

Section 2 New development by Japanese companies in East Asia as a surface: Full-scale business activities in East Asia

As indicated in the previous section, the East Asian economy is undergoing an integration, including the integration of regulatory systems, through an EPA/FTA such as the ASEAN Free Trade Agreement (AFTA). As the East Asian business environment gradually becomes harmonized by the liberalization of intra-regional economies, the East Asian business network centering on Japan is increasing in complexity and laying down deep roots throughout the intra-regional economy. This section „at first discuss these new developments from three viewpoints of production, sales, and R&D, and then, focusing on the logistics functions that support business activities, describe the conditions of the East Asian economy that make necessary efforts to actualize an EPA/FTA in terms of regulatory systems and policies.

1. Changes in production: Multilateral division of labor by processes and concentration of production and supply functions

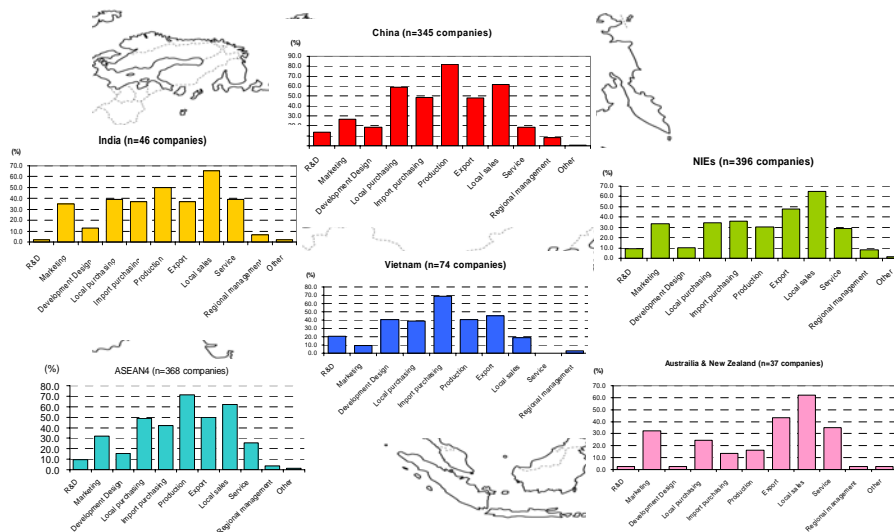
East Asia continues to maintain a triangular trade structure, whereby goods are assembled in China and ASEAN, where personnel costs are low, using high value-added parts developed and produced in Japan and NIEs, for export to Japan, the U.S. and Europe. Meanwhile, Japanese companies are developing more efficient production networks in East Asia through the division and concentration of production processes. The following is a discussion of the expansion and deepening of business networks based on the results of a questionnaire survey of Japanese companies in east asia and supported by trade data.

(4) Expansion and deepening of East Asian business networks

(State of the network: Production functions centered in China and ASEAN, sales functions centered in NIEs, India, Australia and New Zealand)

Japanese manufacturing industry has built a business network through direct investment in East Asia with a view to reducing production costs and participating in local markets. Comparing the inroads Japan has made in East Asia from the perspective of business functions, the proportion of production functions held by Japan in bases in China and ASEAN is notably high, and Japan also holds a high proportion of sales and service functions in NIEs, India, Australia and New Zealand (Figure 2-2-1).

Figure 2-2-1 Business Functions of Japanese Manufacturing Industry in East Asia



(Notes) 1. Japanese companies that are in multiple countries or regions provided multiple responses.

2. For details on this questionnaire survey, refer to attachment 2-2.

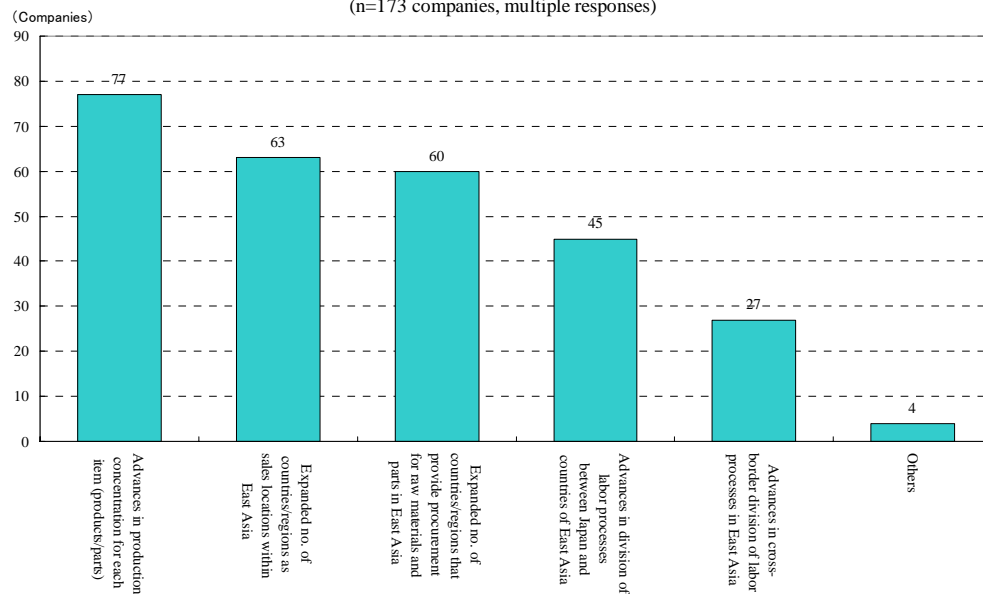
(Data) Made from Japan Industrial Policy Research Institute (2007) *Seicho wo Togeru Chugoku - Indo Keizai no Genjo Bunseki to Service Sangyo wo Fukumu wa ga Kuni Kigyo No Kaigai tenkai ni kan suru Chousa Kenkyu*.

