

The Rise of China and the Repositioning of Asian NAEs

Won Bae Kim *

As a result of the rise of China, East Asian countries are adjusting themselves around China through a very complex web of interdependence along fluid but distinctive transborder spaces. This paper examines the adjustments being made by Japan and the newly advanced economies in Asia. Coastal China is at the center of the transformation of economic geography of East Asia, indicating the maritime focus of the evolving production networks. With the emergence of transborder spaces, city-regions are busy forging inter-city networks across the border. The article concludes that the capacity of cities and city-regions in the larger transformation process depends upon their position within the national and international political economy settings.

Keywords: China, Asian NAEs, Economic interdependence, Specialization, Transborder spaces

JEL Classification: F59, R11

I. Introduction

The most important change in the overall economic relations in East Asia in the past two decades has been the shift in the relative positions of Japan and China (Macintyre and Naughton 2005). Japan's investment in other parts of Asia began in the early 1970s and accelerated dramatically in the latter half of the 1980s. The earliest Japanese investments were made in Northeast Asia, mostly in Taiwan and South Korea. With the subsequent expansion into Southeast Asia, transborder production networks developed in industries dealing with textiles, light manufac-

* Research Advisor, Gyeonggi Research Institute, 179, Pajang-dong, Jangsan-gu, Suwon 440-290, Korea, (Tel) +82-31-250-3297, (Fax) +82-31-250-3118, (E-mail) winterpine@gri.re.kr.

turing, and raw materials. The currency realignment that followed the Plaza Accord of 1985 facilitated a stronger wave of intra-Asian investments. The metaphor of the “flying geese” symbolized a Japan-led economic development in East Asia in the 1980s (Bernard and Ravenhill 1995; Kojima 2000).

China’s rapid growth since its opening and reform in the early 1980s transformed the economic landscape of East Asia. Trade statistical data confirm that China is an important global market. Further, China is a principal export destination for nations and economies in East Asia, which is evidenced by the significant and continued increase in the percentage of exports going to China since the mid 1990s. For example, China is the major recipient of exports from Japan, Korea, Taiwan, and Hong Kong. Moreover, it is one of the major destinations of outward investment from Hong Kong, Taiwan, South Korea, and Japan. Thus, the predominant trend in East Asia is the creation of an extensive web of mutual interdependence among diverse actors, resulting in the entrenchment of China at the center of the web. Even the possibility that a Sino-centric regional order is emerging in East Asia has been discussed extensively (Lampton 2005; Shambaugh 2005; Christensen 2006; Moore 2008; Beeson 2009). As a result, much of East Asia is reorienting itself around China in an extremely complex division of labor.¹ This reorientation or repositioning is more pronounced and significant in the first generation of Asian newly advanced economies (NAEs), including Hong Kong, Singapore, Taiwan, and South Korea, as compared with Japan, which has been repositioning itself from its role as leader in the past to a partner in the new East Asian regional order. For a time, transborder investment flowed from both manufacturing and financial institutions based in Hong Kong and Taiwan. A significant part of this investment went into coastal China, creating distinctive cross-border Chinese production networks that are typically based on family and ethnic connections (Chen 2005; Beeson 2007). Additional flows of investment from South Korea and Singapore enhanced the networks of bottom-up connectedness between China and these economies.

As a result of trade and investment, production networks in East Asia have been established along transborder economic spaces. These spaces, which are centered on China’s coastal areas, are called by different

¹ According to Beeson (2009), China’s sheer size means that even a role as a predominantly export platform is causing major economic restructuring across the entire East Asian region.

names: growth triangles, sub-regional economic zones, or natural economic territories (Chen 2005).² By the mid- to late 1990s, a dense web of networks in manufacturing emerged throughout East Asia. Within the rising intra-regional trade of East Asia, a considerable portion was in finished products. However, a substantial part of the growth involved intra-firm trade arising from the new ability of individual companies to move components throughout their regional production networks; this was aided by the increased ease by which they crossed national borders.

In sum, economic interdependence in East Asia is not simply one of discrete national economies captured by international political economy in a manner that focuses on state-to-state relations. There is also a distinct interdependence created by the ongoing transnationalization of production and exchange as captured by global political economy approaches focusing on non-state actors, such as multinational corporations (MNCs) and multi-level network forms of governance.

This paper aims to analyze how this adjustment has been occurring in the Asian NAEs over the past two decades. Given that Singapore has much closer connections with the ASEAN countries, the focus of this paper is on the other three NAEs, *i.e.*, Hong Kong, Taiwan, and South Korea (Korea, hereafter). Section 1 presents the changes in the relations between China and the NAEs in terms of trade and investment. During the last two decades, increasing economic interdependence among China, the NAEs, and Japan is believed to have contributed to the expansion of regional production networks.

Borrowing the logic of the “flying geese” model, Section 2 attempts to discern the tendency of industrial specialization of subnational regions due to increasing economic interdependence and industrial spread across the border. In Section 3, an outline of responses by the NAEs to the increasing centripetal forces of the Chinese economy is provided. The concept of transborder regions is introduced, and different adjustment patterns of the NAEs are examined. Obviously, Hong Kong, which is a small city economy and presently, a part of China politically, is limited in its policy choices vis-à-vis the mainland. Taiwan, which has a slightly

² However, international axes with countries and regions beyond its immediate borders point to China’s wider engagement in the global economy. In fact, the Sino-US economic relation exemplifies the most striking manifestation of this dimension (Ash 2005). Based on trade statistics, Ash confirms that China’s open door policy, which began in the 1980s, has led to the emergence of a Great China economic region. Nevertheless, the activities of Hong Kong and Taiwan investors have not been restricted to this single region, nor have they monopolized it.

larger economy and a politically distant stance from China, possesses a much varied range of options than Hong Kong. However, it is again being pulled into mainland China's growing economy. South Korea, which is different from Hong Kong or Taiwan that constitute a "greater China," has the most freedom in making decisions about its own future. Then again, China looms large in economic terms over Korea. Japan, although it is not highly dependent on China's economy compared with the NAEs, makes adjustments by its own strategic thinking. In the concluding section, the meaning of China's ascendance from a geo-economic perspective is interpreted, and the implications for the Asian NAEs are discussed.

II. Increasing Economic Interdependence through Trade and Investment

A. Trade Interdependence and Asymmetry

As a trading partner, China began to play an increasingly important role in both intra-Asian trade and in exports outside the region. By the mid-1990s, production and trade networks among China, Taiwan, and Hong Kong have developed real regional weight. For example, the total external trade of these three, after netting out trade among them, surpassed Japan's total external trade. More crucially, in the electronics sector, these networks began to seize technological and competitive superiority from Japan. Although Japan remains as the most important source of technology and components, China is currently closely following its lead (Macintyre and Naughton 2005). Moreover, China has surpassed Japan as the most important Asian market for exporters from South Korea, Taiwan, and Singapore.

