The percentage of total global FDI captured by developing countries has increased from 18 percent in the mid to late 1980s to over 36 percent in 1996. Asia has captured more than 60 percent of FDI flows to the developed world. Further, a considerable number of TNCs from a small number of developing countries, most obviously some of the Asian NIEs have emerged. Among a list of the 1995’s top 50 TNCs based in developing economies, 34 are home institutions of the 4 Asian NIEs and China. These 50 firms have total assets ranging from US $ 1.3 to 40 million, total sales ranging from US$ 366 thousand to 36 million and total number of employees ranging from 7,434 to 200,000. Two of them are included in the 1996 list of Top 100 global TNCs (UNCTD, 1997).
A third key factor that has facilitated and enhanced global restructuring has been the new wave of technological innovations. Advances in micro-electronic, telecommunications, robotics, biotechnology and new materials have come in rapid succession in developed countries and selected NIEs. As one observer has noted: 
“[t]echnology is, without doubt, one of the most important contributory factors underlying the internationalization and globalization of economic activity” (Dicken, 1992:97). The world economy is facilitated by new information technologies, in which ideas, capital and people move rapidly and in large numbers (Lo, 1994).

The new wave of technologies has created new growth markets in both developed and developing countries as outdated products and production processes decline in demand. Information technologies play a key role in increasing global integration and speeding economic transactions. The Internet and related telecommunication technologies will make markets more transparent and continues to drive globalization process as they drive prices for long distance transactions down. For example, a three-minute telephone call between New York and London has fallen from US$ 300 (in 1996 dollars) in 1930 to US$ 1 in 1997 (The Economist, 1997). According to a UN forecast, the potential from information technology will increase ten times between 1990 and the year 2000 (UN, 1990). By the year 2000, more than half of the capital goods industries of the industrialized countries will be dominated by newly developed high technologies (Lo and Nakamura, 1992).

While the major breakthroughs in the transport of goods and services occurred in the 19th Century, modern enhancements, such as large cargo freighters and jumbo jets have improved the movement of goods and services. More importantly, the expansion and development of commercial high-speed passenger transportation have
allowed for a tandem rise of annual distance traveled and personal income. That is, while people from different classes and societies are spending the same average amount of time traveling per day\(^8\) those with higher incomes are traveling farther. Thus, as world GDP per person has increased so has total person kilometer miles (PKM). For example, total PKM traveled has increased by over 4 times from 5.5 PKM trillion in 1960 to 23.4 PKM trillion in 1990 and is expected to more than double by 2020 to 53 PKM trillion (Schafer and Victor, 1997). This has helped to create a community of global travelers that has increasingly significant social consequences. Innovations and advances in information and transportation are but a few of the new wave of technologies that are enabling truly large-scale revolutionary change. Together they have helped to bring about a new “techno-economic paradigm,” based on knowledge intensive production (Lo, 1994).

The internationalization of production, finance, banking and services, coupled with advances in telecommunications, information and transportation have helped to minimize the importance of national boundaries in decisions to locate production plants (Friedmann, 1986; Nakakita, 1988). Increases in trade, finance and investments have the effect of creating a “borderless” global economy (Ohmae, 1990). This “borderless” economy has become a distinctive feature of the new global economic system and it symbolizes the inter-penetration of transnational economic activity among national economies. The growing interdependence that accompanies these linkages is based on complementary relationships among different entities. Although examples of regional complementary and cooperative relationships are rare, they are

\(^8\) The average “travel-time” budget for traveling is typically between 1.0 and 1.5 hours per person per day in a wide variety of economic, social and geographic settings.
developing. The end of the 1980s saw growing interest in economic cooperation as a result of major global political changes, acceleration in the pace of liberalization, and the perceived need particularly in Asia-Pacific economies, to maintain competitiveness in the global economy.

1.3 Economic Growth and Structural Interdependence in the Asia-Pacific Region

As mentioned previously the economies in the Asia-Pacific region have been undergoing rapid and intensive economic growth (Table 3). Since the 1960s, nations in East Asia and the Pacific have had higher growth rates than every region of the world. Indeed, the progress of some countries in the region has been described as nothing short of a “miracle” (World Bank, 1993).

The rapid rise of Asian economies and the region’s developing structural interdependence began with Japan’s recovery from WWII. Starting with the Korean War in the early 1950s, Japan’s economy revived and expanded dramatically. Japan’s GDP soared from 8.5 percent in 1960, to 20 percent in 1970, and to 55 percent in 1990 of that of the USA. By 1992, Japan’s GNP per capita was second in the world to that of Switzerland, and amounted to US$ 28,190. Japanese economic power was housed in large institutions including 10 of the world’s largest banks and 315 of the world’s top 1,000 corporations. They also controlled a leading position in 25 of 34 technologies considered essential for a post-industrial world (Nester, 1990). Between 1986 and 1990 Japanese firms received 44 percent of all the patents issued around the world for robot technology and 33 percent for patents on optical fiber technology

---

9 The most developed and sustained instance has been among the ASEAN countries.
Japan’s current account balance for 1992 was the largest in the world totaling, after official transfers, to US$ 118 billion. However, Japan’s role was not limited solely to providing new prominence to the region as an emerging economic giant. It, more significantly, led the way in reshaping the economic activity in East and Southeast Asia through trade and intra-regional investment. Indeed, the region has developed in Japan’s embrace (Shinohara and Lo, 1989; Hatch and Yamaura, 1996).

Japanese trade and investments in the Asia-Pacific region have been the key to both the initial success of the region and the restructuring of many of the area’s economies. Japanese exports have been increasingly directed to nations in the region. For example, between 1975 and 1985, the value of the Japanese products exported to Korea, Singapore, Malaysia and Thailand increased by 202 percent, 226 percent, 378 percent, and 121 percent respectively (Akita, Lo and Nakamura, 1997). By 1987, Japan’s trade with the Asian NIEs had increased so sharply that it was of roughly the same magnitude as its trade with the 12 countries of the then European Community (Yeung and Lo, 1996). By 1996, Japan’s exports to the world amounted to US$ 400.5 billion and over 45 percent of that went to Asia (JETRO, 1997).

Japanese trade in Asia grew with the importance of intra-firm trade among Japanese companies. Many Japanese TNC have subsidiaries located in the region with which they trade parts and services. In this way Japanese trade has strengthened its economic linkages to developing countries in the region. Therefore the basis for increased Japanese trade with the Asian NIEs and ASEAN originated and developed with FDI. At its height, the region’s catch of Japanese FDI reached 11.7 percent in
It is the accumulation of Japanese FDI and the technologies that have accompanied these investments that have provided the original impulse for the region’s growth and strengthened its interdependency.

The historical pattern of regional economic development within East and South East Asia is related to three waves of spatially concentrated investments. The first wave began with the relocation of Japan’s manufacturing industries to offshore sites in South Korea, Taiwan, Singapore and Hong Kong. During the 1960s and 1970s Japanese firms, experiencing escalating labor and material costs of production at home were looking for sites elsewhere (Kojima, 1978). At that time, Japanese investments in Asia were in labor intensive manufacturing and the Asian NIEs not only provided cheaper labor, but also new markets for goods. The host countries welcomed the employment, capital infusion and technological uplift that accompanied the investments.

The second wave occurred in the 1970s and 1980s, when the comparative advantage of countries in ASEAN attracted Japanese investment. At first, industrial investment decisions to relocate factories were related to the factor endowments and the comparative advantages of specific localities. This industrialization pattern became the catalyst for the “flying geese” pattern of development (Yamazawa, 1990). In this industrialization process, latecomers successfully entered sectors in

---

11 Since that point the relative share of Japanese FDI in the region has decreased, yet Japan is still a major influence in the Asia-Pacific.

