

Urban Dynamics in Northeast Asia and the Future of Korean Cities

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1. Introduction

The erosion of the Cold War system has brought a very fluid situation in Northeast Asia.¹⁾ The demise of the Soviet Union and ensued radical reform in Russia has produced a disarray and serious economic crisis. The 10-year long recession in Japan has generated a doubt whether a Japanese model of development is worth emulating. In contrast, a continued high rate of economic growth in China has elevated China's position in the global geo-politics, even though China has to face many internal problems arising from uneven development and incomplete reform of state-owned enterprises. Both South and North Korea are suffering from economic crisis. Whereas North Korea faces a serious crisis affecting the survival of the regime, South Korea encounters structural problems of state-led development model in the past.

In the midst of these economic crises, power balances in Northeast Asia have been shifting. Every state in the region has been struggling to reposition itself to take a better seat in the emerging geopolitical hierarchy of the region. Simultaneously with the changing inter-state system and geopolitical hierarchy of states, the geoeconomic power of cities or city-regions are also changing in response to shifting regional political relations. On top of this fluid situation, intensified global economic interdependencies call for a continued adjustment of cities to changing supra-national and national reconfigurations.

Against this backdrop, this paper attempts at analyzing the urban dynamics in Northeast Asia. To envision the future of Korean cities, this paper will first examine changing regional structure of East Asia by looking at major forces determining a geoeconomic structure of the region.

Secondly, the paper will identify major urban centers and urban hierarchy in the region to assess the relative position of cities in the regional urban hierarchy. The third section of the paper will examine the prospects for inter-city networks in Northeast Asia. The future of Korea and Korean cities will then be assessed in the context of inter-city networks and inter-state relations. The final section will discuss macro and urban-level strategies to promote the global and regional competitiveness of Korean cities.

2. Changes in East Asia's Regional Structure and Future Prospects

1) Forces of Change in the East Asian Regional Structure

With the rapid economic growth of Asian economies during the last three or four decades—first Japan, then Asian NIEs, and recently China and Southeast Asia, East Asia has emerged as one component of the tripolar world economy. No matter what critics say about the East Asian economy in a current round of crisis, there is no doubt that East Asia as a whole served as a production base for European and American capital through its diligent and young labor force. In addition, the growth of East Asian economies themselves provided a virtuous

feedback to the dynamic process of development within East Asia.

In fact, diverse East Asian economies complement one another—a fact that has led to an increase in intra-regional trade and investment. Labor, capital and resources strategically shared among Asian nations has been the basis of growth, but it has been the "catching up" process that has led to real results. The "catching up" process refers to a process where latecomers continuously emulate advanced technologies and best practices proven successful by leaders. As such, the catching up process maintains the growth momentum within the region as a whole.

Economic dynamism in East Asia has been clearly evidenced by trade and investment statistics. A double-digit export growth was seen in most East Asian countries. East Asia was one of the major destinations of foreign direct investment during the 1980s and the 1990s. The proportion of intra-regional trade and investment has grown steadily except for China and Indonesia (Figure 1). The relative decline in the proportion of intra-regional trade in China and Indonesia can be attributed to their late integration into the world economy.

With the increase in intra-regional trade and investment since the 1980s, it is true that the level of interdependency among the East Asian countries has grown, and this trend is

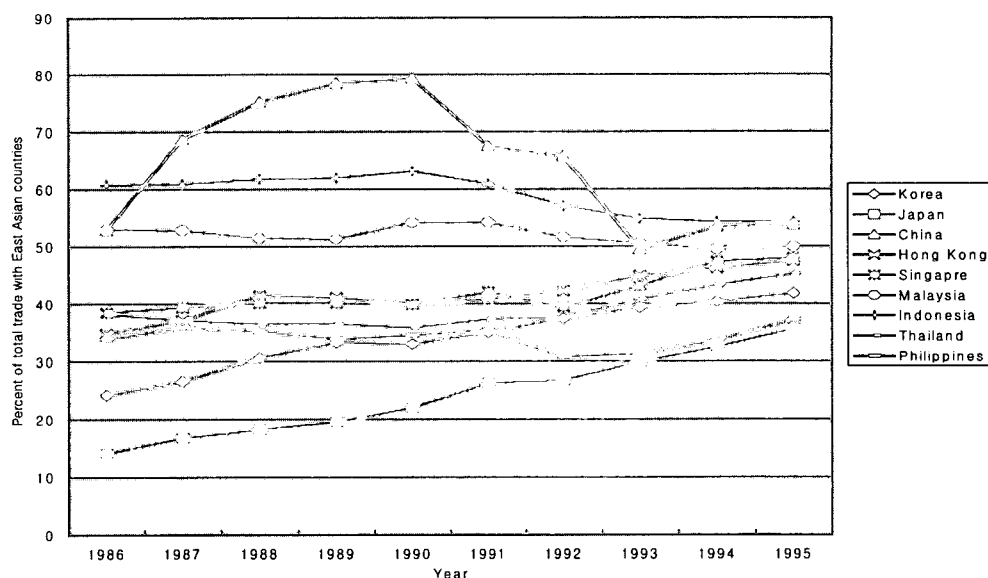


Figure 1. Intra-Regional Trade Interdependence in East Asia

expected to continue. In particular, intra-regional foreign direct investment (FDI) initiated by Japan in the 1970s and promoted by the NIEs since the 1980s has been a major impetus of East Asia's economic growth (Kojima 1997). China has been the major recipient of foreign direct investment in the 1990s. South East Asian countries were also benefited greatly from FDI inflow from Japan and the Asian NIEs until 1997 (Table 1).

The Asian economic crisis erupted in 1997, however, placed a dent in investment outflows from Japan and Asian NIEs in 1998 (JETRO 1999). FDI outflow by Japan and Korea slumped in 1998 and therefore had a ripple effect: for example, FDI inflow from Japan and Korea into China and ASEAN countries has shrunk. Taiwan was not hard hit by the crisis and its FDI outflow remained high in 1998. At

any rate, East Asian states, especially those most affected by the 1997 crisis, has renewed their efforts to attract FDI either from within or outside East Asia.

As burgeoning trade and investment inflow had contributed to the shaping of the urban-regional structure of East Asia before the crisis, intensified competition for capital after the crisis has begun and it will affect the transformation of regional structure of East Asia. But inter-spatial competition is not the only factor in the reconfiguration of regional structure. Transborder cooperation, which is now visible in many parts of East Asia, is another important force behind the emerging regional structure of East Asia, which will be discussed later.

In brief, competition and cooperation are two major forces transforming the geo-economic structure of East Asia.

Table 1. FDI Inflow to East Asian Countries (Balance of Payment Basis)

Unit: US\$ million

	1991	1992	1993	1994	1995	1996	1997
Japan	1,290	2760	120	910	40	200	3200
China	4,366	11156	27515	33787	35849	40180	44236
Korea	1180	728	588	809	1776	2325	2844
Taiwan	1271	879	917	1375	1559	1864	2248
Singapore	4887	2204	4686	8368	7386	7444	8631
Thailand	2014	2113	1804	1366	2068	2336	3029
Malaysia	3998	5183	5006	4342	4178	5078	5106
Philippines Pines	544	228	1238	1591	1478	1517	1253
Indonesia	1482	1777	2004	2109	4346	6194	4677

Source: <http://www.jetro.go.jp/whitepaper/invest99>

Internally, East Asian countries are struggling to strengthen their competitiveness across various sectors such as production, trade and finance by means of restructuring their industries, developing technology, implementing business innovation and building tangible and intangible infrastructures. Japan has successfully restructured its low value-added labor-intensive industry and low-tech capital-intensive industry of the 1970s, and companies have adopted a global production system. Challenged by the growth of ASEAN countries, the four Asian tigers, which includes Korea, are also now in the process of restructuring in an attempt to transform their low value-added, labor-intensive industry into a high-tech, knowledge-intensive industry (Kim 1995).