(Expansion and deepening of networks: Multilateral division of labor by processes and concentration of production and supply)

In East Asia, trade barriers are coming down thanks to the expansion of intra-regional EPA/FTA networks such as AFTA and the Thailand-India FTA, a process which is leading to a seamless, integrated economy free of the snares of national borders. At the same time, business activity is less restricted than before as a result of regulatory system reform in the various countries. Under these new circumstances, the East Asian business networks of Japanese companies are likely to expand and deepen even further.

In a questionnaire survey of Japanese manufacturing industries that have expanded into East Asia conducted in February 2007 regarding some of the changes that have come about through their business networks in the past three years, the change most frequently identified was progress made in concentrating production by product and part. Also mentioned as frequently were increases in the number of countries within East Asia from which they could procure parts and materials and to which they could export (Figure 2-2-2). The second most frequent response was progress in a cross-border division of labor by processes, not only between Japan and East Asia but between the countries of East Asia not including Japan. This suggests that Japanese companies are expanding the division of labor across multiple countries and regions within East Asia, irrespective of whether the work is performed by a single company or divided among multiple companies. At the same time, a movement is emerging that seeks the integration of East Asia as a market, including the concentration of production and supply functions aimed at achieving economies of scale.

Figure 2-2-2 Changes in East Asian production and sales networks of Japanese manufacturers over the past three years
(n=173 companies, multiple responses)



Note: Valid responses received from a total of 366 companies. Figures here are for 173, excluding those that responded that there were "no changes" over past three years
Source: SEICHO WO TOGERU CHUGOKU-INDO KEIZAI NO GENJOBUNSEKI TO SERVICE SANGYO WO FUKUMU WAGAKUNI KIGYO NO KAIGAITENKAI NI KANSURU CHOSA KENKYU. (JIPRI/2007).

(5) Development of a multilateral division of labor by process consisting of triangular trade and mutual supply of intermediate goods

(Procurement trends among companies that have expanded into East Asia)

To clearly understand this expansion and deepening of the divided labor structure (multilateral division of labor by processes) that extends across multiple intra-regional countries and regions, it would be instructive to examine trends in the procurement of parts and materials by the East Asian bases of the Japanese manufacturing industry. While on the one hand the rate of procurement from Japan is declining, the rate of local procurement is increasing, and this trend is most prominent in China and ASEAN (Figure 2-2-3). According to the results of a questionnaire survey conducted between December 2005 and February 2006, 50% of the local suppliers of Japan's manufacturing industry are Japanese-affiliated companies (Figure 2-2-4). The probable reasons for this increase in the rate of local procurement are the shift to local procurement of general purpose components and further expansion by Japanese companies into East Asia.

Figure 2-2-3 Procurement trends in East Asian subsidiaries of Japanese manufactures

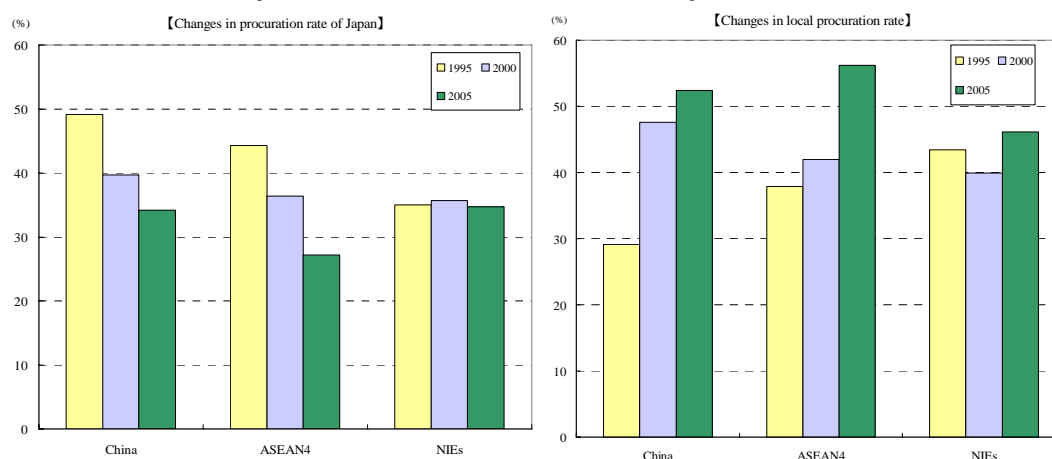
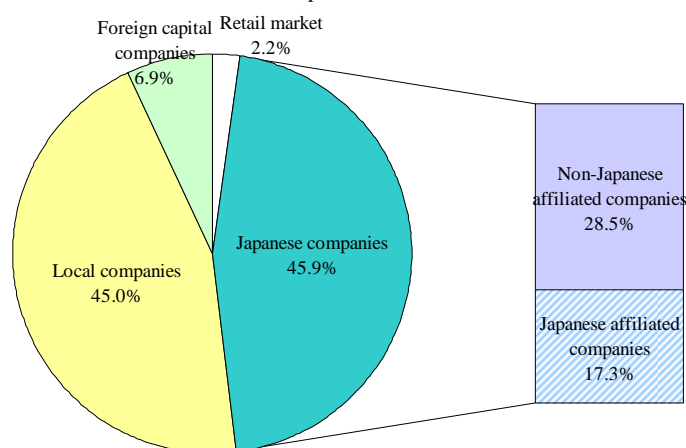