12 As Walter Hatch and Kozo Yamamura (1996: 27) have explained, “Japanese economist Akamatsu Kaname developed this theory of economic development. Like Vernon’s product cycle theory [1966], it spelled out a protracted process, driven by the gradual and international diffusion of technology, in which a developing country upgrades its export and industrial structures. In the 1970s and 1980s, the theory was modified to explain the synergistic pattern of economic development and integration in Asia. Japan was the “lead goose” followed by the Asian NIEs, then the ASEAN, then China, and so on. As it flies forward, becoming more and more technological advanced Japan pulls the entire V-formation along with it. It does so by successively shedding industries in which it no longer holds a comparative advantage. Through FDI, these industries ultimately find a new home among the less developed countries (“follower geese”) of Asia. Over time, these developing countries master the new technology, upgrade their own industrial structures, and themselves begin shedding outdated industries.” See Akamatsu “A Historical Pattern of Economic Growth in developing Countries,” *The Developing Economies*, No. 1 (March-August 1962).
which they had an increasing comparative advantage in terms of cost. They also imported technology from already mature economies whose competitive advantage in that industry was declining. They later invested in new industrial products using new technologies and know-how for which they had the innovative edge.

Japan led the region in relocating light manufactured goods industry to NIEs in the 1970s. The Asian NIEs responded and shifted their exports to light manufacturing and subsequently to durable consumer goods and machinery products. Almost simultaneously the ASEAN group shifted from raw material exports to manufacturing exports and then light manufacturing. The movement of industrial production followed the shift of investment, from Japan to the NIEs and then to ASEAN.

Since then Japanese inter-industrial linkages with the NIEs and ASEAN diversified into chemical products, metal products, machinery and transport equipment, construction and even high tech industries. These industries were dominated by inter-industry structures that were not easily replicable. They therefore did not conform to the flying geese model as experienced previously. Many of these types of industries were relocated based on so-called “borrowed technology” and depended on Japan and other industrialized economies for capital goods, technology and direct investment (Lo, Salih and Nakamura, 1989). The inflows of FDI and technology took on a “billiard ball” pattern where parts of the production process for one product have been located in a variety of different localities. (Ohta, Tokuno and Takeuchi, 1995). While the pattern of development no longer strictly resembles the “flying geese” model, the resultant East Asian industrial belt has been further strengthened by the intra-regional structural linkages among Japan, the NIEs, and ASEAN nations (Lo and Nakamura, 1992).
The flow of Japanese capital was enhanced by a seemingly unrelated set of events in foreign relations. Exchange-rate alignments among the major developing countries not only helped to sustain a long economic boom over the latter half of the 1980s for developed nations, but also impacted the economic flows of goods, services and investment in the Asia-Pacific region to developing nations. The appreciation of the Yen (endaka) as a result of the Plaza Accord of September 1985 helped to further provide the incentive for Japanese investment into Asian NIEs and later into ASEAN and China (Lo, 1994).

Although, after the Plaza accord the leading recipients of total Japanese investment were still the US and European countries, the gravity of Japanese manufacturing investment shifted to the NIEs and ASEAN nations. Japanese companies were anxious to relocate their production processes abroad in order to maintain a competitive edge. During the short period from 1985 to 1988, Japanese investment cases in ASEAN rose from 292 different investments amounting to US $ 9.3 billion, to 825 investments amounting to US$ 27.1 billion (Yamashita, 1991). Japanese investment stock accumulated in Asia from 1985 to 1987 totaled US $422 million compared to an accumulated stock US $ 593 million from the previous three decades (Nakakita, 1988).

The appreciation of the Yen was followed by a similar appreciation of the South Korea and Taiwan currencies in 1986 and 1987. These “little Tigers” in turn, also enhanced their export manufacturing competitiveness by relocating domestic industries to cheaper locations. FDI from Taiwan, Hong Kong and Singapore exhibited a gravitational tendency and remained in neighboring nations in Asian. Taiwan first, followed by Korea, Singapore and Hong Kong, were extremely
important as sources of FDI for ASEAN during the late 1980s (Yamazawa and Lo, 1993). For example, by 1986 Taiwan ranked second to Japan in its investments in value in Thailand (Lo, Salih, and Nakamura, 1989). South Korea invested over US$ 250 million in cumulative stock in 1988 in ASEAN. However, South Korea’s overseas investment continued to rise. By 1990, it hit a record of US$ 959 million in 1990, an increase of 68 percent over the previous year (Clifford, 1991).

Hong Kong and Singapore followed the lead of South Korean and Taiwan. Hong Kong provided FDI to China and especially to its immediate hinterland, the Pearl River Delta. Vast quantities of manufacturing investment poured out of Hong Kong into neighboring Guangdong province. It was estimated that Hong Kong businesses employ some two million workers in that region in thousands of small factories. Hong Kong has also been a substantial provider of investment in Indonesia and Thailand (W. Yeung, 1994). Singapore’s direct investments also flow to its neighborhoods. Two thirds of the total investments from Singapore are located in Malaysia and another 24 percent went to Indonesia. Singapore’s two closest neighbors were the recipients of almost 90 percent of the its total investment in Asia (Dicken, 1992).

The inflows of FDI facilitated structural changes in trade orientation and economic development in ASEAN countries. As a result of the FDI, ASEAN countries underwent major economic restructuring, particularly from being commodity exporters in the 1960s to manufacturing exporters in the 1980s (Figure 1). Starting in the mid-1980s the share of manufacturing exports began to rise dramatically in these countries. Just as primary commodity prices dropped in the early 1980s, the inflow of investment provided the ASEAN countries with timely and
critical support for the development of new export industries. Export oriented FDI resulted in stimulated the manufacturing sector in these countries. During the period from 1980-1990 manufacturing industry exports almost tripled from 21.8 percent to 59.8 percent for all ASEAN countries. Indonesia’s percentage increase was 15.6 times while Singapore and Thailand also made impressive gains (Yueng and Lo, 1996). In general the exports from the Asia Pacific region increased dramatically after 1985. The four Asian NIEs and the ASEAN countries accounted for only 12 percent of world exports in that year, but by 1993 their share had climbed to 19 percent. It has been estimated that Asia Pacific exports will reach 23 percent of total world trade in 1998 and this figure does not include Japan’s contribution, nor China’s increasingly significant one (U.S News and World Report, 17 May 1993: 61). Outward-oriented export expansion based growth has been the most important factor in explaining their escaping the fate of African and Latin American countries during that period. For example, Indonesia was hard hit by the drop in oil prices, but still overcame “Dutch disease”\textsuperscript{13} in the mid-1980s as it switched from oil revenue to other types of goods and services for its export led growth (Saldi, 1989). The structural changes associated with FDI inflows allowed Asian NIEs and ASEAN nations to first switch to export manufacturing before subsequently increasing their production capacities.

The third wave of foreign investment and development occurred after the mid-1980s and centered on China. In the early 1980s four Special Economic Zones in Guangdong and Fujian in Southern China saw rapid development because of their special privileges in setting policies to make foreign investment attractive and

\textsuperscript{13} “The Dutch disease” is a term used to describe a phenomenon first observed in the Netherlands in the 1970s. When oil was discovered and exported, it caused an appreciation in the real exchange rate of the Netherlands, making its exports less
propitious. With positive results from this experiment, Premier Zhao Ziyang was able to introduce an ambitious plan to extend the practice of encouraging FDI to fourteen other cities along the coast in 1984. Then, in 1990 a successful new development area was designated in the Pudong area near Shanghai. The governmental efforts in the Pudong New Area of Shanghai helped to turn the city from a domestic economic center to an international metropolis between 1990 to 1995 with the inflow of US$ 8.52 billion (Ning and Wang, 1996). As China’s general open policy gathered momentum, FDI converged on its coastal cities making them the generators of over 53 percent of the total Chinese GDP (Ning, 1996).