China has been achieving a remarkable growth after introducing its bold opening policy in the late 1970s.

Foreign direct investment that China attracted from the developed nations in Asia and Hong Kong has been the driving force of their rapid growth (Lardy 1994, McMillan and Naughton 1992). In addition, agricultural reforms and the development of businesses operated by ethnic Chinese in the region propelled China's growth. More recently, China has focused on transforming its economy by reforming its state-owned enterprises and the industrial structure as a whole. The Southeast Asian countries are no exception to this restructuring trend as they shift their focus from an export-oriented labor-intensive industry to enhancing their competitiveness by overhauling their industrial structure.

However, many Asian countries including Japan now find themselves caught in a serious economic trouble. The remedy calls for not mere reforms in the financial sector, but fundamental reforms in the economic system. This

is challenging in that fundamental reforms will contract the real sector and change the dynamics of the current intra-regional interdependency relations. Although the outcome of the Asian crisis is not easy to forecast, some plausible results are increased competition in exporting products and attracting foreign capital.

Externally, East Asian states and cities are trying to forge alliances and linkages with other states and cities. At the inter-state level, there is no formal regional body such as European Union and North American Free Trade Agreement in East Asia. Although ASEAN exists, it is not comparable to EU or NAFTA in terms of solidarity and power. In the near future, it is unlikely for East Asia to form an exclusive bloc considering a heavy dependence of East Asia on North America and Europe in terms of economics and security. Rather, transborder cooperation by subnational units is possible and in fact has been occurring extensively. SIJORI (Singapore Johor Riau connection) and Southern China (Hong Kong Guangdong and Fujian Taiwan) are just two examples among many (Myo Thant 1998). These emerging transborder regions intersect global, national, and subnational scales, which is increasingly disarticulated from the territorial matrices of the state-centered system (Brenner 1999).

2) The Geoeconomic Configuration of East Asia

Several studies predict that the main players of the global economy in the 21st century will not be nations but cities. Cities have been emerging in Asia as the seedbed of economic growth, and specific geographic networks of major cities will be visible in the 21st century. Many experts in the economic and geopolitical field concur that the future global economy will be led by a few multi-functional mega-cities, and that such a trend is gradually unraveling in Asia (Dunning 1998, Scott 1977, Friedmann 1997, Ohmae 1995).

In Asia, coastal cities and regions have developed due to the export-oriented growth strategies, and with the focus once again on exports amidst the economic crisis, this trend is expected to continue. An examination of the situation by nation indicates that in Japan, which is responsible for more than 10% of the world's production, the Pacific Coastal Belt and new national development axes areas central to Kanto and Kansai regions have been the growth engine of the Japanese economy. South Korea is expected to further integrate and modernize the current Seoul-Pusan axis as the basis for economic activities (Rimmer 1997),²⁾ and China will also continue to develop its coastal areas, focusing on forming a coastal development axis that connects Dalian

and Hong Kong via Shanghai. China's strategy is envisioning a T- or bow-shaped structure for its territorial development. The bow-shaped structure is buttressed by high-speed railway projects. China is planning three major lines, which link Beijing with Shanghai, Hong Kong, and Shenyang. The east-west axis is expected to be headed by Shanghai and spread out towards the inland of the Changjiang Belt (Choi, 1994).

Considering the vast size of China, growth will be centered on not a single region, but a number of city regions. These include the Changchun - Harbin and Dalian - Shenyang region in China's northeast, Tianjin - Beijing, Qingdao-Jinan in Shandong, the Greater Shanghai region and the Changjiang Mid-river area centering on Wuhan, the Changjiang Lower River Area linking Nanjing with Yangzhou and Hefei, the mega cities of Chengdu and Chongqing of the Sichuan Province -- and the Zhujiang Delta that links Hong Kong, Shenzhen, and Guangzhou. The Zhujiang Delta is already a core region for economic growth, and the Shanghai area is expected to ascend to an equal status in the near future. The Beijing-Tianjin agglomeration is another one to be reckoned with. The future of the other cities mentioned above depends on how they execute their restructuring strategies and on whether they succeed in attracting foreign capital (Zhao

1996).

In Taiwan, a high-speed train project connecting Taipei and Kaoshiung, one of the top five ports in the world, is under construction. Upon completion, Taiwan's economic growth will most probably be centered on the west coast axis linking Taipei with Kaoshiung, which is a similar scenario to that of Korea. Thailand's Bangkok region has already emerged as a major hub of the Southeast Asian region, and the urban corridor linking Kuala Lumpur and Penang in Malaysia is expected to become a significant route as well.

In order to overcome its limitations in production factors such as land and labor, Singapore has adopted a strategy to develop a cooperative triangular bloc that links the Johor Province of Malaysia and Riau Province of Indonesia, and has already succeeded in allocating a major portion of the necessary land. In Indonesia, a major urban corridor that connects Jakarta, Bogor, Tangerang, Beccasi, is already an active axis for economic development, and will likely reemerge as a major production base after the financial crisis simmers down. The Manila region of the Philippines and the smaller Hochimin and Hanoi region of Vietnam are also likely candidates for bedding economic growth (Rimmer 1997). In the far eastern part of Russia, Vladivostok and Khabarovsk will serve as major regions stimulating economic recovery in Russia, and Northeast Asia as a whole

(Kim 1996). In the distant future, East Asia is expected to form a development corridor stretching from Vladivostok in the Russian Far East to Bali, Indonesia (Saito 1994, Hoshino 1999).

Obviously, the Asian economic crisis has halted or postponed the above visionary projects. Despite economic contraction in many parts of East Asia, infrastructure plans are reemphasized in 1999. For example, the South Korean government expanded social overhead capital budget to \$10 billion, while China plans to spend about \$400 billion a year for the next few years. Other Asian NIEs and Thailand are also gearing up for major infrastructure projects (Table 2).

Table 2. Infrastructure Spending in East Asian Countries

Country	Annual budget or estimated amounts of spending for the next few years, US\$ billion	Major projects
China	400	Railways, expressways, etc.
Japan	82	
Korea	10	High-speed railway, Incheon international airport, West coast highway
Singapore	8	Rapid transit, petrochemical plants, deep-tunnel sewage systems, water desalinization plants
Hong Kong	6	New rail projects
Taiwan	4	High-speed railway, rapid transit
Thailand	4	Skytrain, expressways and railway

Source: FEER March 25, 1999.