Figure 2-2-4 Breakdown of procurement sources for East Asian subsidiaries and affiliates of Japanese manufacturers



Note: 1. Survey period: December 2005- January 2006. No. of respondent companies: 213. The simple average of the ratio of procurement sources responded by companies.
 2. Group companies refer to those that have capital relations.
 Source: "HIGASHI ASIA NO TOUSHI SHIKIN CHOUTATSU KANKYU TO WAGAKUNI KIGYOU NO KAIGAI TENKAI NI KANSURU CHOUZA KENKYU" (Japanese Industrial Policy Research Institute (2006)).

In a survey concerning changes in the amount of procurement by companies in the past three years, companies most frequently mentioned an “increase” in the amount of local procurement. However, what stood out prominently in this survey was that after local procurement, companies most frequently mentioned an “increase” in the amount of procurement from within China and ASEAN other than from the location of bases (Figure 2-2-5). In fact, 30% of companies that have bases in China and 40% of companies that have bases in ASEAN carry out procurement from within China and ASEAN other than from the location of bases. Given that most of the companies that answered that the amount they procured from Japan had declined also responded that they had increased local procurement or procurement from China and ASEAN other than from the location of bases, it can be concluded that suppliers of parts and materials within East Asia are increasing (Table 2-2-6). Companies’ specific examples, moreover, indicate that they are procuring parts from many countries within the East Asian region and carrying out mutual supply between bases, thus building a system of production and procurement at optimal locations within the region (Table 2-2-7).

Figure 2-2-5 Changes in procurement amount of Japanese manufacturers in East Asia bases (compared to 3 years ago)

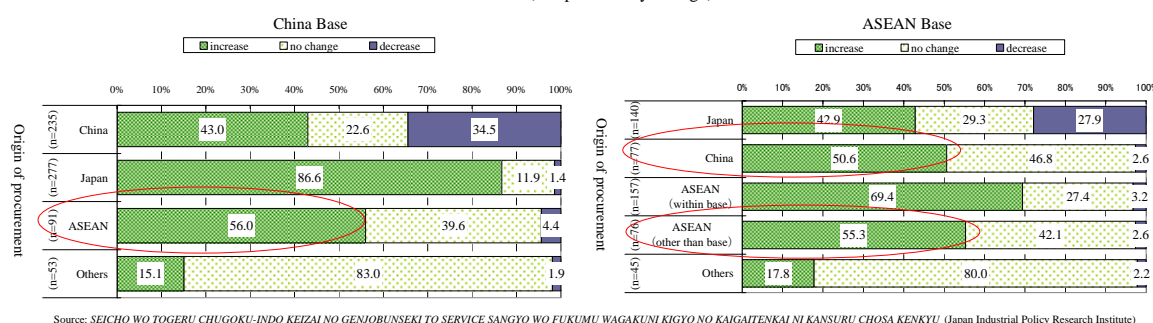


Table 2-2-6 Procurement trends for Japanese manufacturing industry in China and ASEAN bases

(Proportion of companies procuring from places in China and ASEAN4 other than their production base)

	No. of responses	Share (%)
Number of companies procuring in Chinese bases	298	(100.0)
Of which procurement is sourced from China	277	(93.0)
Of which procurement is sourced from ASEAN4	91	(30.5)
Number of companies procuring in ASEAN4 bases	190	(100.0)
Of which procurement is sourced from ASEAN4 (bases)	157	(82.6)
Of which procurement is sourced from ASEAN4 (non-bases)	76	(40.0)
Of which procurement is sourced from China	77	(40.5)

(Procurement trends in companies that responded procurement volume from Japan has reduced)

	No. of responses	Share (%)
Number of companies with Chinese bases with reduced procurement from Japan	81	(100.0)
Of which local procurement has increased	76	(93.8)
Of which procurement from ASEAN4 has increased	21	(25.9)
Number of companies with ASEAN4 bases with reduced procurement from Japan	39	(100.0)
Of which local procurement has increased	24	(61.5)
Of which procurement from ASEAN4 (non-bases) has increased	13	(33.3)
Of which procurement from China has increased	11	(28.2)

Source: SEICHO WO TOGERU CHUGOKU-INDO KEIZAI NO GENJOBUNSEKI TO SERVICE SANGYO WO FUKUMU WAGAKUNI KIGYO NO KAIGAITENKAI NI KANSURU CHOSA KENKYU, (JIPRI) (2007).

Table 2-2-7 Examples of multilateral division of labor structure in Japanese companies

Industry type	Content
Electronics manufacturer A	A PC board manufactured at a Vietnam base is supplied to Thailand and Philippines bases and hard disc drives are manufactured.
Electronics manufacturer B	For TV manufacturing at the Vietnam base, cathode-ray tubes are sourced from other group companies advanced in ASEAN countries.
Machine manufacturer C	For manufacturing bearing for vehicles, mutual complement is implemented between the China and Thailand bases.
Automaker D	At the respective ASEAN bases, Thailand: Diesel engine, Malaysia: engine computer, Indonesia: gasoline engine, the Philippines: transmission, etc. are manufactured, and mutual supplies are implemented between bases.
Automaker E	At the respective ASEAN bases, Thailand: engine, Malaysia: power steering, Indonesia: breaks, the Philippines: transmission, etc. are manufactured, and mutual supplies are implemented between bases.
Plating Industry F	Plastic molding is done at the Malaysia base and plating is done at the Singapore base.