China is currently the top trade partner of Asian NAEs; it is also the number one trade partner of Japan. During the period 1990-2007, China established its centrality in the East Asian trade networks. The country's rising influence in the external trade of Japan and the Asian NAEs, however, has different implications for Japan and each NAE. In the case of Korea and Taiwan, trade with China became the most important, while their trade shares with the US and Japan substantially decreased. Interestingly, trade with ASEAN countries increased for both Korea and Taiwan, and trade among the Asian NAEs themselves became more significant over time. It should be noted, however, that China's share in both Korea and Taiwan's world trade is much greater than the respective

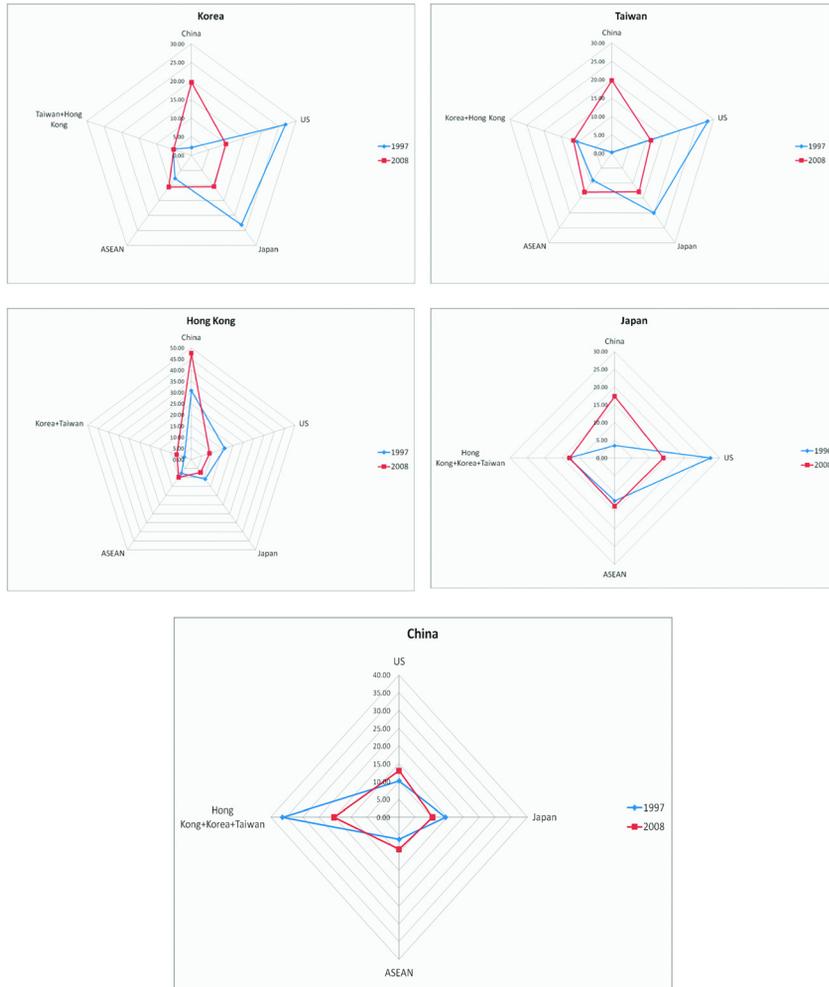


FIGURE 1
SHIFTING TRADE PARTNERS

shares of Korea and Taiwan in China's world trade, resulting in an asymmetry. This implies that Korea and Taiwan's trade dependency on China is greater than China's dependency on either country. Certainly, this suggests a semblance of vulnerability for Korea and Taiwan in relation to their partner, China. From 1990-2008, Hong Kong's dependency on China deepened. This was a natural result of its reversion to China after 1997. In spite of this political reversion, Hong Kong seems to have

maintained a balanced proportion of trade among ASEAN countries, the US, Japan, and other NAEs.

Thus, trade statistics suggest that the respective trade dependencies of Hong Kong, Korea, and Taiwan on China have increased substantially in an asymmetrical manner, making Asian NAEs vulnerable to China's economic fluctuations and potentially susceptible to Beijing's political pressure. In general, China's centrality in the East Asian trade networks has increased substantially.³ Japan, once the leader of the East Asian economy, still retains technological superiority over all other Asian economies. Japan gives the impression of less dependency on particular nations or economies. It maintains a balanced trade structure, at least in terms of geographical distribution. Its heavy dependence on the US market has been reduced in the past two decades. It now has a more balanced country composition as regards its trade. Although China recently became a top trading partner of Japan, its trading activities with China, the US, ASEAN, and Asian NAEs are more or less evenly shared. This balanced regional breakdown provides Japan a much desired leverage in its external economic relations.

B. Increasing Importance of China as a Foreign Direct Investment (FDI) Destination

Asian NAEs, Japanese, and Western MNCs have established production networks in China and East Asia in the last two decades. In particular, the NAEs contributed to the growth of China's export economy through extensive FDI in China, thus helping — to a certain extent — the rise of the Chinese economy in East Asia.

The share of intra-regional investment of Asian NAEs and Japan increased over the period 1990-2007. For example, Korean outward investment mainly went to the US, followed by China, ASEAN, and Western Europe in the 1990s. The order shifted to China, the US, and ASEAN in the 2000s. In a drastic fashion, Taiwan's outward investment (1952-2001) shifted substantially to China during the 2002-2007 period.⁴ This

³ Based on trade statistics, Ohashi (2005) notes that the surge in bilateral trades between China and ASEAN as well as China and the NAEs seems to have made the regional economic more Sino-centric, with a qualification that Japan and the US also made substantial increases with East Asia. China's export growth is known not to have diminished the export of other emerging Asian economies (Ahearne *et al.* 2003).

⁴ The break for 2001 or 2002 is important. China joined the World Trade Organization in November 2001, which signaled the opening of China's market.