China has now become the magnet for FDI in the region. In 1992 China approved 48,764 foreign investment projects, with the contracted amount reaching US$ 58.1 billion, of which US$ 11 billion was utilized. These are increases of 276 percent, 385 percent and 152 percent respectively over the previous year (Xiaoji, 1995). Although as early as 1986 more than half of China’s import and export trade went into the Asia-Pacific region (Yu, 1989) the massive inflow of FDI into Chinese coastal cities, particularly from Japan,14 has tightened regional economic integration and secured China’s role in the region’s growth.

By early 1990s the region experienced increased investments from the Asian NIEs, ASEAN and non-regional economies. By 1994, FDI from the individual Asian NIEs into the region was approaching the levels of flow from Japan and in the case of Hong Kong tripled Japanese investments (Table 8). During that year, the investments from these countries were primarily directed at ASEAN and China. However, Japan competitive and causing a relative decline in its manufacturing sector. See W. M. Corden and J. P. Neary, 1982 “Booming sector and deindustrialization in a small open economy,” Economic Journal, Vol. 92, December, pp. 825-848.
has maintained a considerable investment interest despite its sagging post-bubble economy. In the early 1990s, Japanese manufacturers, particularly machine makers continued to invest heavily in the region. The shares of Japanese manufacturing FDI in Asia has grown from 19.8 percent in 1990 to 32.9 percent in 1993 while falling from 43.9 percent to 37.2 percent in North America and from 29.7 percent to 18.3 percent in Europe during the same period (Fukushima and Kwan, 1995). Japanese FDI increased sharply in Thailand during 1993 and 1994 as Casio, Sony, Toyota and Honda expanded their production capacities. Japanese firms also have recently increased investments in the Philippines, Indonesia, Malaysia and China (Hatch and Yamamura, 1996). Heightening the draw of investment is the growing market for final consumption of goods and services among many developing countries in the region.

While in general, the percentage of FDI to domestic capital formation in NIEs and ASEAN is not large, it is still vitally important to these countries. By 1996, the ratio of FDI inflows to gross domestic fixed capital did not exceed 8.2 percent in developing countries, but were much higher for Asian countries like Singapore (24.6 percent), Malaysia (17.9 percent) and China (25.7 percent) (UNCTD, 1997). Further FDI flows into the NIEs and ASEAN represents continuous technological uplift. For example, Japanese joint ventures promoted technology transfer through on-the-job training (OJT), quality control (QC), and production management (Yamashita, 1991). In 1992, of 231 affiliates surveyed, 54 percent of all TNCs operating in South, East and South East Asia have transferred their management technologies and quality controls (UNCTD, 1995). Technological diffusion is having a cumulative impact on

---

14 In 1994 there were 636 cases of FDI from Japan alone, slated for the Chinese mainland (Hatch and Yamamura, 1996).
economic growth. Domestic firms in Malaysia, for example, have acquired substantial operation and process adaptation knowledge and experience in the production processes in the electronics industry through foreign investments (Salleh, 1995).

The flows of FDI and transfers of technologies have had a synergistic affect on both inter- and intra-regional trade and have made the region economically complementary. Since the economies of Japan, Asian NIEs, ASEAN and China are at different stages of economic development, have different population sizes, resource endowments and structures of production, the combination of shifting comparative advantage for certain industries and inter-regional FDI investment flows have strengthened structural interdependency. This has stimulated plans for the manufacturing of entirely regional products. Nissan, for example, has announced plans to assemble the “first truly regional, strategic vehicle,” called the NV (New Vehicle) with parts coming from Thailand, Taiwan, Malaysia, Philippines and Japan (Hatch and Yamamura, 1996:26). Over the recent past the spread of industrialization from Japan to the NIEs and then to ASEAN has facilitated the international division of labor and allowed countries at different stages to climb up the comparative advantage ladder (Yamazawa and Lo, 1993). The East Asian Industrial Belt that has developed will only get stronger with continued political stability, the growing openness of China and the trend away from trade and investment protectionism.15

---

2.0 Urban Transformations in Asia-Pacific

At the center of global integration are the inter-linkages of cities and major metropolises into a world city system. The rise and then stagnation of OPEC cities, the debt burden of Latin American metropolises, the stagnation of import-substitution industries in African urban centers and the rising role of Tokyo and other Asian cities as new trade and financial centers in the world economy clearly demonstrate how the major metropolitan centers in the world have been affected by global structural adjustments.

Previously urban scholars believed that cities, metropolises, or megalopolises took their shape and character from the economic and social processes largely operating within the limits of national territories. However, the movements of capital, people and information have expanded urban hinterlands across national boundaries. The new “borderless” economy has resulted in the development of an international hierarchical system of cities and international transactions now impinge on city form. The system of cities that has developed in East and South East Asia is based on integrated sets of economic functions. This section reviews the structural linkages between cities in the region and the development of the Asia-Pacific city system. The differentiated process of world city formation has further compelled cities to enhance their international roles. The resulting patterns of urban development demonstrate that both domestic and international forces order city forms.
2.1 The Structural Linkage of Cities in the Asia-Pacific Region

Among a variety of developing urban networks within the Asia-Pacific region, the emergence of a large urban corridor has been identified (Lo and Yeung, 1995). This corridor stretches between the Tokyo area and northeast China via the two Koreas to Malaysia, Indonesia and the Philippines. A bird’s eye view of the area suggests that the urban corridor is composed of a set of smaller scale urban corridors including the Pan-Japan Sea Zone, the Pan-Bohai Zone and the South China Zone, among others (Figure 2). Choe (1996) has provided the best illustration of a mature transnational sub-regional urban corridor, in which an inverted S-shaped 1,500-km urban belt from Beijing to Tokyo via Pyongyang and Seoul connects 77 cities with over 200,000 inhabitants each into an urban conglomeration of over 97 million people!

In the past urban scholars thought that echelons of connected cities organized by city size, the operations they performed for the immediate surrounding area, and the nature of local trading relationships constituted urban systems. Central place theory attempted to address urban system structures (in terms of size, spacing of cities and the configuration of their market areas) by concentrating on the interdependence of urbanization and local (national) trade. However, given recent changes in the global economy and the changing nature of trade, it is useful to consider urban system development in light of the central role of cities in the “borderless” economy. City size alone is no longer a good indicator of importance (Chase-Dunn, 1985; King, 1990), rather the basis of a city’s centrality in the global system is its articulation into a functional network of cities (Heenan, 1977; Friedmann and Wolff, 1982; Timberlake, 1985; Henderson and Castells, 1987).
The urban corridor in the Asia-Pacific region is not simply a set of mega-cities exclusively providing goods and services, markets and governmental services for individual nations. It is a transnational system of functionally integrated cities. This network of cities links, in a hierarchical manner, the nations in the region through the imperatives (trade, finance, investments, transportation, commerce, banking, services, government administration, manufacturing production and so on) of globalization. It has therefore been referred to as a functional city system (Yeung and Lo, 1996). The implication of this system is that the accumulation of networks provides the basis for development and the measure of a city’s international importance.