Source: From various press releases, Umada, Ohgi (2005), FTA policy of BRICs and ASEAN Countries and Strategies of Japanese Companies, JETRO, Japan Finance Corporation for Small and Medium Enterprise - Report (2006) Seisan Kyoten no Kokusaitekina Kinou Haichi (International Arrangement of Functions of Production Centers), (Japan Small Business Research Institute).

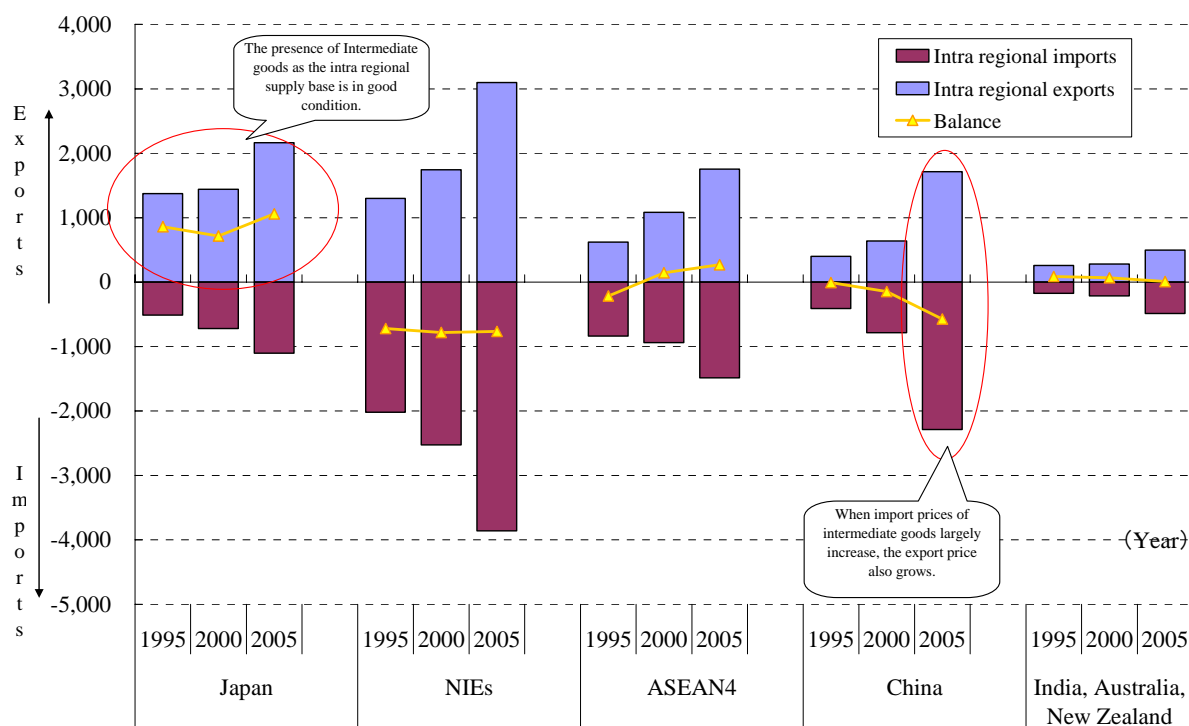
(Expansion of mutual supply of intermediate goods within the East Asian region)

When seen in terms of the trade structure that exists within the East Asian region, it again can be concluded that cross-border transactions of intermediate goods made of parts or processed goods is expanding.

As mentioned in the preceding section, the ratio of trade in intermediate goods within the East Asia region is growing dramatically. An analysis of trends in the trade of intermediate goods by country and region reveals that the volume of intra-regional exports by Japan greatly exceeds the volume of imports, and thus the region has become a base for the supply of intermediate goods. Moreover, the fact that ASEAN has become a net exporter in recent years suggests that this supply capacity is increasing. Furthermore, China, which has become a base for the assembly and export of finished goods, is importing a substantially larger amount of intermediate goods from within the region, while its export volume, too, is increasing, which means that although China continues to show a deficit in the balance of trade in intermediate goods, the proportion of total exports of intermediate goods within the East Asia region accounted for by China is heading upward (Figure 2-2-8 and Figure 2-2-9). Thus, China and ASEAN's capacity to supply intermediate goods has sharply increased, and as a result the mutual supply of intermediate goods within the East Asia region is expanding (Table 2-2-10).

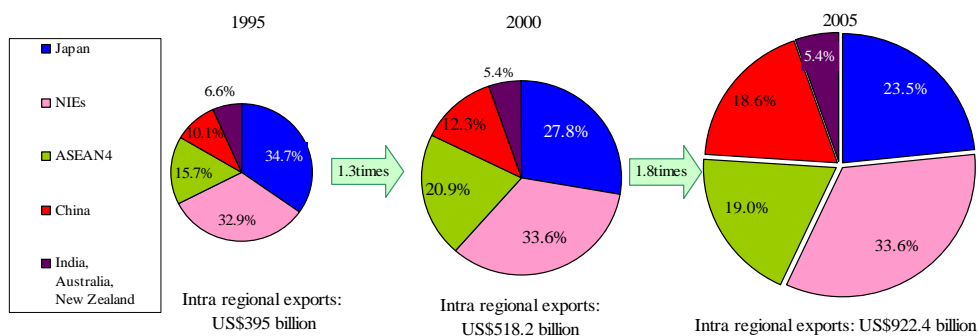
(\$ 100 million)

Figure 2-2-8 Changes in trade of intermediate goods in intra-regional East Asia



notes: Import has designated the mark as minus
Source: RIETI-TID2006 (RIETI).