Although it is uncertain which specific area will lead the growth of East Asia in the 21st century, the most probable scenario is that the Pacific coastal belt of Japan will continue to partially fulfill this role, assuming that Japan's economy does not shrink. There is another strong argument that the sheer size of the Chinese economy will let the Chinese Golden Triangle linking Hong Kong, Shanghai and Taipei rival the Japan belt. However, this will depend on how China and Taiwan resolve their political issues. China will probably take its time and take advantage of its rapid economic growth to pressure Taiwan, while Taiwan is likely to seek cooperation with other nations to sustain an independent survival. Therefore, the formation of a Chinese Golden Triangle is not plausible in the near future. In the case, however, that the two countries face internal economic difficulties and do not succeed in finding other partners, they may reach a compromise and cooperate with one another. A Chinese Golden Triangle, if formed, would have a significant impact on the geoeconomic structure of East Asia: economic gravity would shift to Southern China.

An alternative scenario of a peaceful and cooperative mood in Northeast Asia will change the above situation, pulling some portion of economic gravity away from Southern China toward Northern China. A key for this

scenario is the unification of the Korean peninsula. It is not presumptuous to assume the unification of two Koreas within the next 20 years. If this happens and economic cooperation in Northeast Asia begins in a major way, Japanese islands, the Korean peninsula, Northern China, and the Russian Far East can form a highly complementary economic region surpassing the size of the European Union. Then, the geoeconomic structure of East Asia would be composed of one centering on BESETO (Beijing-Seoul-Tokyo) and the other one on the triangle of Hong Kong-Taiwan-Shanghai.

In sum, the two major forces of competition and cooperation will determine the geoeconomic structure of East Asia. In other words, the interaction dynamics of the major economic growth centers and the future of each center will depend on pull (cooperation) and push (competition) forces operating at the multiple scales of global, regional, national, and subnational levels. The geoeconomic power of each center depends on the level of technology, the development of a knowledge-intensive industry and an advanced service industry, and the success of regional industry cluster. As is revealed by studies on companies, regional clustering is achieved when the external effects of cooperation among companies are maximized and transaction costs are minimized (Porter

1990, 1994, Scott 1997, Enright 1998, Dunning 1998). The local assets and environment, such as transportation and telecommunications infrastructure, a flexible labor market and a market-based business environment are also critical in determining the competitiveness of city-regions.

3. Urban Hierarchy and Leading Growth Centers in East Asia³⁾

As in the ranking of world cities, determining a hierarchy among East Asian cities has been plagued by the lack of available data that accurately reflect rapid changes occurring in most cities in the region. As the economic, political, social and cultural strengths of a city are bound to wax and wane depending on various internal and external factors, so the rank of that city in relation to others is bound to change. Recognizing the difficulty of the task, this paper attempts to rank East Asian cities on the basis of available information. Leading theories on how to determine a hierarchy among cities include the traditional central place theory, the world city hypothesis, and economic competitiveness. In addition, empirical studies on regions usually focus on data on inter-city trade flows in the global context (Smith and Timberlake, 1995). As Friedmann (1995) points out,

interactions between cities based upon flows of goods, people, information, and capital result in the formation of a functional urban network that can then be used to assign each city a rank according to its economic power. A city's rank, however, depends not only on its own economic strength but also on the size and productivity of its surrounding area. Therefore, the geographic network of cities can also play a major role in the ranking of cities.

This paper attempts to consolidate the existing theoretical background into

four functions; control, trade, production, and innovation. The paper then ranks the cities in each category and then assigns each city an overall rank. Determining a city's overall rank, however, is hampered by the difficulties of collecting data of a uniform quality and assigning a weight to each category.

Tokyo dominates other cities in control and management functions as well as trade functions, with the exception of its port handling capacity (Table 2). Tokyo is followed by Hong Kong, Singapore, Seoul, and Taipei as

Table 3. The Hierarchy of East Asian Cities

Total			Exchange Functions			Control and Financial Functions			Information and Innovation Functions Rank		
Rank	City name	Score	Rank	City name	Score	Rank	City name	Score	Rank	City name	Score
1	Tokyo	8.88	1	Hong Kong	3.48	1	Tokyo	4.33	1	Tokyo	3.05
2	Hong Kong	4.80	2	Singapore	3.19	2	Taipei	1.66	2	Singapore	1.92
3	Singapore	3.73	3	Tokyo	1.50	3	Seoul	0.35	3	Hong Kong	1.49
4	Seoul	0.11	4	Bangkok	-0.11	4	Osaka	0.17	4	Beijing	0.45
5	Taipei	0.14	5	Seoul	-0.21	5	Jakarta	0.00	5	Seoul	-0.03
6	Bangkok	-0.79	6	Taipei	-0.56	6	Hong Kong	-0.17	6	Bangkok	-0.18
7	Kuala Lumpur	-1.68	7	Osaka	-0.78	7	Kuala Lumpur	-0.34	7	Kuala Lumpur	-0.45
8	Osaka	-1.94	8	Manila	-0.81	8	Bangkok	-0.50	8	Manila	-0.87
9	Manila	-2.43	9	Kuala Lumpur	-0.89	9	Manila	-0.75	9	Taipei	-1.24
10	Beijing	-2.68	10	Jakarta	-1.49	10	Singapore	-1.38	10	Shanghai	-1.26
11	Jakarta	-3.03	11	Shanghai	-1.57	11	Beijing	-1.38	11	Osaka	-1.33
12	Shanghai	-4.83	12	Beijing	-1.75	12	Shanghai	-2.00	12	Jakarta	-1.54

Note: Exchange Functions: Air passengers and port cargoes

Control and Financial Functions: Fortune 500, The Banker 1000

Information and Innovation Functions: Information industry and international conferences

core management centers in East Asia. Although Bangkok, Jakarta, Kuala Lumpur, and Manila act as core cities in Southeast Asia, they lag behind the cities mentioned above in their larger regional influence due to weakness in their control functions.

Osaka, Japan has previously been rated only as a domestic core city, since its overall position is dominated by Tokyo. More recent data analyses, however, show the city growing into a core management city in East Asia in terms of its control and exchange functions. Its future will depend upon developing the strength of its linkages with Tokyo. Nagoya, caught between Tokyo and Osaka, seems to be withering. If it manages to retain its competitiveness, Nagoya may maintain a position as a core city specializing in production.

In China, Beijing and Shanghai are not yet thought of as core East Asian cities, though this is inevitable to change, as China's political and economic influence continues to grow. Beijing is likely to soon emerge as a political and cultural center of East Asia, while Shanghai's growth potential in production and finances prepares it to become a core regional city. Pusan and Kaohsiung will be able to specialize in port-based trade functions, though they will not be able to obtain world city status.

The comparison of this paper's findings with the existing functional

analyses of urban hierarchy shows that both methods produced similar results (see Table 3). In all of the studies, Tokyo stands out as the only East Asian city identified as a world-class city. In particular, Tokyo is widely recognized as being predominant in the fields of international finance and management of international corporations (Sassen 1991, Friedmann 1986, 1995). Other East Asian cities including Singapore, Seoul, Osaka, and Hong Kong are regarded as core cities on regional or national levels. Rimmer's (1996) analysis based on transportation and telecommunications data is entirely consistent with the findings of this study, in classifying Tokyo as world-class city, Singapore, Hong Kong, Taipei, and Seoul as regional cities, and Bangkok, Kuala Lumpur, Jakarta, and Manila as national cities.