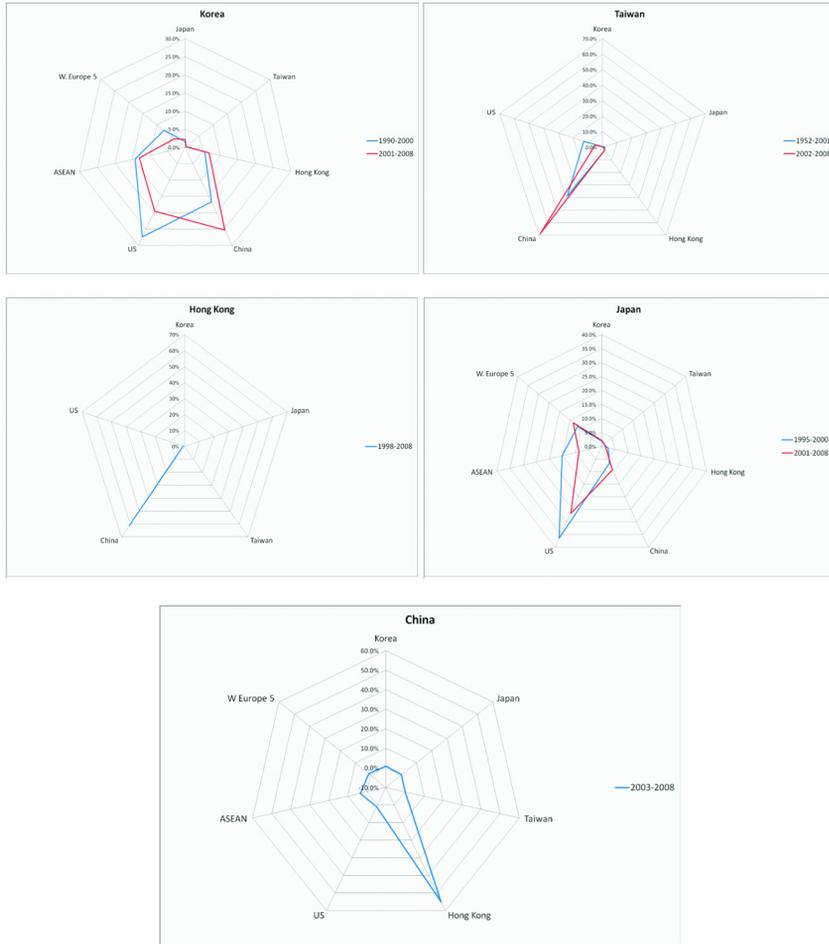


FIGURE 2
INVESTMENT DESTINATIONS

heavy bias toward China raised a concern for some politicians in Taiwan about the future independence of Taiwan from China.

Meanwhile, the special case of Hong Kong exemplifies a near-integration of the two economies in terms of both investment and trade. Hong Kong is not simply the biggest source of FDI for China as a whole, but the most important source of capital and management know-how for the adjacent Guangdong province. The integration of Hong Kong with Guangdong seems to be in full swing at present. Although the share of

China in Japan's outward investment has increased between 1995-2000 and 2001-2007, the US remains as the major destination of Japan's FDI, followed by Western Europe. Apparently, the increase in China's share of Japanese FDI is partially at the expense of ASEAN and the US.

Up until recently, China has been the major recipient of FDI. However, with its US\$2.65 trillion in foreign exchange reserves at the end of September 2010, China is aggressively pursuing outward investment, especially since it aims to secure energy and mineral resources. The statistics available (until 2007) indicate that China's interest continues to be limited to economic integration with Hong Kong (partly using Hong Kong as an intermediary for other destinations) and buy-outs of mines and oil facilities. Nevertheless, China's contribution to the growth of Asian NAEs through its outward investment remains limited. According to the Ministry of Commerce, the major destinations of China's outward direct investment stock at the end of 2007 were Hong Kong and Macau. Considering that Hong Kong and Macau are special administrative areas of China, the rest of Asia accounted for only a small proportion. For example, the ASEAN 10 accounted for 3.35% of Chinese overseas direct investment (ODI) stock at the end of 2007, a portion of which went to infrastructure projects across the Mekong border regions. Thus far, China's interest in Japan and Korea is minimal in terms of its ODI, accounting for 0.78% and 1.03%, respectively. Taiwan is not yet registered as a destination of China's ODI, which may change in the near future as closer relations develop across the Taiwan Strait.⁵

Presently, the media in both Taiwan and mainland China portray an imminent rush of mainland Chinese investment in Taiwan. Given the improving relations across the Taiwan Strait, it is very likely that mainland China will become a major investor in Taiwan's real estate market in the near future. Increasing China's investment in Hong Kong and, particularly, in Taiwan has important implications for South China as well as East Asia. The greater China concept can become a reality in the near future, wherein Taiwan is likely to be a satellite economy of China. In such circumstances, Korea's position in East Asia will be precarious and, possibly, Japan will also have to reposition itself.

In sum, we can explain the increasing interdependence in East Asia, which is centered on China, and facilitated by the push and pull dy-

⁵ As a matter of fact, Taiwan expects substantial investments from mainland China. For example, the senior manager of Taipei 101 anticipates Chinese investors to fill up the vacant 20% of royal block in the building soon.

namics within the region. From the 1980s until the late 1990s (perhaps even before the Asian economic crisis), the relocation of manufacturing from Japan and Asian NAEs to ASEAN and China resulted mainly from a push factor, *i.e.*, rising wages and cost of production in Japan and Asian NAEs. Firms seeking low-cost production sites moved to ASEAN and China to take advantage of cheap labor and land found in these countries. The majority of these firms were engaged in the manufacture of products for export to the US and Europe. The situation changed in the early 2000s, especially after China's entry into the WTO. China became a huge market that has attracted investments from advanced and semi-advanced economies. In other words, the pull factor, *i.e.*, a rapidly growing Chinese market, rather than the push factor, *i.e.*, high wages and costs of production, plays a bigger role in ushering FDI into China and increasing trade between foreign countries and China.

III. Increasing Economic Interdependence and Industrial Specialization

A. The Logic of the "Flying Geese" Model

The success of Japan's economic development allowed the country to play a leading role in regional economic development through foreign aid, trade, investment, and technology transfer. Japan dominated the East Asian region until the early 1990s. Such economic success has given the country a quiet but unmistakable leadership role as the head of a flock of East Asian "flying geese" (Pempel 2005).⁶ The collapse of the "flying geese" model took two forms (Macintyre and Naughton 2005). As a result of the weakness of the pulse of the Japanese economy at its

⁶The flying geese idea predates the most recent phase of Japanese re-integration into the region. Indeed, "in the 1930s, the flock was commandeered by militarist who saw it as a neat emblem of Japanese ethnic superiority" (Terry 2002, p. 53). Although the association with Japanese imperialism might help explain why the flying geese idea has been treated with caution, there exists a more fundamental reason for doubting its validity: much of the region simply has not caught up in the way that might have been expected. On the contrary, a number of Southeast Asian economies seem destined to remain locked in a subordinate position in a regional production hierarchy dominated by Japan. One of the critical flaws in the "flying geese" model, which became a major potential obstacle to the possible industrial upgrading that the Japanese themselves achieved, has been the conspicuous reluctance of Japanese MNCs to transfer technology to would-be competitors.