Figure 2-2-9 The constituent ratio of intermediate goods exports within East Asia by country/region



Source: RIETI-TID2006 (RIETI)

Table 2-2-10 The growing rate of trade of intermediate goods in East Asian regions (2000-2005: annual rate)
(%)

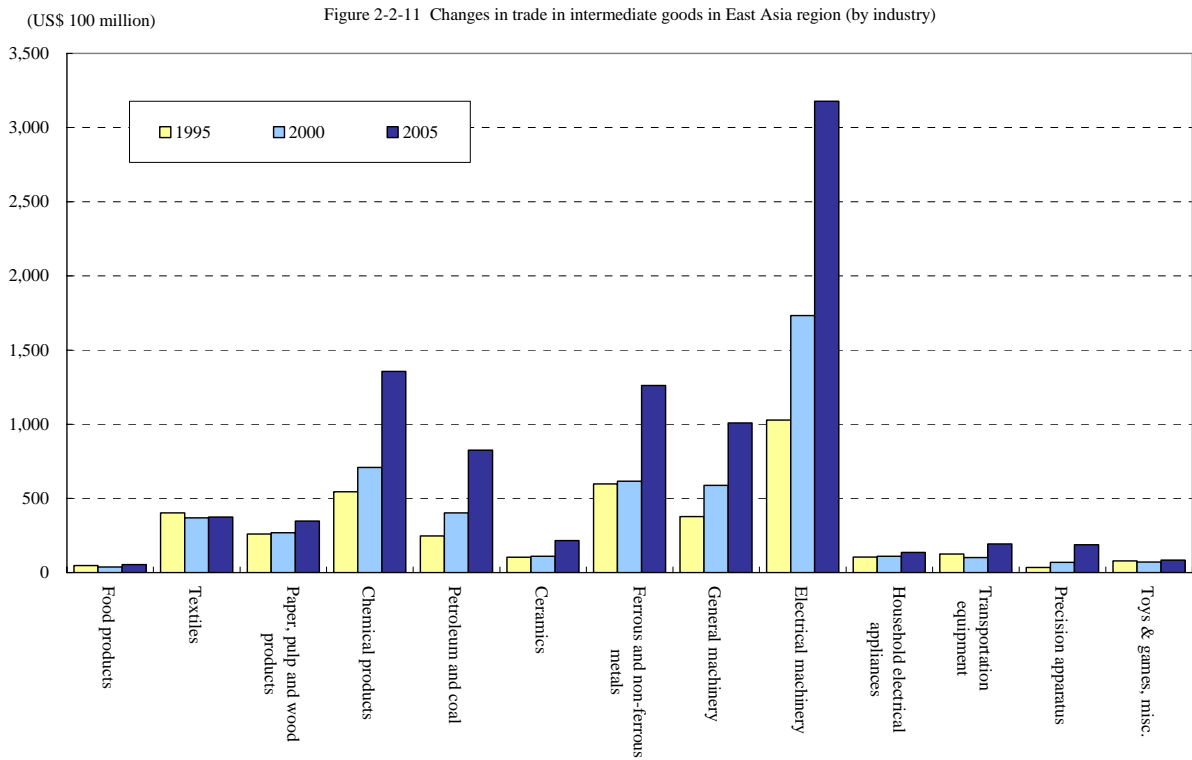
		Exports					
		Japan	NIEs	ASEAN4	China	India, Australia, New Zealand	East Asia Total
Imports	Japan	-	4.5	5.3	20.9	5.9	8.9
	NIEs	5.2	6.1	6.3	19.8	10.0	8.9
	ASEAN4	5.1	7.8	11.2	31.5	11.8	9.6
	China	18.3	26.7	27.5	-	25.1	23.8
	India, Australia, New Zealand	5.6	20.8	12.9	33.3	17.7	18.1
	East Asia Total	8.5	12.2	10.1	21.8	12.2	12.2

Source: RIETI-TID2006 (RIETI).

(Mutual supply of intermediate goods centering on electrical equipment)

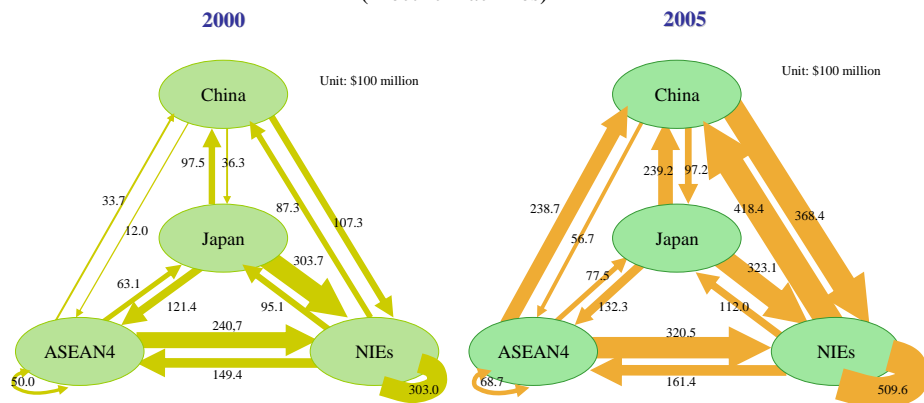
The following discussion will examine the aforementioned intra-regional mutual supply of intermediate goods to determine the main industries in which this expansion of mutual supply is taking place and the countries and regions where it is occurring according to industry. Looking first at the industry breakdown, the largest volume of trade in intermediate goods is that relating to electrical equipment, and intra-regional transactions are booming (Figure 2-2-11). The electrical equipment field, which is a core industry for trade in intermediate goods, has been undergoing a dynamic industrial expansion, as demonstrated by the substantial rise between 2000 and 2005 in exports to China from ASEAN, which was previously not prominent in the principal flow of trade. This stands in contrast to chemical products—the field second to electrical equipment in the volume of trade in intermediate goods—which is undergoing a quantitative expansion while basically maintaining the same pattern of trade flow (Figure 2-2-12 and 2-2-13).