However, the functional city system in the Asia-Pacific region is enhanced through the dual importance of networked cities as both international and domestic centers of growth. Table 9 demonstrates how important some individual cities in the region are to their domestic economies. These figures are conservative estimates and show that both the population and percent share of GDP is concentrated in single urban centers. If the boundaries of these cities were extended to encompass the extended metropolitan area for each locality, the shares of these indicators would increase substantially. In 1992 DKI Jakarta and its surrounding administrative districts, collectively called Jabotabek, accounted for over 23 percent of the GDP of Indonesia (BAPPENAS, 1996). Notwithstanding the importance of the metropolitan region, the figures in this table demonstrate the importance of these central city areas to the domestic production of their respective countries.

---

16 In 1973 DKI Jakarta was incorporated into a larger metropolitan region through the promulgation of Jabotabek. This urban agglomeration combines the metropolitan area of Jakarta (Ja) with the surrounding kabupatens (administrative regions) of Bogor (Bo), Tangerang (Ta), and Bekasi (Bek). A joint development cooperative board was established with the responsibility of coordinating development in this region.
At the same time these cities are the sites of international transactions, such as FDI flows, international trade and transportation and communication networks as discussed previously. As Table 9 also indicates, a large proportion of the FDI into the nations in the region flows into the major urban centers. In many nations FDI inflows are predominately directed to these primate cities. In 1993, Bangkok, Manila and Jakarta all received over 40 percent of all foreign investments into their respective countries. These relationships represent developing trends. Between 1967 and 1991, investment in Jakarta accounted for one fifth and one third of total domestic and foreign investment projects, respectively. These shares would double if the Botabek region outside of Jakarta, were included. Bogor, Tangerang and Bekasi accounted for more than half of domestic investment and almost 50 percent of foreign investment cumulatively from 1967 to the end of 1990 (Soegijoko, 1996). In Bangkok, from 1979 to 1990, 67.8 percent of all approved foreign direct investment for Thailand was located in the surround five provinces (inner ring) of the city (Krongkaew, 1996).

International trade also flows through these cities. Singapore and Hong Kong, as city-ports, represent extreme cases of trade-city nexus. Singapore’s exports of goods and nonfactor services were 170 percent of it’s GDP in 1990 and during the same year Hong Kong’s exports were 137 percent of its GDP trade (World Bank, 1992). While the large volume of trade does not represent the imports of good consumed in the city and amount of exports are not strictly related to internal production, the traffic adds to significantly to urban economic growth via the necessity to service trade flow. In other cities, trade from domestically produced and consumed goods and services are important to economic growth. In Jakarta, Indonesia the 1989 value of the city’s exports accounted for one-third of Indonesia’s exports (excluding
oil and gas) and the city's share of trade has been increasing since 1986. During that same year, 50 percent of all imports to the country moved through the city (Soegijoko, 1996).

Global and regional integration is highly dependent on transportation and communication networks. Transportation networks are developing rapidly in the region. Eleven of the top 25 container ports that dominate world container traffic are now located in East and South East Asia and the region also has 6 to 7 of the busiest airports in the world, carrying both passengers and freight to global destinations (Rimmer, 1996). Meanwhile, the diffusion of information technologies has progressed in few developing countries, but among those nations where it has begun to proliferate are the Asian NIEs, including Hong Kong, Korea, Singapore, and Taiwan (Soubra, 1995).

Regional integration is also based on political relations among nations and cities. Many nations in the region have attempted to enhance their integration into the global economy by liberalizing FDI, finance and trade policies (World Bank, 1993). Urban areas in northeast Asia and the Asia-Pacific region have also been initiating regional cooperative efforts on a city-to-city basis. Some medium-sized cities (Kobe, Kitakyushu, and Niigata in Japan, Khabarovsk, Sakhalin and Irkutsk in the Commonwealth of Independent States and Jilin, Dalian, and Hunchun in China) are actively engaged in political efforts to establish cross-national linkages (Hong, 1996).

These conditions strongly suggest that within the Asia-Pacific region an integrated system of urban-based networks is developing into a large urban corridor.
Those cities integrated into the system have been undergoing changes related to their roles. These changes have a profound impact on the physical form of the city.

2.2 World City Formation

While local economic, political and social influence continues to play a major role in shaping cities, the changing world economy has brought attention to regional and global impacts on the physical character of urban centers, particularly those articulated to the world economy (Sassen, 1994). A number of works have attempted to identify the urban centers that should be included into the category of “world cities” (Cohen, 1981; Friedmann, 1986; Soja, 1986; King, 1990; Sassen, 1991). These attempts usually characterize world cities as those that provide advanced financial services, business services, headquarters of TNCs, and international institutions and transportation linkages. Therefore a valuable approach to the study of the cities in the Asia-Pacific region is to identify the physical changes that have accompanied their integration into the larger system. Identifying changing patterns in urban form and conceptualizing world city formation as a process is critical to the understanding of the functional city system.

In order to be effective in the global and regional economies, cities in the region have been preparing themselves in a variety of ways. Many cities have not spared any efforts or costs in infrastructure investment, creating space within their administrative boundaries and improving themselves, physically and economically, so as to be able to enhance their roles as command posts, financial centers, headquarters venues, transport hubs and industrial centers. The improvements to urban infrastructure to accommodate globalization needs include new transportation
facilities, technological oriented modern buildings, financial districts and new town development. International economic flows have also been facilitated by a variety of government policies to attract investments and direct FDI to specific locations.

Asian cities have recently invested massively in physical transportation infrastructure to cope with rapidly growing global traffic. One increasingly popular project is the construction of huge and futuristic airports, such as, Chek Lap Kok in Hong Kong, Kansai in Osaka, the Seoul Metropolitan Airport and Nong Ngu Hao in Bangkok. Other cities, such as Taipei and Singapore,\(^{17}\) are busy upgrading and expanding existing facilities (Japan Development Bank, 1996).

The establishment of infrastructure for information networks is indispensable to the global economy, particularly because of the recent shift in emphasis, mostly deeply felt in the developed world, to a postindustrial or “information society.” World cities in formation are increasingly network-dependent and technologically oriented. Cities are the best providers of telecommunication services among the nations of East and South East Asia. For example, 2 to 3 times the percentage of urbanites enjoy telecommunications links in the cities of Bangkok, Manila, Jakarta, Shanghai than those in smaller cities and the average rural dweller in their respective countries (Japan Development Bank, 1996). It is no wonder that large telecommunication projects have also become important parts of the urban landscape. The Teleport project in Tokyo built on a landfill in Tokyo Bay, less than 6-km from downtown is the best example of this type of development. The town, planned as an information and futuristic city, when completed will consist of elegant apartment blocks for 60,000 people and high-tech companies offering 110,000 jobs, in fields such as
telecommunications, information, international business, information networking, advertising, printing, etc. The estimated construction cost of the area’s infrastructure alone is approximately US$ 20 billion (TMG, 1996).

Many Asian cities have also striven to construct “intelligent” buildings following similar innovations in American cities. The Mitsui New No. 2 Building in Tokyo, completed in 1985, is regarded as the first built in Asia. Since then Manila has completed a 32 story Stock Exchange Center in 1992, which is run by an electronic nerve center and able to monitor the internal conditions of the building by regulating air conditioning and lighting. Seoul’s Sixty-four Building, Hong Kong’s Central Plaza, and Kuala Lumpur’s Petrona Towers are large building of similar design.

Along with high-tech building construction, Asia cities have also invested in R&D complexes. In Singapore, Taipei and Seoul, industrial parks have operated with success, prompted and supported by government and private investments. In Japan, the government has encouraged the construction of entire technologically advanced cities or “technopolises” such as Tsukuba Science City located 60-km northeast of Tokyo. Tsukuba is a small city built for high-tech industries, research institutes, residential housing and universities. Taiwan used this model to create Science Park, a new R&D and high-technology manufacturing center located in Hsinchu.