The latter Southeast Asian cities were contenders for regional cities before the 1997 crisis but their geoeconomic power has fallen after the eruption of the crisis. Shanghai's position was expected to rise, challenging Hong Kong but the crisis has caused a dampening effect on Shanghai. Osaka is emerging as a regional city with construction of its new Kansai International Airport, though it will remain subordinate to Tokyo. Rimmer (1996) also concludes that Beijing and Shanghai still have a long way to go before joining the global city network, as the Chinese

Table 4. The City Hierarchy Compared with Earlier Studies

City	I (1995)		II (1991)		III (1982)	
	Ranking	City	Ranking	City	Ranking	City
Tokyo	1	Tokyo	1	Tokyo	1	Tokyo
Hong Kong	2	Hong Kong	2	Singapore	1	Singapore
Singapore	3	Singapore	2	Hong Kong	1	Hong Kong
Seoul	4	Seoul	2	Taipei	4	Beijing
Taipei	5	Taipei	2	Seoul	1	Seoul
Bangkok	6	Bangkok	3	Bangkok	2	Bangkok
Kuala Lumpur	7	Kuala Lumpur	3	Kuala Lumpur	2	Taipei
Osaka	8	Osaka	3	Jakarta	2	Kuala Lumpur
Manila	9	Manila	3	Manila	2	Osaka
Beijing	10	Beijing	-	Osaka	-	Manila
Jakarta	11	Jakarta	-	Beijing	2	Jakarta
Shanghai	12	Shanghai	-	Shanghai	4	Shanghai

Note I: Study Results

II: R. Rimmer (1996)

III: Nomura Research Institute (1982)

economy has only lately begun to integrate into the global economy.

Although ranking cities on an individual basis is meaningful in its own right, such an analysis cannot accurately represent urban power given the tendency of cities to cluster and network among themselves. This paper therefore aims to look into the character of major city regions, which lead or will be leading the development of the East Asian economies. The question arises of how to define a city region. The boundary is usually drawn according to the availability of the core city's services or commuting distance. In this study, areas examined were within two

hours' trip from the core city and fell within a single economic zone. In cases where these criteria were hard to apply, the study drew on local scholars' estimation of a metropolitan area.

Major city-regions, which constitute the regional motors of the East Asian economy, are introduced below. Given the focus on Northeast Asia, city-regions in Southeast Asia are dealt lightly here.

Tokyo is a city-region of about 40 million people already established as a world economic center. The Osaka area is also strengthening its position in a triangular network connecting Osaka, Kyoto, and Kobe. The Nagoya area is

pushing ahead with its plan for internationalization by encouraging production giants like Toyota. These three areas are the top growth-inducing regions of Japan. As a hub of southwest Japan, the urban region of Kyushu is consolidating links with East Asia, though it lags behind the top three areas. With its favorable location in relation to Korea across the Korean Strait, the Kita Kyushu region has a great potential to become a growth-inducing region of Northeast Asia.

As the center of the Korean economy, the Seoul-Inchon area is poised to become one of logistics and business hubs in Northeast Asia with the construction of the Inchon International Airport. The Pusan region has traditionally played second fiddle to Seoul, but is now planning to start the 21st century with aggressive moves to foster international trade and the information industry, and consolidate its function as a port city. Both Seoul and Pusan are handicapped by the economic setback now gripping Korea in the wake of the economic crisis in 1997, and are therefore likely to fall behind other East Asian cities unless renewed efforts are made.

China is expected to evolve into a global economic center in the 21st century. The country can be roughly represented by five key urban areas of intensive growth. The Beijing-Tianjin area, Dalian-Shenyang, and the

Qingdao-Jinan area serve as the growth engines of northeastern China, while the Shanghai area serves mid-eastern China, and the Hong Kong-Guangzhou area serves southern China. In the process of China's economic reform, Beijing has emerged as the political, cultural and informational center of the nation, and is seeking to form a growth triangle with Tianjin and Tangshan.

The Qingdao-Jinan and Dalian-Shenyang regions lag behind Tokyo or Seoul, but the completion of the Dalian-Shenyang expressway shows that the area is making a rapid progress towards becoming a major production base of Northeast Asia in the 21st century. The growth of industries along the expressway is also making the Qingdao-Jinan area a major economic player in northeast China.

The Shanghai area is aspiring to become the economic engine of the Yangtze basin, an area accounting for a third of the Chinese population and more than a half of China's GDP. The prosperity of the area will greatly contribute to Shanghai's future importance in East Asia. As the Pudong Development Strategy reveals, the Shanghai area is expected to emerge as an international financial center and the most important production base for Chinese light industry in the 21st century (Olds 1997).

The Hong Kong-Guangzhou area is

already firmly established as an economic center of East Asia. Although there are many conflicting views over Hong Kong's future, Hong Kong's position as the economic center of East Asia will not be threatened if the Chinese government adheres to its current policy on Hong Kong. This policy designates Hong Kong as a special administrative region and independent economic zone (Skeldon 1997). If Hong Kong can retain its role as a financial center and production base, the region will continue to be an engine of growth in East Asia (Yeung 1997).⁴⁾

With its huge holding of foreign reserves, a diverse and flexible industrial base, and relatively well-developed infrastructure, the Taipei metropolitan area in Taiwan is a force to be reckoned with in the East Asian urban hierarchy. If Taiwan's scheme to develop Taipei as an Asia-Pacific business operation center succeeds, Taipei will emerge as a center of growth in southern China along with Hong Kong and Shanghai.

In Southeast Asia, Singapore has been consolidating its position as a regional management center and forming a growth triangle with Johor in Malaysia and Riau in Indonesia (Ho 1997). In addition, the metropolitan areas of Bangkok, Kuala Lumpur, and Jakarta are all taking leading roles in their respective economies. Malaysia is planning a mini-Silicon Valley along

the 50 km section of road linking Kuala Lumpur and its new airport, preparing for the 21st century's information age (MDC 1997). Thailand is also mapping out a plan to build a transportation network linking Bangkok and adjacent industrial zones, taking advantage of Bangkok's proximity to other Indochina countries to make it into the production, financial, and commercial center of Southeast Asia (Thavinpipatkul 1998). The Jakarta metropolitan area, also known as Jabotabek taking after the initials of major cities within the region, constitutes the core of the Indonesian economy. Jabotabek is currently assuming the role of a major production base for Asia through its abundant resources and favorable policy to attract foreign capital (Soegijoko 1997).

The recent Asian financial crisis has caused a temporary setback in the economies of Korea, Thailand, Malaysia and Indonesia. Japan is also suffering from a ten-year long recession. China and Taiwan, however, have been unscathed by the crisis. Devaluation of currency and properties in the crisis-hit countries has changed the relative position in terms of investment costs of these countries and cities within them vis--vis those countries and cities less affected by the crisis (JETRO Censor 1999). In particular, China's major cities have become more expensive places to foreign investors,