A look at changes in the shares of intra-regional transactions of intermediate goods by exporting countries shows that ASEAN, since the latter half of the 1990s, and China, since 2000, have expanded their role as bases of interregional trade in electrical equipment and general equipment, respectively. Since the latter half of the 1990s, China has gradually expanded its share in the field of electrical home appliances, and in 2005, it accounted for about half of the total amount of intra-regional exports (Figure 2-2-14).



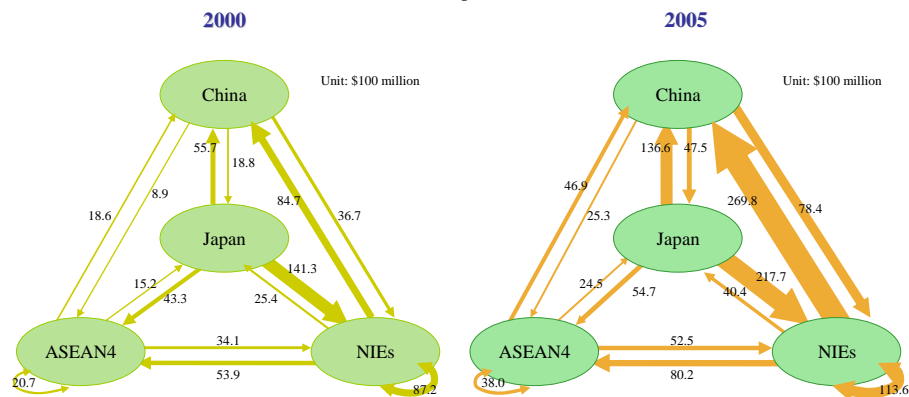
Source: RIETI-TID 2006. (RIETI)

Figure 2-2-12 Changes in trade of intermediate goods in East Asian regions (Electric machines)



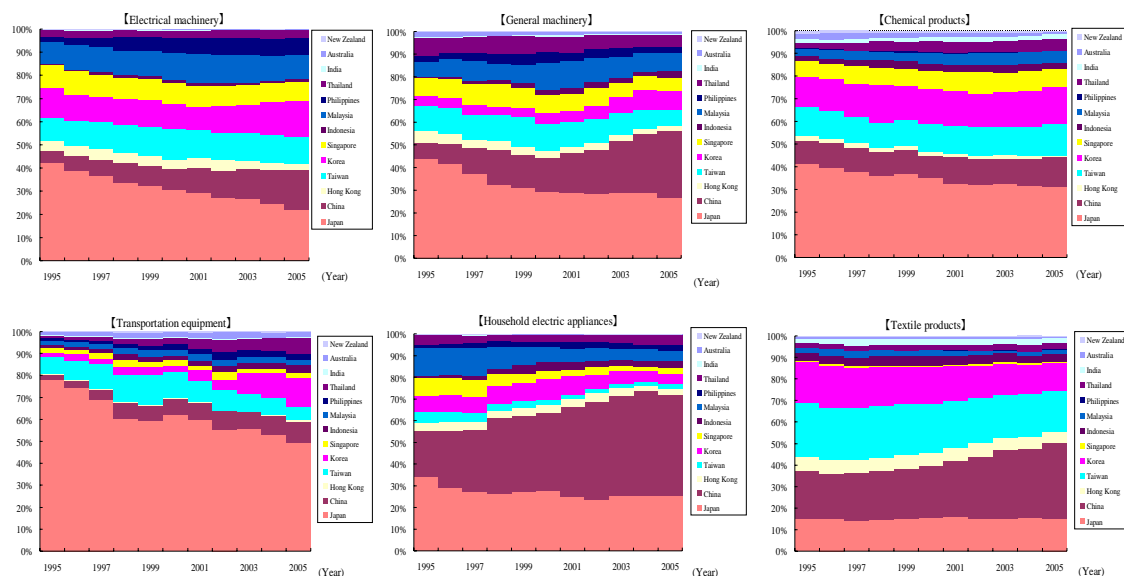
Source: RIETI-TID2006 (RIETI).

Figure 2-2-13 Changes in trade of intermediate goods in East Asian regions
(Chemical products)



Source: RIETI-TID2006 (RIETI).