An intensified urban renewal process (to increase and reuse space) is often an important part of development plans for Asian cities. This process has taken on a variety of forms. Legislation and the cooperation of the public and private sectors have facilitated the re-development of much of the central city area of Singapore since 1960s. Hong Kong moved in this direction with the establishment of the Land

---

17 Singapore has plans to enlarge their airport, Changi, so that it can handle over 2 and half more airplane take-offs (360,000) a
Development Corporation. On a smaller scale, many cities have witnessed neighborhood gentrification, whereby the physical and economic uplift of an area has been realized. When unimproved land wasn’t available it was reclaimed. The Kansai, Chek Lap Kok and Seoul airports are all built on reclaimed land. In Singapore, much of the east coast has been reclaimed over the last two decades, giving way a new commercial and business centers such as Marine Parade. Tokyo, too, has been expanding through landfills along the Tokyo Bay since the 1960s for its booming industries and a new airport. The Haneda airport, only 15-km from the city center, was originally built as an international facility, but has only supported a domestic role after the opening of Narita. The demand for space in Hong Kong since the mid-nineteenth century has also necessitated land reclamation from its deep-water harbor.

Since the 1970s, private capital has been attracted to public development through incentives such as low taxes, large subsidies and deregulated business environments. Cities in Asia have strenuously sought FDI through relaxation of restrictive regulations. Consequently, the urban space of some cities has become an arena for large-scale capital accumulation. In certain cities this has resulted in a “bubble” where land prices far exceed their value. The collapse of the bubble in Tokyo in the early 1990s and most recently in Bangkok deeply affected their respective national economies.

World city formation is a continuing and varied process. An understanding of this process neither provides a prediction as to whether a particular city in the region will be able to participant in globalization driven growth in the future, nor will it make possible the determination of a defined development path for all cities. Urban growth
is a highly complex phenomenon and is influenced by national and local circumstances. For example, not all cities promote similar infrastructure developments. However, within the large number of cities in the region that are articulated to the functional city system, the recent and rapid changes to cities are both a result of and preparation for global and regional integration. A general pattern is emerging within those cities based on the hierarchical functions performed within their boundaries. The last section presents a generalized pattern of development among cities in the Asia-Pacific region. This categorization is not meant to be exhaustive but rather demonstrates some of the various ways that international functional networks are impacting city growth and development.

2.3 Emerging Patterns of Urban Development

Although globalization connotes an increasingly homogenized world, and has led to the use of such labels as “global village,” “global market-place” or “global factory,” claims of a seamless urban space are oversimplifications. As has been argued in this paper, globalization has impacted regions and countries differently. Similarly, networked cities have not developed uniformly. The demands of the emerging city system in the region have been different for each city depending on the set of functions performed by the city. Hence, the ensuing world city formation process shaping each city has been different. Among a variety of “types” of city forms that are emerging, three are common. These forms include post-industrial centers (e.g. Tokyo, Japan and to a lesser extent Seoul, Korea and Taipei, Taiwan), industrial centers (e.g. Jakarta, Indonesia, Shanghai, China, and Bangkok, Thailand) and borderless cities (Singapore and Hong Kong, China). These general categories of
urban development provide an example of the emerging regional urban system pattern.

The post-industrial city is dominated by the processing of information and knowledge (Savitch, 1988). Tokyo and Seoul exemplify cities in Asia that are currently undergoing this type of development. Both are large cities, with high levels of infrastructure development and intensive commercial office development. Employment in manufacturing is decreasing while the city is host to a variety of central management functions (banks, accounting firms, legal firms, TNC headquarters). Both Seoul and Tokyo are similar in that they house a high concentration of CMFs, R&D firms and government agencies. These cities are important command and control centers for the global economy.

In the 1960s, Tokyo emerged as a national magnet in the Japanese economy, but it was in the 1970s that the city developed as a national financial, telecommunications and transnational corporation center. The size and density of the city was enhanced with the advent of globalization in the 1980s. By then Tokyo’s economic reach became global and corporate organizations responded by restructuring and relocating manufacturing production to cities abroad, particularly in the Asia-Pacific region, but by also retaining key central managerial and R&D functions. Already established nodes of commercial development within the city, such as Shibuya, Ikebukoro and Shinjuku, experienced even more intensive development and high rise construction. Meanwhile the working population continued to expand the urban agglomeration to more than 30 million inhabitants within a daily commuting distance of some 50-km from the city center.
Korea’s industrialization process was even more intense than that of Japan and like Japan, Korea’s government also played a large role in the development process. Seoul, the largest and most important city in the country, grew together with Korea’s rapid economic development. The service and high-tech activities of the entire Korean economy are highly concentrated in this primate city. All of Korea’s TNCs are based in the capital city and enjoy close contact with the central government (Brotchie, 1995). While new “downtowns,” across the Han River have been created by moving the various back offices into intelligent buildings, Seoul retains the most important CMFs functions (Kwon, 1996).

Industrial manufacturing processes are vitally important to the growth and development of the region and hence these centers play an important role in the functional city system. Industrial centers include urban areas such as Bangkok, Jakarta and Shanghai. These urban centers have recently experienced a rapid decline in agriculture and an increase in industrial concentration and then decentralization. The original industrial activity start-ups resulted, in large part, from the inflow of foreign direction investment. This change in economic activity has created a dynamism that has resulted in rapid land use changes, settlement creation, and proliferation of many different types of traffic responses (Macleod and McGee, 1996). Areas outside the industrial centers urban core have relatively more available land and somewhat less stringent regulatory controls on manufacturing-related growth and investment by transnational corporations. Global integration has affected their pattern of development. A ring of manufacturing plants has concentrated in a donut fashion around not only Jakarta and Bangkok, but also is forming around cities like Shanghai (Cui, 1995). This development is an extremely strong pull factor affecting the
urbanization process in each country. In China, for example, the steady flow of people to the industrial cities along the Pacific coast has reversed the pre-1978 trend of decentralization and is predicted to continually increase unless there is strong government intervention (Yeh, 1995).

The new climate of economic globalization has also spurred sub-regional economic cooperation in several locales and others are being planned for implementation. Growth triangles, a development pattern that started in the 1980s, are localized economic zones involving several countries and can be viewed as “borderless” economies where the international division of labor has developed to the city’s advantage (Thant, Tang, and Kakazu, 1995).

Cities that have been impacted by borderless economies can no longer be considered distinct economies but are really part of a larger extended metropolitan region (EMR) (Ginsburg, Koppel, and McGee, 1991; Macleod and McGee, 1996). EMRs may stretch up to 100 km from an urban core and are characterized by high levels of economic diversity and interaction, a high percentage of non-farm employment and a “deep penetration of global market forces into the countryside” (Macleod and McGee, 1996:418). The processes of economic and spatial development need increasingly to be seen as regional rather than rural or urban. An existing and successful “borderless” economy has grown between Singapore, Malaysia (Johore) and Indonesia (Riau Islands) and is called SIJORI. It revolves around Singapore, which has recently reached out to acquire the benefits that rural industrialization can provide. The growth of the outer reaches of Singapore’s core was directly related to the Singapore’s maturing economy. The flows of people and
goods from the city to the outlying areas accompanied an increasing level of cross-border capital flows.