Table 5. Major Growth-inducing Regions in East Asia

Major Growth-Inducing Regions	Regional Scope	Population (million)	Area (km ²)	GDP (US billion \$)
Tokyo Region	Tokyo, Kanagawa, Chiba, Saitama	39.2 (1995)	13,553.02	1330.93 (1993)
Shanghai Region	Shanghai, Changzhou, Xuzhou, Hangzhou	37.3 (1994)	36,285.00	47.40 (1994)
Beijing Area	Beijing, Tianjin, Tangshan	26.3 (1994)	41,585.00	25.26 (1994)
Hong Kong-Guangzhou Area	Hong Kong, Macau, Pearl River Delta	28.0 (1995)	43,061.00	167.08 (1994)
Qingdao-Jinan Area	Qingdao, Zibo, Jinan	24.2 (1994)	40,678.00	18.97 (1994)
Seoul Area	Seoul, Incheon, Kyonggi	20.2 (1995)	11,723.90	209.05 (1995)
Jakarta Area	Jakarta, Bogor, Tangerang, Beccasi	17.1 (1990)	6,843.00	15.72 (1994)
Osaka Area	Osaka, Kyoto, Hyogo	16.8 (1995)	14,888.92	610.61 (1993)
Greater Manila Area	Manila, Pampanga, Bulacan, Rizal, Laguna, Cavite, Batangas	16.0 (1990)	12,967.00	15.32 (1994)
Shenyang-Dalian Area	Dalian, Wafangdian, Yingkou, Haicheng, Anshan, Liaoyang, Shenyang, Benxi, Fushun, Tieling	26.9 (1994)	80,934.00	23.84 (1994)
Greater Bangkok Area	Bangkok and ten adjacent districts	11.6 (1990)	27,139	28.64 (1994)
Nagoya Area	Aichi, Mie	8.7 (1995)	10,923.87	322.38 (1993)
Northern Kyushu Area	Fukuoka, Yamaguchi, Kumamoto	8.3 (1995)	18,478.96	247.78 (1993)
Taipei Region	Taipei City, Keelung, Taipei County, Taoyuan	7.9 (1996)	3,678.12	108.76 (1994)
Pusan Area	Pusan, Ulsan, Masan, Ch'angwon, Jinhae, Yangsan, Kimhae	6.0 (1995)	3,484.61	30.78 (1995)
Singapore Growth Triangle	Singapore, Johor, Riau	5.1 (1990)	19,963.00	69.51 (1994)
Kuala Lumpur Urban Area	KL, Selangor	4.2 (1994)	8,199.00	14.83 (1994)

Note : Regional GDP estimation (Region's GDP = Region's Pop./National Pop.; this number is based on the population and pertinent under the assumption that the industrial structures of the nation and the region are the same. Since the industrial structures of the cities in the top rung are much more developed than that of the nation, however, the region's GDP estimates represent the lowest figures.

Sources: Japan: Regional Statistics Handbook (1997 edition) edited by Regional Promotion and Improvement Corporation, p. 512; Japan Statistics Yearbook 1998, p. 825, 1996, p. 819 (Japan's exchange rate \$1=11.85 yen in 1993)

South Korea: Korea Research Institute for Human Settlements, Social Overhead Capital Statistical Yearbook: 1996 (based on administrative districts)

China: Excerpted from China Provincial and City Statistical Yearbook, China, 1994, 100 yuan = US\$ 861.87 (In China's case, the real value is thought to be about three times in general according to the purchasing-power equivalent index, not the formal nominal exchange rate) (Shandong Statistical Yearbook: 1995, Liaoning Statistical Yearbook: 1995; China Statistical Yearbook: 1995)

Malaysia: Malaysia Handbook (1996), p. 23, and p. 70

Taipei, Bangkok, Manila: Jones et. Al (1998), Taiwan: 26.26 NTS = 1 US\$ (Taiwan: 1994)

Kuala Lumpur: thong (1996), Hong Kong-Guangzhou: Re-quoted from Ng (1998)

Jakarta (Jabotabek): Re-quoted from Soegijoko (1997) Jakarta's GDP was calculated as 25 % of Jabotabek's share in

Singapore: See Singapore Handbook and Lee Tsao Yuan (1991)

whereas Seoul, Bangkok, and Jakarta have become more attractive at least in terms of costs. The long-term impact of the crisis on the relative ranking of East Asian cities remains to be seen.

4. Prospects for Linkages among Major Growth Regions of East Asia

As the globalization process has been intensified, the seemingly contradictory trends of globalization of production and the formation of economic blocs have emerged. On the global scale, these trends have led to the development of cities in which transnational enterprises assume central roles. On the regional scale, tighter networking between cities is commonly witnessed. Networking between cities is not a novel trend; the Hanza League of 13th century Europe, which aimed to protect and nurture trade, lasted for four centuries (Friedmann, 1996). A more recent example is the formation of a "Eurocity" in Europe. Strategic alliances have also been forged among Asian cities. The Singapore growth triangle and the tight integration between Hong Kong and Chinese cities in the Zhujiang delta are examples. Building a network linking cities in Korea, China and Japan, with the possible addition of Russia, has been discussed for the past several years (Kim, 1996).

Structural changes and increased interdependencies among East Asian

economies invariably influence inter-city networks in the region. Despite expectations that interdependency will increase in the 21st century, financial difficulties in the region could hinder inter-city linkage formation. But the opposite situation may evolve the Asian financial crisis could reinforce cohesion among regional states and stimulate the formation of inter-city networks to buffer from external shocks generated by global capital.

Functional and strategic inter-city network structures are affected not only by market forces but also by state- and urban-level policies. Three factors will determine inter-city networks in the 21st century; the economic power of East Asian states and cities, national and urban policies promoting these networks, and the existing infrastructure frames for the networks. As mentioned in the previous section, Japan's growing overseas production capabilities have led to the formation of a global network of cities with Tokyo at the center. As it is highly unlikely that Japan's economic power will wane in the near future, it is safe to assume that Tokyo will continue to play a central role in inter-city network formation in East Asia up to the early 21st century. On the other hand, if a popular prediction that China will emerge as an economic power in the next century come true, Tokyo-centered network could be threatened by the

South China Triangle linking Hong Kong, Shanghai and Taipei (Rimmer, 1997). Ongoing projects including the construction of expressways and high-speed railways, which are designed to enhance linkages among the Tokyo, Nagoya and Osaka Regions, could help Japan defend its position from challenges posed by the South China Triangle. Furthermore, the Triangle's influence would be weakened if Japan actively develops a network with Korean and Northern Chinese cities.

Accurate forecasts of city networks are difficult to make due to political and economic factors affecting the network formation. For example, normalization of Sino-Taiwanese relations and a mutual agreement on economic integration are necessary for the Hong Kong - Shanghai - Taipei Triangle to be effective. Furthermore, a consensus on the division of roles and respective specialization of the three cities needs to be reached. Setting aside its political hurdles, the South China Triangle is still more feasible than a BESETO (Beijing - Seoul - Tokyo) alliance among Korea, China and Japan. After all, Japan's weak political ties with Korea and China make economic integration among these states difficult. Without fundamental changes in ways of thinking, partial inter-city cooperation is to be expected at best in the short run.⁵⁾

Current discussions on forging an

alliance between Kyushu and Pusan can swiftly materialize with the commitment of the Korean and Japanese government. As a result, a regional economic zone based on the Korean Channel, though unlikely to rival the Tokyo region or the Hong Kong - Guangzhou region, could emerge. Increased political, cultural and economic exchange between the two sides, and the construction of an undersea tunnel are prerequisites to such development. While the formation of inter-city network in the Yellow Sea Rim is imminent, its success relies on China and Korea's level of commitment. A major stumbling block in forming a BESETO alliance and the Yellow Sea Rim network is the closed regime of the DPRK. One should note that the longer the delay in inter-Korean economic integration, the weaker Korea's role would be in shaping the geoeconomic structure of East Asia.