TABLE 1
BASIC INDICATORS OF THE MARITIME ZONE OF EAST ASIA

Country	1990				2008			
	PPP GDP	Int. exchange rate GDP	GNI Per capita (nominal)	Pop	PPP GDP	Int. exchange rate GDP	GNI Per capita (nominal)	Pop
	(m\$)	(m\$)	(\$)	(1000 persons)	(m\$)	(m\$)	(\$)	(1000 persons)
China	906,401	356,937	330	1,135,185	7,912,368	4,327,000	2,940	1,324,655
10 Coastal provinces	425,779	167,670	397	422,440	4,988,997	2,728,310	5,305	514,260
(% of China)	47.0	47.0	120.3	37.2	63.1	63.1	180.4	38.8
Japan	2,319,548	3,018,271	26,660	123,537	4,358,471	4,910,840	38,130	127,704
Korea	329,763	263,777	6,000	42,869	1,344,360	929,121	21,530	48,607
Taiwan	194,955	164,789	7,556	20,401	741,200	402,690	15,313	22,998
Hong Kong	92,312	76,887	12,660	5,705	306,720	215,355	31,420	6,977.7
Singapore	51,633	36,842	11,860	3,047	238,684	181,948	34,760	4,839.4
ASEAN (excl. Singa pore)	697,104	302,652	774	432,230	2,452,594	1,307,734	1,966	576,710
World	25,539,115	21,883,227	4,085	5,259,140	69,609,169	60,557,010	8,654	6,697,254

Sources: World Development Indicators online, World Bank.

*Taiwan population and per capita GNI: Taiwan Statistical Department (www.stats.gov.tw)

*Taiwan, Myanmar, GDP: World Economic Outlook Database, IMF

*Cambodia GDP (1990): World Economic Outlook Database, IMF

*Myanmar GNI per capita (1990): Key Indicators for Asia and the Pacific 2008, ADB

*Myanmar GNI per capita (2008): UN database

*Myanmar PPP GDP (2008): Economist Intelligent Unit

*10 Coastal provinces include Liaoning, Hebei, Beijing, Tianjin, Shandong, Zhejiang, Jiangsu, Shanghai, Fujian, and Guangdong: China Statistical Yearbook (<http://www.stats.gov.cn>)

*GNI per capita values for the 10 coastal provinces are substituted by the respective GDP per capita values

heart, the circulation of capital and technology through the system was too weak to organize the system around Japan itself. Moreover, the unambiguous hierarchy no longer existed, and the regional division of labor became more complex. We observe the embryonic emergence of the pattern of multiple production systems. The Japan-centered system has

gone into decline, while the greater China networks have been ascendant.

One can expect that the increasing economic interdependence and expanding production networks in East Asia would lead to industrial specialization across the economies, as well as division of labor along the value chain. Industrial specialization of subnational regions can also be anticipated, especially at the subregional transborder zones. Such borderless specialization of industries is happening in an integrated Europe. To a lesser extent, we may anticipate a similar reconfiguration, at least in the manufacturing industries in maritime Asia, *e.g.*, China's coastal areas, the three NAEs, and Japan. Table 1 shows the basic economic indicators.

B. Industrial Specialization and Spatial Differentiation

Industrial specialization across the national border is assumed in the "flying geese" model. Logically, industrial spread across national borders through FDI promotes industrial specialization between countries and subnational regions. For example, Japan specialized in technology- and knowledge-intensive industries when labor- and capital-intensive industries spread to developing countries. Assuming that the process of industrial spread occurred over the past two decades or more in East Asia (particularly in coastal China, which received the majority of FDI from Japan and the three NAEs), we expect that subnational regions would have developed industrial specialization according to their comparative advantages. Japanese regions would have more of technology- and knowledge-intensive industries, while the three NAEs would specialize in the capital-intensive and partly knowledge-intensive industries. China, on the other hand, would focus on labor-intensive industries. Consequently, subnational regions could reveal a higher level of industrial specialization compared with the level of the past two decades. We would also expect functional and growth differentiations across cities and city-regions as enterprises move around borders to exploit the benefit of agglomeration and cluster economies.

However, the analysis based on manufacturing employment during the period 1990-2005 is inconclusive. Specialization of industries did not occur in all the sub-national regions, *i.e.*, provinces and prefectures. In addition, several subnational regions revealed an increased level of industrial diversification rather than industrial specialization. It is surprising that most subnational regions in Korea experienced industrial diversification instead of industrial specialization despite the country's rapidly

TABLE 2
INDUSTRIAL DIVERSIFICATION AND SPECIALIZATION OF SELECTED
SUBNATIONAL REGIONS BETWEEN 1990 AND 2005

Nation	City	Index of Diversification		Index of Specialization		Comparatively Specialized Industry			
		1990	2005	1990	2005	Index value/Industry code (1990)		Index value/Industry code (2005)	
Korea	Seoul	1.646	1.659	0.304	0.301	3.393	14, 15	4.150	14, 15
	Incheon	2.105	1.452	0.237	0.344	1.916	26	2.207	24, 25
	Gyeonggi	2.187	2.086	0.229	0.240	2.820	26	2.255	26
	Busan	1.343	1.583	0.372	0.316	4.618	14, 15	2.736	29, 30
	Ulsan	NA	0.831	NA	0.602			9.283	29, 30
	Gyeongnam	1.895	1.229	0.264	0.407	4.721	29, 30	5.094	29, 30
Japan	Saitama	2.338	2.364	0.214	0.212	2.012	29, 30	1.960	17
	Chiba	1.793	2.430	0.279	0.206	1.890	24, 25	2.261	24, 25
	Tokyo	2.614	2.331	0.191	0.214	2.147	26	1.580	26
	Kanagawa	1.656	1.723	0.302	0.290	2.665	29, 30	2.412	29, 30
	Gifu	2.578	1.817	0.194	0.275	2.319	14, 15	2.030	17
	Aichi	2.039	1.316	0.245	0.380	4.309	29, 30	5.121	29, 30
	Mie	2.389	1.847	0.209	0.271	2.433	29, 30	2.595	29, 30
	Kyoto	2.848	3.736	0.176	0.134	1.689	13	1.634	13
	Osaka	3.228	1.762	0.155	0.284	1.848	24, 25	2.454	24, 25
	Hyogo	2.945	2.350	0.170	0.213	1.725	24, 25	2.023	24, 25
Nara	4.896	2.305	0.102	0.217	1.485	26	2.052	17	
China	Beijing(91)	4.674	2.079	0.107	0.240	1.293	28	1.932	10, 11, 12
	Tianjin	5.074	3.371	0.099	0.148	1.309	19, 20, 21	1.452	19, 20, 21
	Hebei	2.558	2.142	0.195	0.233	1.442	19, 20, 21	2.095	24, 25
	Shanghai	3.601	2.983	0.139	0.168	1.452	28	1.666	10, 11, 12
	Jiangsu	2.973	4.539	0.168	0.110	1.711	13	1.776	13
	Zhejiang	2.875	2.685	0.174	0.186	1.898	13	2.048	13
	Liaoning	2.279	2.529	0.219	0.198	1.623	28	1.723	24, 25
	Shandong	2.233	2.079	0.224	0.240	1.699	13	1.604	10, 11, 12
	Guangdong	3.338	2.580	0.150	0.194	1.744	14, 15	1.900	27
Fujian	2.685	2.421	0.186	0.206	2.113	17	1.986	14, 15	
Taiwan	Taiwan	2.920	1.544	0.171	0.324	1.699	26	2.554	26
	Hong Kong	1.336	2.197	0.374	0.228	3.704	14, 15	2.570	14, 15

Adapted from Kim *et al.* (2009).

growing trade and investment ties with China over the same period.