Another example of cross-border cooperative development, involving capital, technological and managerial inputs involves the integration of Hong Kong, Taiwan and China’s southern provinces of Guangdong and Fujian. Hong Kong is the center of the Zhujiang Delta and has emerged as a financial and headquarters center. A large proportion of the manufacturing production in Hong Kong has been relocated to southern Guangdong in China. Apart from Guangzhou, Shenzhen, Zhuhai and Huizhou most other cities within the delta are basically labor- and land-intensive production areas. They are dominated by manufacturing with a small tertiary sector. About 3 to 5 million workers in this part of China are reportedly employed in factories funded, designed and managed by Hong Kong entrepreneurs. Further, about 20.8 percent of Hong Kong’s imports are from the interior of China and 31 percent of her exports went to China (Sung, 1991). Between Hong Kong and Shenzhen alone 805,000 TEUs of goods pass through road checkpoints in addition to the 281,000 TEUs ferried there by river vessels (Chu, 1996).

In July of 1997, China reabsorbed Hong Kong. However, the “borderless” economy of the city still exists, perhaps even more so. Taiwanese capital has been attracted to the city and much of it has been channeled through Hong Kong intermediaries to the mainland. This is particularly true for Taiwanese investments in rapidly growing cities such as Shanghai (Ning and Wang, 1996). Also trade relations between China, Hong Kong, Taiwan are fully integrated and considered an important part of each country’s continued growth (Hwang, 1995).
The patterns described for individual cities are, at best, general development patterns. Therefore it is not expected that every city in the Asia-Pacific functional city system will fit into this typology. The patterns do represent the impacts of international influences on the growth and development of cities. For example, Bangkok is both the Primate City and capital of Thailand and holds an important position among the network of cities in the region.

3.0 Conclusions

This paper has attempted to explain the logic of globalization and how this logic has played out in East and Southeast Asia region. Global transactions and relationships have been shaped by increased international trade, investments, financial flows, telecommunications and new waves of technologies, among other factors. The result has been a more integrated yet functionally differentiated spatial pattern of economic activity.

At the center of this global economic integration and structural adjustment is the inter-linkage of mega-cities and other major metropolises, which forms a functional city system. Cities are the engines of economic growth in the new global economy. In the Asia-Pacific region, because of intense economic integration and interdependence, an urban corridor has developed.

Those cities integrated into the functional city system are undergoing the process of world city formation. Whether they are labeled as “world cities” is irrelevant. Their inclusion in the system has had direct affects on their form and growth. The demands of the new economic and social order within the region has selectively included cities within the urban corridor running from Tokyo to Jakarta,
i.e., large coastal cities with good transportation and communication access. More trade and economic interactions are translated directly into a growing number of airports, container ports and teleports. These major infrastructure provisions are but a few examples of the world city formation process in action.

The urban system in the region is composed of hierarchically integrated cities. Typical examples of cities that are considered the nerve centers of the system are Tokyo, Seoul and Taipei. While they have retained the command and control roles of the regional and global economy, other aspects of production and distribution have decentralized to locations in other NIEs and ASEAN countries. At a lower intensity of decentralization, cities such as Hong Kong and Singapore have developed “borderless” economies, although their economies have retained a strong neighborhood character. Finally, the industrial centers, such as Jakarta, Shanghai and Bangkok have developed an urban growth pattern resembling a donut with commercial development occurring in the center of the city and manufacturing firms locating around the periphery. Each of these types of cities are integrated into the developing urban corridor of East and South East Asian and make up essential components of the Asia-Pacific city system.

The integration within the world city system enhances polarization within a particular nation and locality. Those areas that have been included act as magnets that continually draw people from the countryside. The rapidity of these changes has created urban environmental stress that will challenge each city’s growth potential in the future. It is necessary for city managers to understand both the domestic and international roles of their cities in order to confront the challenges before them and position their cities for continued growth in the twenty-first century.
### Table 1  Share of Service Sector in GDP of G7 Countries, 1960-1993

<table>
<thead>
<tr>
<th>Country</th>
<th>1960</th>
<th>1993</th>
<th>% Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>USA</td>
<td>58</td>
<td>75 (a)</td>
<td>29.31</td>
</tr>
<tr>
<td>UK</td>
<td>53</td>
<td>65</td>
<td>22.64</td>
</tr>
<tr>
<td>France</td>
<td>52</td>
<td>69</td>
<td>32.69</td>
</tr>
<tr>
<td>Germany</td>
<td>41</td>
<td>61</td>
<td>48.78</td>
</tr>
<tr>
<td>Japan</td>
<td>42</td>
<td>57</td>
<td>35.71</td>
</tr>
<tr>
<td>Canada</td>
<td>60</td>
<td>71</td>
<td>18.33</td>
</tr>
<tr>
<td>Italy</td>
<td>46</td>
<td>65</td>
<td>41.30</td>
</tr>
</tbody>
</table>


### Table 2  Shares of Manufacturing in GDP, 1976-1993

<table>
<thead>
<tr>
<th>Country</th>
<th>1960</th>
<th>1993</th>
<th>% Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>USA</td>
<td>29</td>
<td>18 (a)</td>
<td>-37.93</td>
</tr>
</tbody>
</table>
UK 32 25 -21.88  
France 29 22 -24.14  
Germany 40 27 -32.50  
Australia 26 15 -42.31  
Japan 34 24 -29.41  
Korea 14 29 107.14  
Hong Kong 25 13 -48.00  
Taiwan 35 (b) 39 (b) 11.40  
Singapore 12 37 208.33  
Malaysia 9 19 (c) 11.11  
Indonesia 8 22 175.00  
Thailand 13 28 115.38  
Philippines 20 24 20.00  
China 32 38  
Argentina 26 20 -37.50  
Brazil 32 20 -23.08  
Mexico 32 20 -13.04  

(a) 1991 Figure, From Survey of Current Business, 1993  
(b) Share of industry to GDP, from ADB, Asian Development Outlook, (various years) Hong Kong: Oxford U. Press  
(c)1985 figure

Table 3 GDP Annual Average Growth Rates of Selected Economies, by Decade

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>USA</td>
<td>4.3</td>
<td>2.8</td>
<td>3.4</td>
</tr>
<tr>
<td>UK</td>
<td>2.9</td>
<td>2</td>
<td>3.1</td>
</tr>
<tr>
<td>France</td>
<td>5.7</td>
<td>3.2</td>
<td>2.2</td>
</tr>
<tr>
<td>Germany</td>
<td>4.4</td>
<td>2.6</td>
<td>2.1</td>
</tr>
<tr>
<td>Australia</td>
<td>5.5</td>
<td>3</td>
<td>3.4</td>
</tr>
<tr>
<td>Japan</td>
<td>10.5</td>
<td>4.3</td>
<td>4.1</td>
</tr>
<tr>
<td>Korea</td>
<td>8.6</td>
<td>9.6</td>
<td>9.7</td>
</tr>
<tr>
<td>Hong Kong</td>
<td>10</td>
<td>9.2</td>
<td>7.1</td>
</tr>
<tr>
<td>Taiwan *</td>
<td>9.7</td>
<td>9.7</td>
<td>7.8</td>
</tr>
<tr>
<td>Singapore</td>
<td>8.8</td>
<td>8.3</td>
<td>6.4</td>
</tr>
<tr>
<td>Malaysia</td>
<td>6.5</td>
<td>7.9</td>
<td>5.2</td>
</tr>
<tr>
<td>Indonesia</td>
<td>3.5</td>
<td>7.2</td>
<td>5.5</td>
</tr>
<tr>
<td>Thailand</td>
<td>8.2</td>
<td>7.1</td>
<td>7.6</td>
</tr>
<tr>
<td>Philippines</td>
<td>5.1</td>
<td>6</td>
<td>0.9</td>
</tr>
<tr>
<td>China</td>
<td>9.2</td>
<td>-</td>
<td>9.5</td>
</tr>
<tr>
<td>Argentina</td>
<td>4.2</td>
<td>2.5</td>
<td>-0.4</td>
</tr>
<tr>
<td>Brazil</td>
<td>5.4</td>
<td>8.1</td>
<td>2.7</td>
</tr>
<tr>
<td>Mexico</td>
<td>7.2</td>
<td>6.3</td>
<td>1</td>
</tr>
</tbody>
</table>

40

*ADB, Asian Development Outlook* (various years), Hong Kong: Oxford U. Press,

Note: Italics indicate estimates.