Inter-city networks are in formation throughout Southeast Asia; the fully developed Singapore growth triangle, the IMT growth triangle linking Malaysia's Penang, South Thailand and Indonesia's Sumatra, and the Golden Quadrangle connecting Myanmar, Thailand, Laos and the Southern boundaries of mainland China. Out of these three, the latter two lack sufficient infrastructure and a central city, reducing the chances of their becoming major growth regions of East

Asia. The Asia Development Bank has shown interest in promoting growth in the underdeveloped IMT region, but as far as active alliances among cities is concerned not much progress has been made thus far.

Japanese scholars have proposed the concept of an East Asian Growth Corridor comprised of the major growth regions throughout the region (Saito,1994). Starting out at Japan's Pacific Rim coastal areas, this corridor would extend to the Seoul-Pusan axis and reach the Bohai coastline and Shanghai. Growth led by the Hong Kong-Guangzhou region would expand to the Indochina Peninsula and reach Jakarta; forming a massive growth corridor. This expanded corridor could ultimately cover Vladivostok and Indonesia's Bali resulting in the formation of a Pacific-Asia Growth Belt (Figure 2). Specific vertical and horizontal axis comprising the Belt have yet to be defined, but this is a separate issue. China is preoccupied with promoting inland development linked with the growth belt on its eastern coastline. Naturally, building a Pacific Asia growth corridor cannot be a priority at present. But China may be interested in forming inter-city networks in a few localized regions including the Yellow Sea.

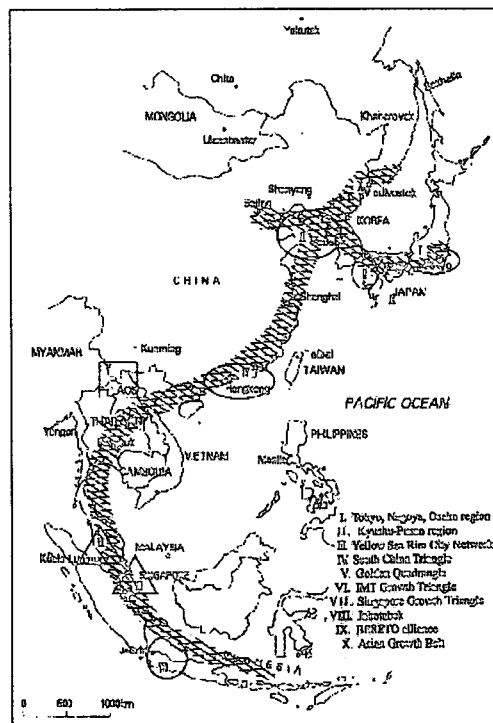


Figure 2. Major Growth Areas in East Asia and Inter-regional Connections

5. The Geoeconomic Structure of Northeast Asia and the Future of Korean Cities

1) Shift Expected in the Geoeconomic Structure of Northeast Asia

It is evident that significant changes will take place in the 21st century as a new regional order emerges on the basis of shifting power balances between the countries in Northeast Asia. Over the next thirty to fifty

years, a gradual shift in the geoeconomic structure is anticipated: China will replace Japan as the regions center and in the interim of this transition a bipolar structure with both countries exerting influence on East Asia is expected. Although it is unlikely that China will become comparable to the U.S. or the EU, a reinforced network covering mainland China, Taiwan, Singapore and parts of Southeast Asia will reshuffle the regional urban hierarchy and the geoeconomic power of cities.

In light of these long-term prospects of change, Korea faces two tasks. The need to enhance the global competitiveness of its major city-regions has become obvious amidst the current economic crisis. Reiterating the urgency would be unnecessary. Strengthening its external linkages is another pressing task for Korea. Korea cannot afford to neglect nurturing its linkage with China, a rapidly emerging economic and political power in the region. In the immediate future, Korea should establish inter-city network in the Yellow Sea Region. In the mid to long run, linkages among the Korean peninsula, Chinas northeastern regions and the Russian Far East need to be established. Korea, however, has to recognize that Japans economic and technological might will be sustained throughout the next century, regardless of a possible weakening in Japans relative status. Therefore, Korea should

build a linkage across the Korea-Japan Strait as well. Discussions regarding connections between Pusan and Northern Kyushu, which have been passive so far, need to be actively promoted. Linkages between the Korean peninsula and its surrounding regions will serve as a foundation for wider networks encompassing the major growth regions of Japan and China, namely the Tokyo and Beijing regions. To this end, Korea needs strategies and action plans at city and national levels.

It is widely acknowledged that Korea will face increasing pressure arising from the nutcracker phenomenon, squeezed between a cost-competitive China and a technologically advanced Japan (Booz, Allen & Hamilton 1997). Head-on competition with these two giants would not be wise for Korea. Rather, it should find its niche. One avenue for Koreas geostrategic move can be found in its geographical location. By taking advantage of economic interactions between its two neighbors, Korea could benefit greatly. Even a narrowly defined Northeast Asia would cover Chinas three Northeast provinces and the North (Huabei) region, which is home to 400 million, and Japan with a population of 120 million. A macrospatial strategy that allows Korea to fully utilize the interaction potential between these two economies is required.

The Korean peninsula should be the center of arterial transport and international functions, and coastal areas of the Korean peninsula should be fully opened up to increase contact points with China, Japan, and the world. This will allow Korea to absorb the gravity generated from the interaction of its neighboring countries. Rather than concentrating on direct production, Korea may benefit more by specializing in logistics and services functions and by establishing itself as a gateway to Northeast Asia. To realize this role, Korea needs to establish necessary hardware for international logistics and create attractive investment environment for transnational companies. The construction of the Seoul-Pusan high-speed railway should be expedited. Strategic nodes like the Incheon New International Airport and Pusan Port should also be developed to enhance their cost competitiveness and to ensure quality services.

2) Macro Spatial Strategies for Korea

Structural readjustment of the Korean peninsula should be based on the changing dynamics of the Northeast Asian Region. Major growth axes of this region are expected to be Japans Pacific axis, and Chinas Dalian-Harbin axis, Tianjin-Beijing axis and Qingdao-Jinan axis. The structure of the Korean peninsula will be

shaped according to its interactions with these areas. Nevertheless, state- and urban-level policies of repositioning could affect the process. The overriding objective of restructuring should be to create an internal physical structure conducive to regional integration and balanced development between North and South Korea, aiming at a globally competitive nation.

The restructuring of the Korean peninsulas spatial structure is directly linked with the realignment of the transportation system. Like it or not, the transportation system must be realigned around one of the central axis in Northeast Asia, the Pusan-Shinuiju axis. There have been suggestions of creating the X, K or Y-type development axes on the Peninsula. Nevertheless, taking into account the characteristic and the importance of the axis, the Pusan-Shinuiju axis has to be treated differently from other axes (Ryu, 1996, Korea Planners Association, 1997). That is because the Peninsula lies between the two economies of Japan and China, and can only secure its geographical value when it becomes a bridge that mediates between the two economies. The Pusan-Shinuiju axis is the central line linking the broad manufacturing base of Northeast China with its more than 100 million population and the accumulated technical know-how of Japan with its 120 million people. The axis also

serves as a medium that manages the movement of goods, people and information between Northeast China and Japan, and can create the high added value in this process.