In contrast, China's coastal areas experienced industrial specialization over the same period. As posited in the "flying geese" model, industrial relocation across the national border is one factor. On the other hand, the disintegration of the cellular (sub-national) regional economies, the main feature of the Chinese economy during the socialist period up until the early 1980s, could be another factor accounting for the industrial

specialization trend in coastal China. This was facilitated by local autonomy in governance. Nonetheless, the crystallization of a few core growth regions along the coast of China is evident.

The web of interdependent economic relations in East Asia, however, seems unable to show mature characteristics of industrial networks. In other words, hierarchical elements and competitive structures remain. The main obstacles to forming transborder production networks may include the technology barrier, a clustering tendency of innovation, and more importantly, the narrowly defined national interests.

Given the growing links between Japan and the NAES as characterized by the rapid growth of investment during the 1970s and 1980s between Japan and Taiwan and Korea in particular and between ASEAN and China, we would anticipate regional production networks to expand in East Asia. The study of Kim (2008) on the regional production networks by Japanese and Korean MNCs in the electronics and automobile industries in Northeast Asia suggests the following features. In contrast to American and European MNCs, firms in China receiving investments from Japanese and Korean companies are slow in localization and tend to retain strong ties with headquarters in home regions. These MNCs often import a substantial portion of parts and components from supplier firms in home regions (or procure them by their home countries' suppliers who co-relocated to China together with major companies). Moreover, major decisions are made by headquarters in home regions. These Japanese and Korean firms usually specialize in production and often do not have an R&D function. If the function is present, it is mostly for the purpose of adapting to the local market. This is what differentiates them from European and American MNCs advancing into China.

As a result, regional production networks set up by Japanese and Korean MNCs in China reveal a hierarchical pattern and a closed structure, both of which are different from the global trend of an open network of production, wherein global sourcing and localization of management and R&D comprise the standard. Such hierarchical pattern and closed structure are more pronounced in the automobile industry than in the electronics industry. Within the electronics industry, the tendency is stronger in the liquid crystal display (LCD) and semi-conductor industry; meanwhile, the tendency is less pronounced in the mobile phone industry.

The vertical industrial organization, which is deeply embedded in Japanese and Korean corporate culture, is known to be the root cause of the aforementioned pattern of regional production networks (Ernst

2005; Sturgeon 2007). The reluctance of Japanese firms to engage in technology transfer out of fear of competition from Korean and Chinese firms adds another barrier to constructing an open production network. Ambivalent perceptions of China by Japanese and Korean companies do not allow them to move swiftly into a modular network system, as their European and American counterparts do.

Given the behavior of Japanese and Korean MNCs, the positioning of Japanese and Korean firms as well as city-regions in regional production networks is obvious. They tend to retain the core technology and higher value-added functions in their home regions, while transferring general technology and lower value-added functions to China and elsewhere. However, this kind of labor division seems increasingly unacceptable in relation to China's advocacy for "scientific development" characterized by high technology and low pollution. Furthermore, given its global orientation of economic development, China seems reluctant to participate in regional or sub-regional production networks (Kim 2008).

The positioning of city-regions in terms of value chain can be divided into three types (Kim 2008). The first type is the advanced region, which tends to focus on R&D and marketing. Japan's Tokyo region is the typical case. The second is the advanced region that continues to retain a full-set structure. Within the Chubu region, which is centered in Nagoya, the full-set structure in the LCD industry is clearly evident in the Mie prefecture. The automobile industry is another example of a full-set structure clustered around Toyota city. The third type is the region specializing in production. China's Guangdong province used to be regarded as the world's foremost factory of low value-added products. In a similar fashion, China's two other coastal areas, namely, the Changjiang Delta and the Jing-Jin-Ji area (composed of Beijing and Tianjin and Hebei provinces), comprised export production bases for MNCs. The Shanghai area, the Beijing-Tianjin area, and the Pearl River Delta, however, have recently been striving to move up in the value chain by focusing on high-technology and R&D (Chosun 2010; Hankyung 2010).

Taiwan has a unique position in the value chain. The Taipei city-region is not quite as advanced as the Tokyo, Osaka, or Seoul region. Moreover, it does not show a strong tendency toward the type of full-set structure prevalent in the Nagoya region. The Taipei region is more or less specialized in manufacturing. However, at the higher end of the value chain, the region is using its contract manufacturer position with global MNCs. Taiwan firms work in China by supplying capital and technology. In turn, the firms receive orders and new technology from American and

European MNCs. Through their technology and talent connections with Silicon Valley, for example, Taiwan firms play an intermediary role between China and the US in global production networks, especially in the electronics industry. In the related literature, this is referred to as triangular manufacturing (Bush 2005; Hsu 2006).

Given that Korean firms emulate partially the Japanese model of industrial development, Korean city-regions reveal a tendency toward a full-set structure in LCD and automobile industries. Seoul, the most advanced region in Korea, however, is not yet at a comparable stage to the Tokyo region in terms of innovative capacity and depth of human resources. Thus, it is too early to classify Seoul as a city-region specializing in R&D and marketing/services. Meanwhile, the Busan city-region specializes in the shipbuilding and automobile industries. The small and large firms within the region show a strong clustering tendency. Due to the fact that the innovative capacity of the region is weak, it more or less specializes in higher-end production.

This positioning in value chain by the city-regions of Japan, the NAES, and China in regional production networks seems untenable because no city-region wished to remain at the lower end of the value chain. If all the regions in East Asia pursue the same path of growth, *i.e.*, move up the ladder in the value chain, competition and conflicts are inevitable at the latter stage of development. Therefore, the best scenario would be one, in which each city-region seeks a different path of growth for its niche based on its own competitive strength. With this, the complementary division of labor between city-regions can be established. This is, however, hard to expect if left alone to market forces, especially since competition is more likely to occur between city-regions. A hierarchy is more likely to develop in the future, unless conscious efforts are made toward a network with more horizontal division of labor.

IV. Different Responses among the NAES

As demonstrated earlier, China, Korea, Taiwan, and Japan have become each other's leading trade and investment partners over the last two decades, surpassing their respective linkages with the US. Hong Kong and Macao became parts of China politically in 1997 and 1999, respectively, and they are being integrated with the Chinese economy, particularly with the Pearl River Delta region. In spite of political differences, Taiwan's relations with mainland China have deepened through

trade, investment, and technological partnership.