Table 4 Annual Average Growth Rates of Trade (Percentage)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>World</td>
<td>6.5</td>
<td>9.2</td>
<td>20.3</td>
<td>6.1</td>
</tr>
<tr>
<td>Developed Market Economies</td>
<td>7.1</td>
<td>10.0</td>
<td>18.8</td>
<td>7.8</td>
</tr>
<tr>
<td>North America</td>
<td>5.1</td>
<td>8.7</td>
<td>17.0</td>
<td>5.9</td>
</tr>
<tr>
<td>EC (a)</td>
<td>8.4</td>
<td>10.2</td>
<td>19.3</td>
<td>8.3</td>
</tr>
<tr>
<td>Developing Countries</td>
<td>3.1</td>
<td>7.2</td>
<td>25.9</td>
<td>2.2</td>
</tr>
<tr>
<td>South America (b)</td>
<td>2.3</td>
<td>5.1</td>
<td>20.6</td>
<td>2.3</td>
</tr>
<tr>
<td>Sub-Saharan Africa</td>
<td>4.8</td>
<td>7.8</td>
<td>20.0</td>
<td>-2.0</td>
</tr>
<tr>
<td>South and South-East Asia</td>
<td>0.2</td>
<td>6.7</td>
<td>25.8</td>
<td>10.8</td>
</tr>
</tbody>
</table>

New York: United Nations, Table 1.5 and 1.6 pp. 16-25.

(a) Includes Belgium-Luxembourg, Denmark, France, Germany, Greece, Ireland, Italy, Netherlands
    Portugal, Spain, and United Kingdom.
(b) Includes Argentina, Brazil, Chile, Mexico, Paraguay and Uruguay.
Table 5: Selected Indicators of FDI and International Production, 1986-1996

<table>
<thead>
<tr>
<th>Item</th>
<th>Value at current prices (Billions of US dollars)</th>
<th>Annual Growth Rate (Percent)</th>
</tr>
</thead>
<tbody>
<tr>
<td>FDI Inflow</td>
<td>317</td>
<td>349</td>
</tr>
<tr>
<td>FDI Inward Stock</td>
<td>2,866</td>
<td>3,233</td>
</tr>
<tr>
<td>Sales of Foreign Affiliates</td>
<td>5933 (c)</td>
<td>6412 (d)</td>
</tr>
<tr>
<td>Total Assets of Foreign Affiliates</td>
<td>7091 (c)</td>
<td>8343 (d)</td>
</tr>
<tr>
<td>Gross Fixed Capital Formation</td>
<td>6,088</td>
<td>NA</td>
</tr>
<tr>
<td>Exports of goods and Non-factor Services</td>
<td>5,848</td>
<td>6,111</td>
</tr>
</tbody>
</table>

(c) 1993
(d) 1994
(e) 1991-1994
(f) 1991-1995
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>World</td>
<td>141.9</td>
<td>158.9</td>
<td>349.2</td>
<td>1,455.3</td>
<td>242.5</td>
<td>17.1</td>
</tr>
<tr>
<td>Developed Countries</td>
<td>116.7</td>
<td>114.8</td>
<td>208.2</td>
<td>929.7</td>
<td>155.0</td>
<td>12.6</td>
</tr>
<tr>
<td>European Union</td>
<td>52.7</td>
<td>78.8</td>
<td>99.4</td>
<td>526.3</td>
<td>87.7</td>
<td>4.8</td>
</tr>
<tr>
<td>North America</td>
<td>53.9</td>
<td>25.5</td>
<td>91.3</td>
<td>317.6</td>
<td>52.9</td>
<td>29.0</td>
</tr>
<tr>
<td>Other</td>
<td>10.2</td>
<td>10.5</td>
<td>17.5</td>
<td>85.8</td>
<td>14.3</td>
<td>10.8</td>
</tr>
<tr>
<td>Developing Countries</td>
<td>24.7</td>
<td>41.7</td>
<td>128.7</td>
<td>479.9</td>
<td>80.0</td>
<td>25.3</td>
</tr>
<tr>
<td>Latin America</td>
<td>8.1</td>
<td>15.4</td>
<td>38.6</td>
<td>140.6</td>
<td>23.4</td>
<td>20.2</td>
</tr>
<tr>
<td>South, East and Southeast Asia</td>
<td>12.4</td>
<td>21.2</td>
<td>81.2</td>
<td>298.3</td>
<td>49.7</td>
<td>30.8</td>
</tr>
<tr>
<td>Other</td>
<td>4.2</td>
<td>5.1</td>
<td>8.9</td>
<td>41.0</td>
<td>6.8</td>
<td>11.8</td>
</tr>
<tr>
<td>Central and Eastern Europe</td>
<td>0.5</td>
<td>2.4</td>
<td>12.3</td>
<td>45.6</td>
<td>7.6</td>
<td>38.0</td>
</tr>
</tbody>
</table>

### Table 7 Comparative Scale of Metropolitan Economies in major East Asian Cities, 1993

<table>
<thead>
<tr>
<th>City</th>
<th>Number (10,000)</th>
<th>National Share (%)</th>
<th>Amount (100,000 US$)</th>
<th>National Share (%)</th>
<th>Inner City (%)</th>
<th>Inner Metropolitan Area (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Singapore</td>
<td>293</td>
<td>100.0</td>
<td>551</td>
<td>100.0</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Kuala Lumpur</td>
<td>115</td>
<td>6.5</td>
<td>71</td>
<td>11.2</td>
<td>0.4</td>
<td>20.5</td>
</tr>
<tr>
<td>Bangkok</td>
<td>555</td>
<td>9.9</td>
<td>531</td>
<td>42.6</td>
<td></td>
<td>46.8</td>
</tr>
<tr>
<td>Manila</td>
<td>793</td>
<td>13.6</td>
<td>175</td>
<td>32.2</td>
<td>14.7</td>
<td>56.1</td>
</tr>
<tr>
<td>Jakarta</td>
<td>826</td>
<td>4.6</td>
<td>201</td>
<td>12.7</td>
<td>15.2</td>
<td>45.7</td>
</tr>
<tr>
<td>Shanghai</td>
<td>953</td>
<td>0.8</td>
<td>262</td>
<td>4.4</td>
<td>8.9</td>
<td>20.6*</td>
</tr>
<tr>
<td>Hong Kong</td>
<td>606</td>
<td>100.0</td>
<td>1,164</td>
<td>100.0</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Taipei</td>
<td>265</td>
<td>12.7</td>
<td>305</td>
<td>13.5</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>Seoul</td>
<td>1,061</td>
<td>24.4</td>
<td>819</td>
<td>24.6</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>Tokyo (23 Ward)</td>
<td>816</td>
<td>6.7</td>
<td>5,254</td>
<td>12.4</td>
<td>NA</td>
<td>NA</td>
</tr>
</tbody>
</table>

*Includes entire Yangtsu delta area.