Meanwhile, the axis connecting Kwangyang port to the Trans-Siberia Railway through Kwangju, Taejon, Wonsan, Chongjin and Rajin/Sonbong can be utilized as an axis of resource exploitation and tourism, and should work to complement the Pusan-Shinuiju axis. The Russian Far East of 8 million people should be regarded as a frontier for resource development rather than a market for the Korean peninsula. The Kwangyang-Rajin axis can be easily linked with the Northeast region of China (Jilin, Heilongjiang) and serve as a resource transport axis. In terms of preserving nature and utilizing its resources, the Kwangyang-Rajin axis carries a special meaning. The Paektu range in the Korean peninsula, Ussuri, the Amur and the Sikhote-Alin of the Russian Far East can be developed into an important tourism route for nature exploration.

It is also important to clearly define the role of the East, West and South coastal areas in the Northeast Asian regional structure. In general, the creation of two economic zones is possible. With the Korean peninsula at the heart of these two zones, one economic zone centers on the Yellow Sea and the other centers on the East

Sea. For the Peninsula, these two economic zones hold different importance. The Yellow Sea economic zone already hosts a considerable amount of regional exchanges, and sea and air routes are in place to link the major cities. Furthermore, the Yellow Sea economic zone encompasses one of the three most important economic zones in China, the Bohai Gulf Zone, thus, plays a decisive role in linking the region with the Korean peninsula.

Meanwhile, the East Sea economic zone encompasses the west coastal region of Japan, the east coastal region of the Korean peninsula, and the Far East region of Russia. Thus, the zone has great potential in terms of resource development and tourism. However, given its sparse population distribution and its natural environment, it is difficult to expect this zone to become the engine of growth for Northeast Asia. In this macro-economic structure, the planned construction of the West Coast Expressway and of the industrial bases in the west coast of the Peninsula should be completed as soon as possible, and the region should strengthen its ties with Chinas Shandong peninsula and the Bohai Gulf Area. In other words, core facilities and industrial structures in the West Coast should be realigned and developed to be compatible with those in Chinas Yellow Sea-Bohai Gulf Region (Kim 1998b).

Inchon, Asan, Kunsan/Changhang,

and Mokpo will serve as nodal points and if the two Koreas enter into a period of reconciliation. Shinuiju, Nampo and Haeju would also be able to serve as nodal points. Inchon, with the opening of its Inchon International Airport in 2001, will be able to emerge as a major transportation hub of the Yellow Sea economic zone. In this respect, there is a need to secure and realign the logistics service bases and know-how in Inchon, Asan and Kunsan/Changhang, taking into consideration the industrial activities of China's East Coast region, should develop manufacturing centers different from those of the Yellow Sea - Bohai Gulf Region.

The South Coast area of the Korean peninsula was discussed mainly in terms of developing marine tourism and fisheries. Besides these possibilities, a section in the Southern Coast can serve as an important transportation system. It is highly unlikely that Pusan and Kwangyang will independently develop into hub ports in Northeast Asia, taking into account of the trends in the development of the maritime industry, including the growing size of maritime transportation and strategic alliances between shipping companies. Therefore, it is more realistic to set up an integrated system of the two ports. For this purpose, it is necessary to install an integrated operating system and a designated highway between the two ports. This is in line with the

development strategy of Rotterdam, i.e., satisfying various demands with the formation of networks with neighboring ports. Specifically, the Pusan Port would be the main port. However, the Kwangyang port could also handle part of the container and bulk cargo connected with the Kwangyang-Rajin axis and serve as a transit port for cargo to and from China.

The South coastal axis should be designed to supplement Korea's gateway function linking Korea with China and Japan while it strengthens its maritime ties with the Yellow Sea, the East Sea and the Pacific Rim economic zones. Meanwhile, the links between the coastal and the inland areas, and the links between the east and west for the balanced development of the regions can utilize the existing Pyongyang-Wonsan, Inchon - Kangnung, Kunsan - Pohang transportation networks.

3) Strategies for Recomposing Urban Form

As indicated in many studies, the urban network in South Korea is that of a uni-polar structure centered on Seoul, and the role of other local cities is very limited (Kwon, 1987; Yeo and Lee, 1989). Despite various attempts to balance out this skewed structure, the concentration of economic activities and high-population density in the Seoul Metropolitan Area continues to

hamper national economic efficiency. Pro-market believers argue that urban regulations must be completely liberalized in order to enhance competitiveness. However, deregulation can reinforce concentration, which may seriously impact the efficiency on a long-term basis (Lee, 1998; Kim, 1999). Therefore, the solution should be found in upgrading the function of the Seoul Metropolitan Area through technological advancements and further developing other local cities at the same time, rather than in drastic deregulation.

The same logic also applies to the countrywide situation since activities in South Korea are concentrated in the Seoul-Pusan axis. Therefore, the challenge is to enhance the functional efficiency of this central axis by applying more advanced technology, while developing other cities at the same time.

A transformation of the unipolar to a multipolar urban system in Korea is, however, premised upon the prospect that the Korean peninsula will be dominated by large city regions (Kim, 1997; Choe, 1997). These regions include the Seoul Metropolitan Area, Pusan, Taegu, Kwangju and Taejon in the South, and Pyongyang, Hamhung, Chongjin and Shinuiju in the North. Of these regions, the Seoul Metropolitan Area and Pusan Region are likely to develop into major urban centers in Northeast Asia. The other

regions will probably have limited influence. The Seoul Metropolitan Area has the potential to become a logistics, information and business hub of Northeast Asia. The Pusan Region, together with the North Kyushu area, will potentially form a small regional hub. Taegu, Kwangju and Taejon regions could emerge as major metropolitan areas by forming clusters with nearby cities.

In the distant future, the Shinuiju Region in North Korea can develop into a small international hub linked with China's northeast region. The Rajin-Sonbong special economic zone forms a triangle with Hunchun, China and Khasan in Russia. In the long run, it could become the center of the Chongjin-Yanji-Vladivostok Triangle, which is waiting to emerge as a major international hub. The Pyongyang-Nampo region, which has already developed into an important economic center, will assume some of the unified Korea's administrative functions and serve as the focal point of the Yellow Sea region. The Hamhung-Shinpo-Danchon region has the potential to become a center in the Mid-east Korean peninsula, providing various services to neighboring areas.

Although a detailed strategy for those large city regions requires an in-depth investigation of each region, it is possible to outline a general strategy. This paper proposes network cities or city cluster as a key concept

for recomposition of urban form to promote the global competitiveness and to prevent the negative impact of overcrowding in a single city (see Batten 1995 for the conceptual discussion). The city cluster approach suggests that the Seoul Metropolitan Area may form a triangular structure of Seoul, Incheon and Suwon. As stated in the Capital Region Reorganization Plan, minimizing congestion and reducing the overload in the Seoul Metropolitan Area is crucial. At the same time, there should be ways to maximize agglomeration economies by assigning specialized functions to the cities of Seoul, Incheon and Suwon. In addition, the Seoul Metropolitan Area should be promoted as an information center of Northeast Asia. Incheon International Airport, scheduled for completion in 2001, will probably not replace Narita Airport. Nevertheless, it has the potential to become one of the major hub airports in Northeast Asia, considering that rising costs is the most important concern for the users of Narita. Incheon might be able to attract transit cargo and passengers by designing an effective cost structure, thereby increasing its chances of becoming a major hub in the region (Hansen and Kanafani, 1990).