Consequently, China may be reaping double benefits from the three key “small,” advanced economies, *i.e.*, the NAEs. Investments from the NAEs have helped China develop its export industries. At the same time, China is pressing the NAEs to upgrade their industries in China. As Chen (2000, 2005) illustrates, the economic relations of the NAEs with China are being reshaped in the transborder sub-regions, with China anchoring and being involved in several of the sub-regions. It should be noted that the relations between China and NAEs are not exclusively confined to these subregions. By drawing Hong Kong, Taiwan, Korea, and—to a lesser extent—Japan into two or three of the transborder sub-regions along its coast, China has managed to establish geo-economically based new alliances that generate both cooperation and competition within and between the transborder subregions. Furthermore, transborder subregions may exert two restructuring effects on the NAEs. One is heightened differentiation in the economies as they become more integrated with their neighbors in varying degrees; the other is the increase in the internal differentiation within the country as coastal China is drawn deeper into the increasingly globalized economy.

Differentiated adjustment or restructuring by the NAEs reflects partially the respective geo-political and geo-economic positions of each NAE in relation to China, Japan, and the US. Risking the error of oversimplification, one can state that Hong Kong, which belongs to China politically and is located at the corner of the Pearl River Delta, is being integrated into or absorbed by China. Taiwan, on the other hand, is increasingly pulled into China’s orbit in spite of potential political waves across the Taiwan strait. Korea is busy exploring optimal strategies to find its niche between China as an economic giant on the one hand, and a technologically smart Japan and the US, comprising an ailing hegemon, on the other. Japan, despite its growing economic interdependence with China, maintains the status of being one of the leaders in East Asia by strengthening its alliance with the US and diversifying its economic relations beyond China, for example, with India.

In the remainder of this analysis, different responses by each NAE to the rise of China are outlined.

A. Hong Kong

Hong Kong provides the most extreme examples. The prospect of forming a southern China growth triangle is strong with the integration

of Hong Kong into the Pearl River Delta (especially with the Guangzhou Bay Area), and with Taipei forging stronger economic ties with China, particularly with Guangdong and Fujian. Hong Kong's economic fate is tied to China, although this is an internal matter at present. Hong Kong is struggling to find its role in China and Asia without being completely absorbed into China (Tucker 2008). Hong Kong's advantage as a center of this subregion is not guaranteed, since Guangzhou and Shenzhen are striving for a central position in the South China region as well (Lui and Chiu 2010).

As Chan (2011), Chan and Lin (2008), and others have explicated, the Pearl River Delta has become an organic part of Hong Kong's production network. It should be noted that economic and spatial integration initiatives are mainly coming not from Hong Kong but from the hinterland, mainly Guangdong.⁷ The recent regionalization (or transborderization) of Hong Kong should be understood from a historical perspective. Hong Kong first developed as an entrepot of a vast hinterland and did not intend to become a self-sufficient and independent unit of economic activity. As political barricades are removed, it would be natural to expect Hong Kong to revert back to its role as entrepot of trade and a service center for its hinterland. Indeed, this explains what has happened during the last decade and a half. The manufacturing share of GDP fell from 18% in 1990 to 4% by 2004. At present, Hong Kong heavily specializes in finance, trade, corporate management, and business services (Shinohara 2003; Meyer 2008).

After all, Hong Kong's high dependence on China makes it vulnerable to the vicissitudes of the Chinese economy and polity. Moreover, while Hong Kong's role as a financial center remains unchallenged, it may face competition from Shanghai. Re-integration with China, especially with the Pearl River Delta region, causes worry on the future of Hong Kong, whose role as a strategic node is limited to the sub-region (South China) instead of covering the broader East Asian regional economy. Ironically, reintegration with China may be the key to Hong Kong's viable future.

⁷ Hong Kong's attitude toward the Pearl River delta integration has been lukewarm until very recently. Due to the "one country two system" policy, Hong Kong SAR has been discussing mainly with Beijing. This seems to be no longer the case. At present, Hong Kong planners seem to realize that they have to work with planners from the respective local governments of Guangdong and Shenzhen.

B. Taiwan

In less than two decades, the core of Taiwan's high-tech production migrated across the strait. Approximately one million Taiwanese workers, engineers, and managers, along with their family members, presently work and live in the mainland, mostly in Guangdong, Fujian, and especially in the Shanghai-Suzhou corridor. Taiwanese capital and technology are important to China's industrialization and export drive. In turn, Taiwan's economic future rests firmly on the performance of mainland industries, its exports, and the expansion of its domestic market (Selden 2009, and author's discussion with experts in Taipei on May 2009).

Concerns with growing economic interdependence between Taiwan and mainland China take three forms. First, there exists a concern regarding the hostage effect, which sees Taiwan companies as being dependent on the mainland, resulting in the island's vulnerability in the face of economic leverage from Beijing. The second is the idea that Taiwanese business on the mainland will become a lobby for the PRC and a tool that will help China accomplish its political agenda. The third is the hollowing-out effect, or the concern that the movement of manufacturing across the Taiwan Strait will leave Taiwan economically weak (Bush 2005).

Against the wishes of some groups in Taiwan, such as the Democratic Progressive Party, Taiwan has already been pulled into China's economic orbit. In addition, Taiwanese companies have long since accepted the centrality of the mainland with regard their future. Although Taiwan can balance its dependence to an extent by enhancing its economic ties with the US, Japan and Southeast Asia, to name a few, it seems impossible to disregard China's challenge. Many intellectuals in Taiwan feel that Taiwan cannot afford to ignore the immense mainland market. Furthermore, they know that there is not much time left to get on the train bound for China (Bush 2005).

Chen (2011) questions the economic future of Taiwan. The choice left for Taiwan is to strengthen itself economically by establishing a new global competitive niche as manufacturing continues to move to the mainland. Triangular manufacturing utilizing Taiwan's connection with the Silicon Valley while carrying out production in China has been successful thus far (Hsu 2006). However, whether Taiwan can sustain its competitive advantage over China in terms of technology and talents remains to be seen. China is not idle in nurturing technologies and talents. The option of making Taiwan, specifically Taipei, a service center for main-

land China is seriously considered. Medical services, tourism, and logistics are considered to be the future industries for the Taipei region that are meant to complement high-technology manufacturing. Some argue that Taiwan, particularly Taipei, has advantages over mainland cities in terms of more cultured, civilized, and competent talents. In short, quality of life, talents, and a globalized business environment are the comparative advantages of Taipei and Taiwan over Chinese major cities.⁸