Table 5

Annual Average Growth Rates of Trade
(Percentage)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>USA</td>
<td>5.1</td>
<td>7.8</td>
<td>18.2</td>
<td>5.9</td>
</tr>
<tr>
<td>UK</td>
<td>4.8</td>
<td>6.3</td>
<td>18.4</td>
<td>5.8</td>
</tr>
<tr>
<td>France</td>
<td>6.4</td>
<td>9.8</td>
<td>19.8</td>
<td>7.7</td>
</tr>
<tr>
<td>Germany</td>
<td>16.6</td>
<td>11.4</td>
<td>19.1</td>
<td>9.6</td>
</tr>
<tr>
<td>Australia</td>
<td>0.9</td>
<td>7.7</td>
<td>15.9</td>
<td>6.3</td>
</tr>
<tr>
<td>Japan</td>
<td>15.9</td>
<td>17.5</td>
<td>20.8</td>
<td>8.9</td>
</tr>
<tr>
<td>Korea</td>
<td>1.4</td>
<td>39.6</td>
<td>37.2</td>
<td>15.1</td>
</tr>
<tr>
<td>Hong Kong</td>
<td>-0.4</td>
<td>14.5</td>
<td>22.4</td>
<td>16.8</td>
</tr>
<tr>
<td>Taiwan</td>
<td>6.5</td>
<td>23.2</td>
<td>28.6</td>
<td>14.8</td>
</tr>
<tr>
<td>Singapore</td>
<td>-0.1</td>
<td>3.3</td>
<td>28.2</td>
<td>9.9</td>
</tr>
<tr>
<td>Malaysia</td>
<td>0.6</td>
<td>4.3</td>
<td>24.2</td>
<td>8.6</td>
</tr>
<tr>
<td>Indonesia</td>
<td>-1.1</td>
<td>1.7</td>
<td>35.9</td>
<td>-1.3</td>
</tr>
<tr>
<td>Thailand</td>
<td>1.5</td>
<td>5.9</td>
<td>24.7</td>
<td>14.0</td>
</tr>
<tr>
<td>Philippines</td>
<td>4.5</td>
<td>7.5</td>
<td>17.5</td>
<td>3.8</td>
</tr>
<tr>
<td>China</td>
<td>19.1</td>
<td>1.3</td>
<td>20.0</td>
<td>12.7</td>
</tr>
<tr>
<td>Argentina</td>
<td>-0.2</td>
<td>4.8</td>
<td>18.0</td>
<td>2.1</td>
</tr>
<tr>
<td>Brazil</td>
<td>-2.0</td>
<td>7.2</td>
<td>21.7</td>
<td>5.1</td>
</tr>
<tr>
<td>Mexico</td>
<td>3.4</td>
<td>6.0</td>
<td>25.7</td>
<td>2.4</td>
</tr>
</tbody>
</table>

## Table 8

Intra-Regional Flows of FDI in East and Southeast Asia, 1994

(millions US dollars)

<table>
<thead>
<tr>
<th>Out</th>
<th>In</th>
<th>Japan</th>
<th>NIEs</th>
<th>Korea</th>
<th>Taiwan</th>
<th>Hong Kong</th>
<th>Singapore</th>
<th>ASEAN</th>
<th>Thailand</th>
<th>Malaysia</th>
<th>Philippines</th>
<th>Indonesia</th>
<th>China</th>
<th>FDI Outflows</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>1,667</td>
<td>428</td>
<td>391</td>
<td>249</td>
<td>598</td>
<td>4,894</td>
<td>2,556</td>
<td>673</td>
<td>103</td>
<td>1,563</td>
<td>2,075</td>
<td>8,636</td>
<td></td>
</tr>
<tr>
<td>Japan</td>
<td>NIEs</td>
<td>226</td>
<td>543</td>
<td>128</td>
<td>402</td>
<td>13</td>
<td>0</td>
<td>15,945</td>
<td>1,282</td>
<td>1,989</td>
<td>631</td>
<td>12,043</td>
<td>24,959</td>
<td>41,673</td>
</tr>
<tr>
<td>Korea</td>
<td>Taiwan</td>
<td>66</td>
<td>5</td>
<td>-</td>
<td>5</td>
<td>NA</td>
<td>NA</td>
<td>2,049</td>
<td>29</td>
<td>156</td>
<td>15</td>
<td>1,849</td>
<td>723</td>
<td>2,843</td>
</tr>
<tr>
<td>Hong Kong</td>
<td>25</td>
<td>68</td>
<td>65</td>
<td>-</td>
<td>3</td>
<td>NA</td>
<td>4,325</td>
<td>475</td>
<td>1,059</td>
<td>268</td>
<td>2,488</td>
<td>3,391</td>
<td>7,809</td>
<td></td>
</tr>
<tr>
<td>Singapore</td>
<td>77</td>
<td>267</td>
<td>43</td>
<td>224</td>
<td>-</td>
<td>NA</td>
<td>6,874</td>
<td>211</td>
<td>333</td>
<td>288</td>
<td>6,042</td>
<td>19,665</td>
<td>26,883</td>
<td></td>
</tr>
<tr>
<td>ASEAN</td>
<td>58</td>
<td>203</td>
<td>20</td>
<td>174</td>
<td>10</td>
<td>-</td>
<td>2,697</td>
<td>567</td>
<td>405</td>
<td>60</td>
<td>1,664</td>
<td>1,180</td>
<td>4,138</td>
<td></td>
</tr>
<tr>
<td>Thailand</td>
<td>6</td>
<td>29</td>
<td>6</td>
<td>8</td>
<td>15</td>
<td>0</td>
<td>-</td>
<td>766</td>
<td>75</td>
<td>5</td>
<td>216</td>
<td>469</td>
<td>499</td>
<td></td>
</tr>
<tr>
<td>Malaysia</td>
<td>0</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>NA</td>
<td>72</td>
<td>-</td>
<td>4</td>
<td>56</td>
<td>12</td>
<td>235</td>
<td>309</td>
<td></td>
</tr>
<tr>
<td>Philippines</td>
<td>0</td>
<td>23</td>
<td>5</td>
<td>3</td>
<td>15</td>
<td>NA</td>
<td>650</td>
<td>68</td>
<td>-</td>
<td>160</td>
<td>422</td>
<td>201</td>
<td>874</td>
<td></td>
</tr>
<tr>
<td>Indonesia</td>
<td>1</td>
<td>3</td>
<td>0</td>
<td>3</td>
<td>NA</td>
<td>NA</td>
<td>43</td>
<td>6</td>
<td>1</td>
<td>-</td>
<td>36</td>
<td>140</td>
<td>187</td>
<td></td>
</tr>
<tr>
<td>China</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>NA</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>-</td>
<td>116</td>
<td>117</td>
<td></td>
</tr>
<tr>
<td></td>
<td>7</td>
<td>25</td>
<td>6</td>
<td>NA</td>
<td>19</td>
<td>NA</td>
<td>25</td>
<td>89</td>
<td>7</td>
<td>17</td>
<td>91</td>
<td>-</td>
<td>57</td>
<td></td>
</tr>
</tbody>
</table>

Source: JETRO Investment Whitepaper, 1994

Source: Japan Development Bank, 1996. "Office Location Environment in Major East Asian Cities," Research, Vol. 219 (September), Table
Bibliography


Hwang, Jing-huei, 1995. “Taipei’s role in the regional development of China,” in Anthony Gar-On Yeh and Chai-Kwong Mak (eds.), *Chinese Cities and China’s*
Development: A Preview of the Future Role of Hong Kong, Hong Kong: University of Hong Kong, pps 277-294.


Salleh, Ismail Md. 1995. “Foreign Direct Investment and Technology Transfer in the Malaysian Electronics Industry,” in Normura Research Institute and Institute of Southeast