The Pusan Region is divided into two wings; the Pusan - Masan - Changwon wing and the Pusan - Yangsan - Ulsan wing. These two wings will allow the Pusan Region to

be developed into a maritime and land transportation gateway of Northeast Asia, with adequate manufacturing, trade and shipping functions. The Taegu region links Taegu with Yongchon, Pohang and Kyongju. It is important to harmonize the different functions of these cities. Rather than a linear structure linking Taejon with Chongju, a triangular city cluster of Taejon, Kongju and Chungju is recommendable. This structure would better handle the logistics overload between Seoul and Taejon and create larger benefits. The Kwangju Region is most likely to develop a linear city cluster linking with Naju and Mokpo. However, in the long run, creating a quadra-angular cluster of Kwangju, Mokpo, Namwon, and Suncheon is also possible if adequate transport networks are developed.

Recomposition of urban form into large polycentric urban regions, however, raises several issues concerning urban governance. The most serious problem of large city regions is congestion and environmental deterioration resulting from a heavy concentration of population and economic activities. Another major issue already emerging in the large city regions of Korea is how to resolve conflicts in urban administration. Since most urban problems such as transportation, water supply, waste disposal, housing, etc. are now crossing administrative boundaries, a region-wide approach is

a must for the management of these problems.

With a short history of local autonomy, local governments in Korea are not fully capable of planning, coordinating, and managing diverse urban problems. Urban restructuring, which became more urgent by the 1997 financial crisis, has been haphazardly carried out in many large cities. The influence of the central government in urban restructuring and urban management is still strong. For example, the high rate of unemployment in large cities engendered by economic restructuring after 1997 is not effectively dealt with at the urban level. Rather, the central government is making policies to abate high unemployment rate and local governments are simply implementing them. The same situation applies to land use and infrastructure provision.

Therefore, it is very important to find an appropriate governance structure for large city-regions in Korea. Although the rhetoric of decentralization is often heard, a true devolution of power from the central to the local government has yet to be realized. Given the need for administrative flexibility and regionally coordinated economic development strategies in the increasingly competitive global environment, local governments should have a higher degree of freedom in policy decisions and better capacity of planning and management.

In the same context, local initiatives from private enterprises and citizens should be fully exploited. Public-private partnership and citizen participation in urban management should be encouraged as well.

However, this decentralized structure of decision-making does not mean the withdrawal of the state from the urban-level strategies. But it means a collaborative form of governance, in which the central and local government, private enterprises, citizens, and NGOs all together participate and cooperate in building up competitive and yet livable large city-regions (Kim 1999). By this collaborative governance, each large city-region can find more endogenous, locally oriented development strategies to ameliorate the volatility of globalism.

6. Conclusion

In the past, Northeast Asia was divided into two parts. The northern region was represented by the former Soviet Union-China-North Korea triangle, while the southern region was represented by the South Korea-Japan-U.S. triangle. Today, with the collapse of the Soviet Union and the establishment of diplomatic ties of South Korea with Russia and China, the two separated triangular structures of the Cold War have now been replaced by a flexible structure

overlapping the two triangles. Of course, it is not yet clear in what form the North-South Korean link, one of the key links in Northeast Asia, will develop into. Nevertheless, experts predict that when the Korean peninsula is reunified, the two separate triangles will merge, forming a rectangular. At this time, if the Korean peninsula is able to coordinate and integrate the interests of the neighboring four powers, its status and role will increase greatly. On the other hand, if the Korean peninsula, neglecting openness and relations with its neighbors, seeks to independently build its own economy, it may become a victim of the power struggle among the four powers.

Against this backdrop, this paper examined the changing regional structure of Northeast Asia and the geo-economic strategies of Korea. The survival of the Korean peninsula in Northeast Asia depends on how well it carries out its role as a distributor of goods and information as well as a mediator of different interests in the region. This paper outlined major tasks to strengthen the peninsula's ties with its neighbors as well as its function as well as an exchange center. Therefore, the basic direction of territorial development is to maximize regional alliance through forging interspatial linkages while facilitating North and South Korea's integration. The important mission of the territorial

integration for the 21st century is to upgrade the central axis of Northeast Asia, which runs through Pusan, Inchon and Shinuiju and connects to China and Japan. Regrettably, South Korea will encounter many obstacles in the process of fulfilling this mission since the North holds onto a closed and non-cooperation policies. When North Korea opens up its territory, building the arterial transportation and information corridor would be the most important task to be implemented by both Koreas.

Transportation system is an integral part of a nation's physical structure. This paper proposes that the restructuring Korea's transportation system must be pursued in line with the evolution of geoeconomic structure of Northeast Asia. Until the reunification of the Korean peninsula, the west coast of South Korea must fully open up for maximum linkages with China. Securing a strong base for exchanges with China is also important. Forming complementary industrial structures can be a good example. In order to promote regional cooperation, Korea must actively utilize geographical advantages of neighboring countries. At the same time, China, Japan and other countries in the region should be encouraged to make the best use of Korea's unique advantages. An open institutional environment is essential to achieving this goal.

Given the current configuration of urban system in South Korea, city cluster or network cities concept is proposed to ameliorate problems arising from agglomeration diseconomies in monocentric cities. Accepting the prediction of large city-centered urban system in the Korean peninsula, different roles and functions should be assigned to each large city-region. The Seoul-Inchon and Pusan region are suggested to perform the role of regional cities in Northeast Asia, while others are playing a role of national importance.

Finally, a collaborative form of governance is suggested to deal with emerging problems of large city-regions as well as transborder regions. Local government capacities and locally oriented development strategies are emphasized to absorb external shocks engendered by global capitalism.

Notes

- 1) The introductory comments draw on Dick and Rimmer (forthcoming) which seeks to apply them within Southeast Asia.
- 2) In general, studies on politics and economics view Northeast Asia as a region covering Mongolia, China, Japan, the Russian Far East and Siberia, North and South Korea, and Taiwan. But for geo-economic research purposes, Korea's primary cooperation region will be limited to China's northeastern and north region, Japan and the Russian Far East. This area, within a 1200km radius from Seoul, covers locations within 2 hours air travel and 5 to 6 hours of high-speed rail travel distance.
- 3) The official policy of Korea, however, emphasizes dispersed growth for obvious domestic political reasons. In reality, it is hard to discount the value of agglomeration economies in the Capital Region and the Seoul-Pusan axis.
- 4) This section and the following two are drawn from Kim (1998a).
- 5) After the 1997 Asian crisis, the two contenders for regional business hub for East Asia are Hong Kong and Singapore and their rivalry has intensified (The Economist April 3, 1999).
- 6) Japan has proposed a free trade area between Japan and Korea. This proposal and the idea of an expanded free trade area including China are being considered by the Korean side.

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factors for changes in the regional structure of Northeast Asia. To examine the role of cities and inter-city linkages, the paper first tries to identify major urban centers and urban hierarchy in Northeast Asia. Secondly, it examines the prospects for inter-city network formation. Against these anticipated changes in the regional structure and inter-city networks in Northeast Asia, the paper discusses about the future of Korea as well as the role of Korean cities in the regional economy of Northeast Asia.

ABSTRACT

This paper attempts at analyzing the urban dynamics in Northeast Asia by looking at major forces transforming the regional structure of Northeast Asia. Trade and foreign direct investment are identified as two principal channels of increasing economic interdependence in the region. In addition, macro development strategy and infrastructure policy are another set of determining