C. Korea

Korean's views about increasing dependency on China are ambivalent. As with Japan, views on China as a threat and an opportunity coexist. Some perceive China as a threat in a way that Korea will turn into a satellite economy of China in the not so distant future. Others consider the rise of China as an opportunity, through which deeper economic relations with China will provide an additional source of growth for the Korean economy. Similar to the case of Taiwan, many Koreans are concerned with industrial hollowing out as more Korean companies migrate to China. A threat perception is summed up as a "nut-cracker phenomenon." Being sandwiched between Japanese technological superiority and Chinese price competitiveness, the Korean economy is likely to face extremely difficult times ahead. Optimists, however, propose the reverse logic, "technological superiority over China and price competitiveness over Japan." Numerous suggestions have been proposed to seize the opportunity arising from deepening economic ties with China. Essentially, these suggestions can be grouped into two: one is to transform Korea (or part of it, *e.g.*, Seoul city-region) into a business hub for China and the East Asian economies, which follows more or less the Hong Kong or Taipei path; the other is to build a knowledge-intensive economy, which is competent in both manufacturing and services by emulating Japan. The Seoul city-region undoubtedly has a great potential to become a center of knowledge-intensive manufacturing and services in the region. Other city-regions in Korea, however, seem to have a bleak future. For example, the Busan city-region, which is the industrial powerhouse of Korea, has a weak R&D capacity and not quite attuned to the global business environment, both of which are required to foster producer service industries. It remains to be seen how long this city-region can retain its shipbuilding and automobile industries, especially since China's

⁸ These viewpoints were obtained from the author's discussion with scholars and experts in Taipei in mid-May 2009.

coastal areas are rapidly catching up with Korea on these two industries.

Unlike the three NAEs, Japan remains as a formidable power in East Asia. Its technological competence cannot be challenged by China or the NAEs, not even in the near future. Even though it is not a substitute market for the US or China, Japan's economic size and its trade and investment volumes count significantly, especially for ASEAN countries. Japan generally remains at the top of the value chain as a provider of equipment and technology-intensive parts and components. The astute behavior of Japanese firms can be summarized as "engage with China with a pull-back position." In essence, they want interdependency rather than dependency in external economic relations. India and the ASEAN countries are the leverage of many Japanese firms. However, sub-national variations exist within Japan. For example, Kyushu, which has the highest trade interdependence with China and the NAEs, desires to expand economic ties with neighboring city-regions in the Pan Yellow Sea Region, while the Tokyo region, with its global status, does not care as much about the regional transborder cooperation.

V. Concluding Observations

Connections with Hong Kong, Taiwan, Singapore, and the overseas Chinese diaspora have been especially important in channeling FDI into mainland China. Consequently, the connections have facilitated the growth of export industries in China's coastal areas. "Greater China" is emergent through a dense web of trade and investment among Hong Kong, Taiwan, and coastal China. Korea and Japan are also important players in the growing regional economic networks in East Asia, but their respective positions are somewhat different from the members of "greater China." In this respect, transborder spaces centered on coastal China are likely to be developed along cultural lines in addition to market principles. Language and values, for example, matter greatly in business and, more broadly, in forging inter-firm and inter-city networks. Shared historical understanding and values are important conditions for a community, including transborder regions. Japan and Korea, due to historical reasons and the prevalence of different values from China, are unlikely to imagine a Sino-centric regional order in East Asia, at least in the foreseeable future.⁹

⁹ Realist international relations analysts, such as Mearsheimer (2001), projected

Whether or not they are anticipating the rebirth of a Sino-centric regional order, all the countries in East Asia are busy adjusting to China's ascendance. As discussed, countries and city-regions adjacent to coastal China are adjusting using different intensities and varying strategies. Hong Kong, which used to be a city-state and, currently, a special administrative area of China, has limited freedom in policy design. Although Taiwan is a separate political entity at the moment, it appears to be pulled into the orbit of the Chinese economy; thus, the future of Taiwan and the Taipei city-region greatly depends on China. Korea, being a relatively small economy with a security problem, faces a dilemma in balancing its economic ties with China against its critical security ties with the US. City-regions in Korea, despite their recent efforts to enhance inter-city networks across the border, are subject to the constraints built by the state. In comparison, Japan feels less urgency than Korea in making adjustments to the rise of China because of its size and level of economic development. However, for some city-regions, such as Kyushu, the situation looks different.

As economic geographers observe, China has regained its centrality in a different form from the one that characterized the China-centered tributary system before the 18th century (Gipouloux 1998; Wang 2003). The past China-centered tributary system was neither accurate nor relevant in describing the emergence of transborder spaces centering on coastal China. The fluidity of the core-periphery dynamics suggests an emergence of maritime Asia instead of the restoration of a Sino-centric order. When the opening and development of China began in the 1980s, China has been experiencing internal differentiation. Coastal China has grown rapidly through a complex web of connections to the NAEs, Japan, and the West. Clearly, the region is differentiating itself from inland China. In a sense, East Asia can be divided into two: maritime Asia composed of coastal China, and the NAEs and Japan, and inland China, which is edging into Central Asia.¹⁰ The core-periphery framework based on the nation-states system cannot explain the dynamics of transborder spaces forming in East Asia. The emerging regional economic landscape in East Asia may be better presented by a corridor model than the concentric zone model implicit in the Sino-centric regional order.¹¹

the emergence of a hegemonic China in East Asia based on the assumptions about China's economic growth. Others, such as Macintyre and Naughton (2005), Moore (2008), and Beeson (2009), made more qualified statements that China is not yet ready to play a leader's role in East Asia.

¹⁰ Certainly, maritime Asia should be extended to Southeast Asia.

In sum, economic spaces in East Asia are being restructured. Coastal China has been undergoing restructuring with the assistance of the NAEs and others, whereas the NAEs and others in maritime Asia have also been undergoing restructuring because of the influence of coastal China. This spatial transformation, which has been occurring along the East Asian corridor, is multi-faceted and can be characterized as bottom-up. Cities and countries around China are not simply peripheral actors in this transformation process; they can actually influence the process. The key question is how to accommodate the demands of China, which is growing bigger and smarter at an alarming rate. The challenge for the NAEs is to find ways to adjust their economic structures and urban functions as well as to find a niche in the shifting regional economic order of East Asia. In future studies, it would be intriguing to examine diverse modes of adjustment by country and city-region in maritime Asia.

(Received 27 October 2010; Revised 17 November 2010; Accepted 10 March 2011)

References

- Ahearne, Alan G., Fernal, John G., Lougani, Prakash, and Schindler, John W. "China and Emerging Asia: Comrades or Competitors." *Seoul Journal of Economics* 16 (No. 2 2003): 183-213.
- Ash, Robert. "China's Regional Economies and the Asian Region: Building Interdependent Linkages." In David Shanbaugh (ed.), *Power Shift: China and Asia's New Dynamism*. Berkeley: University of California Press, pp. 96-131, 2005.
- Beeson, Mark. *Regionalism and Globalization in East Asia*. Houndmills, Basingstoke, Hampshire: Palgrave Macmillan, 2007.
- _____. "Hegemonic Transition in East Asia? The Dynamics of Chinese and American Power." *Review of International Studies* 35 (No. 1 2009): 95-112.
- Bernard, Mitchell, and Ravenhill, John. "Beyond Product Cycles and Flying Geese: Regionalization, Hierarchy and the Industrialization of East Asia." *World Politics* 47 (No. 2 1995): 171-209.