Figure 2-2-14 Changes in trade in intermediate goods in East Asian region (by share of exporting countries)



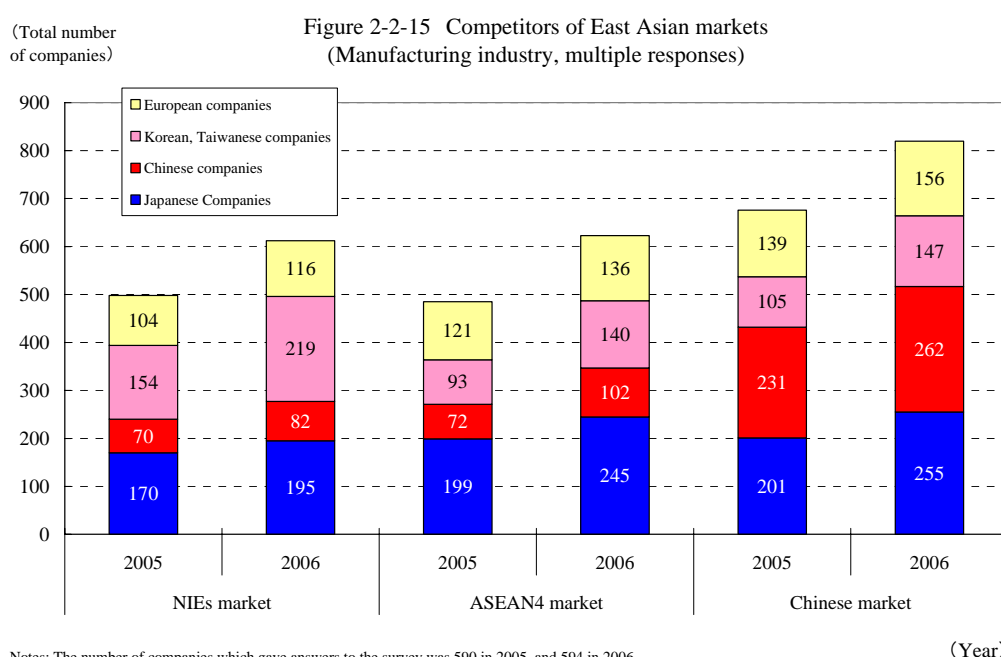
Source: RIETI-TID 2006.

(Background of the expansion in the mutual supply of intermediate goods)

The background of this major expansion of the volume of trade in intermediate goods in the East Asian region, particularly the increase in the export of intermediate goods from China and ASEAN to within the region, can be explained by focusing on the following two points.

First, the parts supply capacity of China and ASEAN has been enhanced through direct investment from Japan, NIEs and major Western countries. For example, the expansion into China and ASEAN by automobile manufacturers, which require large quantities of parts, has promoted the concomitant

development of automotive parts manufacturers, leading to a local concentration of industry, including direct entry by foreign-affiliated companies. In the electrical equipment field, the supply capacity of local companies is expanding, particularly in general purpose components. In addition, Japanese-affiliated automakers are channeling effort into the development of local companies in China and ASEAN for the purpose of reducing costs and strengthening local production capacity, and as a result the supply capacity of local companies is improving.⁸ A look at the results of a survey conducted to determine which country's companies are competing with Japanese companies in the East Asian market shows that while, in general, there is a high rate of competition between Japanese-affiliated companies, many companies answered that local Chinese-affiliated companies rather than Japanese-affiliated companies are the principal competitors in the Chinese market, suggesting that the overall competitiveness of local companies has improved (Figure 2-2-15).⁹ The key to competitiveness is the extent to which electrical equipment manufacturers can procure parts at a low price, and it seems that a system to respond to these needs through direct investment and development of local companies is being set in place in China and ASEAN.



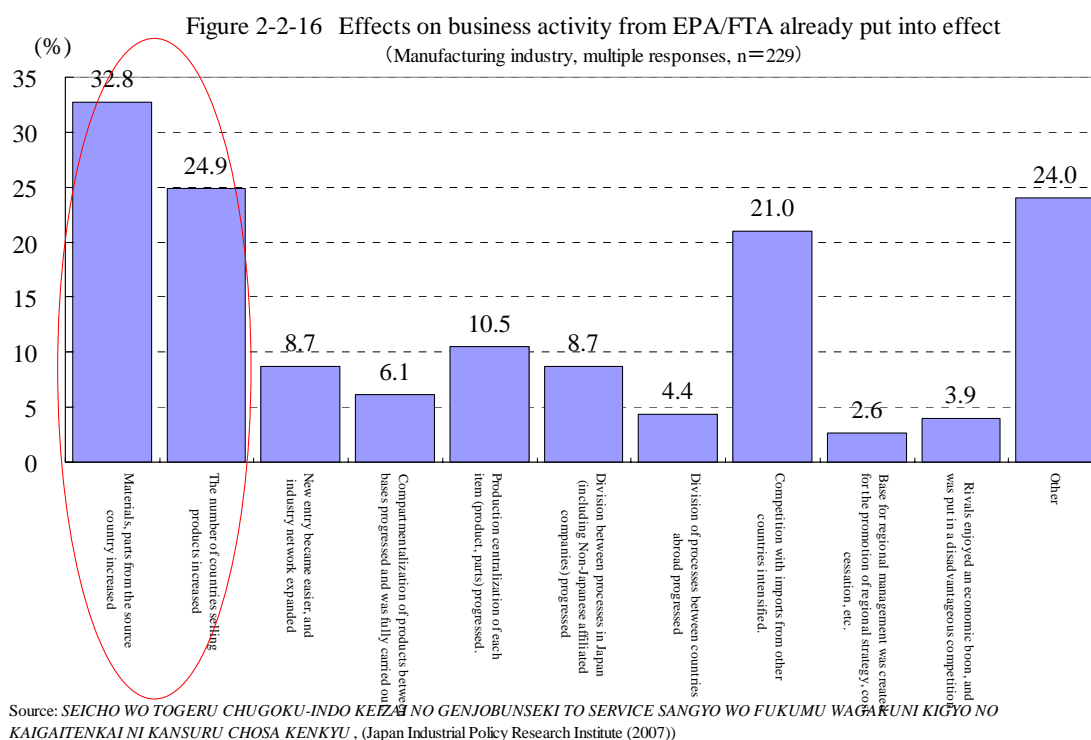
Notes: The number of companies which gave answers to the survey was 590 in 2005, and 594 in 2006.