¹¹ Motegi (2005) conjured up the image that China at the center had the closer relations (tributary) with immediate peripheries and less close relations with far peripheries.

- Bush, Richard. "Taiwan Faces China: Attraction and Repulsion." In David Shanbaugh (ed.), *Power Shift: China and Asia's New Dynamism*. Berkeley: University of California Press, pp. 170-86, 2005.
- Chan, Roger C. K. "Hong Kong's Position in Guangdong under "One Country, Two Systems"." *Seoul Journal of Economics* 24 (No. 2 2011): 125-150.
- Chan, Roger C. K., and Lin, George C. S. "From a Colonial Outpost to a Special Administrative Region: Hong Kong's First Decade of Reunion with China." *The China Review* 8 (No. 1 2008): 1-6.
- Chen, Hsiao-hung Nancy. "The Political Economy of Cross-Strait Investments—Taiwanese High-tech Industry as an Example." *Seoul Journal of Economics* 24 (No. 2 2011): 171-195.
- Chen, Xiangming. "The Geoeconomic Reconfiguration of the Semi-periphery: The Asian-Pacific Transborder Subregions in the World Systems." In G. M. Derluigian and S. L. Greer (eds.), *Questioning Geopolitics: Political Projects in a Changing World-System*. Westport, Connecticut: Praeger, pp. 185-205, 2000.
- _____. *As Borders Bend: Transnational Spaces on the Pacific Rim*. Lanham: Rowman & Littlefield Publishers, 2005.
- Chosunilbo. New Economic War among Korea, China and Japan. 2010, <http://biz.chosun.com/svc/news/printcontent.html?type=> (accessed on October 22) (in Korean).
- Christensen, J. "Fostering Stability or Creating a Monster? The Rise of China and U. S. Policy toward East Asia." *International Security* 31 (No. 1 2006): 81-126.
- Ernst, Dieter. "Searching for a New Role in East Asian Regionalization: Japanese Production Networks in the Electronics Industry." In Peter J. Katzenstein and Takashi Shiraishi (eds.), *Beyond Japan: The Dynamics of East Asian Regionalism*. Ithaca and London: Cornell University, 2005.
- Gipouloux, Francois. "Integration or Disintegration? The Spatial Effects of Foreign Direct Investment in China." *China Perspective* 17 (May-June 1998): 6-15.
- Hankyung. China Power. 2010, <http://www.hankyung.com/news/app/newsview.php?type=2&aid=2010041204751&n> (accessed on April 30) (in Korean).
- Hsu, Jinn-Yuh. "The Dynamic Firm-Territory Nexus of Taiwanese Informatics Industry Investment in China." *Growth and Change* 37 (No. 2 2006): 230-54.
- Kim, Won Bae. *Development Prospects for and Collaborative Development*

- of the Core Economic Regions in Northeast Asia (II) – Regional Production Networks and Complementary Regional Development Strategy.* Anyang: KRIHS, 2008.
- Kojima, Kiyoshi. "The "Flying Geese" Model of Asian Economic Development: Origin, Theoretical Extensions, and Regional Policy Implications." *Journal of Asian Economics* 11 (No. 4 2000): 375-401.
- Lampton, David. "China's Rise in Asia Need Not Be at America's Expense." In David Shanbaugh (ed.), *Power Shift: China and Asia's New Dynamism.* Berkeley: University of California Press, pp. 306-26, 2005.
- Lui, Tai-lok, and Chiu, Stephen. "Becoming a Chinese Global City Hong Kong (and Shanghai) beyond the Global-local Duality." In Xiangming Chen (ed.), *Shanghai Rising: State Power and Local Transformation in a Global Megacity.* Minnesota: University of Minnesota Press, pp. 93-123, 2010.
- Macintyre, Andrew, and Naughton, Barry. "The Decline of a Japan-Led Model of the East Asian Economy." In T. J. Pempel (ed.), *Remapping East Asia: The Construction of a Region.* Ithaca and London: Cornell University, pp. 77-100, 2005.
- Mearsheimer, John. *The Tragedy of Great Power Politics.* New York: Norton, 2001.
- Meyer, David. "Structural Changes in the Economy of Hong Kong since 1997." *The China Review* 8 (No. 1 2008): 7-30.
- Moore, Thomas G. "China as an Economic Power in the Contemporary Era of Globalization." *Journal of Asian and African Studies* 43 (No. 5 2008): 497-521.
- Motegi, Toshio. "Junggukgwa bada (China and the Sea)." In Omoto Keiichi, Hamashita Takeshi, Murai Yoshinori, and Yakima Hikoichi (eds.), *Badaui Asia (Asia on the Sea).* Translated by Kim Hung Hwan, Paju: Darimedia, 2005 (in Korean).
- Ohashi, Hideo. "China's Regional Trade and Investment Profile." In David Shanbaugh (ed.), *Power Shift: China and Asia's New Dynamism.* Berkeley: University of California Press, pp. 71-95, 2005.
- Pempel, T. J. "Introduction: Emerging Webs of Regional Connectedness." In T. J. Pempel (ed.), *Remapping East Asia: The Construction of a Region.* Ithaca and London: Cornell University, pp. 1-28, 2005.
- Selden, Mark. "East Asian Regionalism and Its Enemies in Three Epochs: Political Economy and Geopolitics, 16th to 21st Centuries." *The*

- Asia-Pacific Journal* 9 (No. 4 2009): 1-34.
- Shambaugh, David. "Return to the Middle Kingdom? China and Asia in the Early Twenty-First Century." In David Shanbaugh (ed.), *Power Shift: China and Asia's New Dynamism*. Berkeley: University of California Press, pp. 23-47, 2005.
- Shinohara, Miyoei. "Reshaping Hong Kong's Economy in the Past Decade: Triangular Trade and Economic Integration into Guangdong." *East Asian Economic Perspective* 14 (No. 2 2003): 14-37.
- Sturgeon, Timothy. "How Globalization Drives Institutional Diversity: The Japanese Electronics Industry's Response to Value Chain Modularity." *Journal of East Asian Studies* 7 (No. 1 2007): 1-34.
- Terry, Edith. *How Asia Got Rich: Japan, China and the Asian Miracle*. Armonk, NY: M. E. Sharpe, 2002.
- Tucker, Nancy B. "China's Relations with the West: The Role of Taiwan and Hong Kong." *Foreign Policy Research Institute Newsletter* 13 (No. 7 2008): 1-6.
- Wang, Hui. *Imagining New Asia*. Translated into Korean by Lee Wook Yeon, Paju: Changbi, 2003.