Source: "WAGAKUNI SEIZOU KIGYOU NO KAIGAI JIGYOU TENKAI NI KANSURU CHOUHA HOUKOKU -2006 18TH KAIGAI CHOKUSETSU TOUSI SURVEY RESULTS -(Japan Bank for International Cooperation).

⁸ Business with Japanese-affiliated automakers has led to the improvement of the technical capabilities of Hong Kong auto parts makers that have expanded into China due to the more stringent plant and quality inspections of the Japanese. In addition, it has been reported that the results of this business have been favorably rated and that business with other Japanese-affiliated manufacturers has expanded. (*Japan-China Economic Forum 2006 Report*, Japan-China Economic Forum Organization Committee (2006)).

⁹ According to the results of a meeting conducted with those companies which responded to the above survey that they were competing with Chinese-affiliated companies, the companies surveyed indicated that Japanese-affiliated companies excelled in high value-added products, but that in general purpose products, quality differences with the products of Chinese companies were diminishing. They also indicated that even if there were quality differences, it was difficult to reflect these differences in prices for competition purposes.

Second, tariff barriers in the East Asian region are coming down thanks to the ASEAN Free Trade Agreement (AFTA) and other EPA/FTA. Since the area within which parts of the required quality can be procured inexpensively is expanding beyond borders, cross-border procurement of parts is increasing along with improvements in supply capacity in China and ASEAN. Many Japanese companies which have expanded into East Asia have increased the number of the countries from which procure parts and materials and to which they export as a result of an EPA/FTA (Figure 2-2-16).



(Triangular trade continues to expand)

Seen from the perspective of a multilateral division of labor by processes, triangular trade can be identified as the characteristic trade structure of East Asia. Triangular trade refers to a trade model in which high value-added parts and processed products manufactured in Japan and NIEs are assembled in China and ASEAN and exported to Japan, the U.S., and the EU, reflecting the characteristics of the East Asia business network whereby labor-intensive processes are performed in regions where wages are relatively low.¹⁰

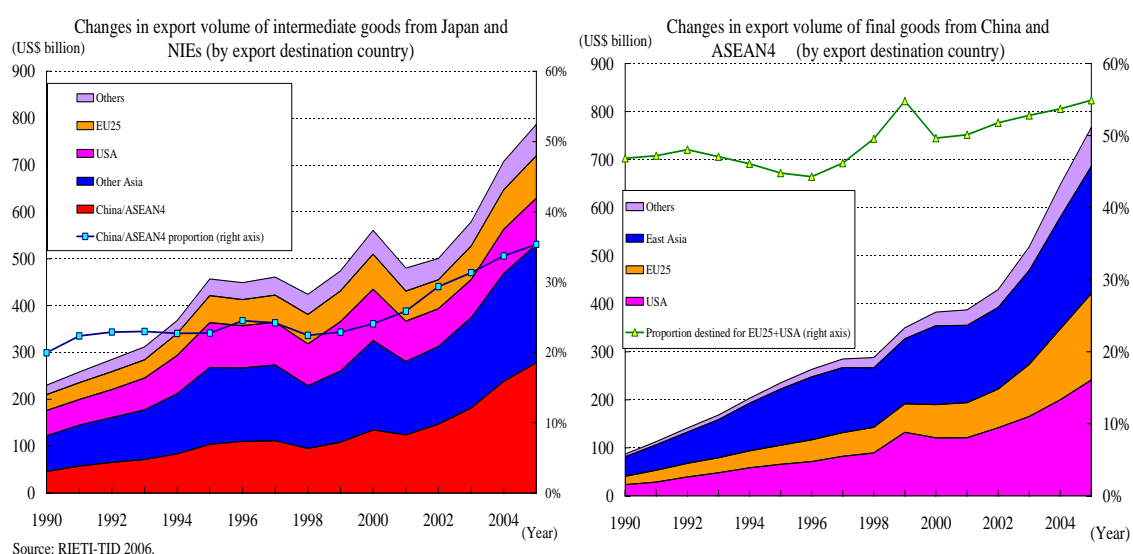
The trend associated with this triangular trade structure in recent years has been the growing export of intermediate goods to China and ASEAN4 from Japan and NIEs and export of finished goods from China and ASEAN4 to the U.S. and EU. Similarly, the proportion of the total amount of intermediate goods exported from Japan and NIEs accounted for by exports to China and ASEAN4

¹⁰ A detailed analysis of triangular trade can be found in *White Paper on International Trade and Economy* 2005, Ministry of Economy, Trade and Industry, 2005.

and the total amount of finished goods exported by China and ASEAN4 accounted for by exports to the U.S. and EU are both rising (Figure 2-2-1).

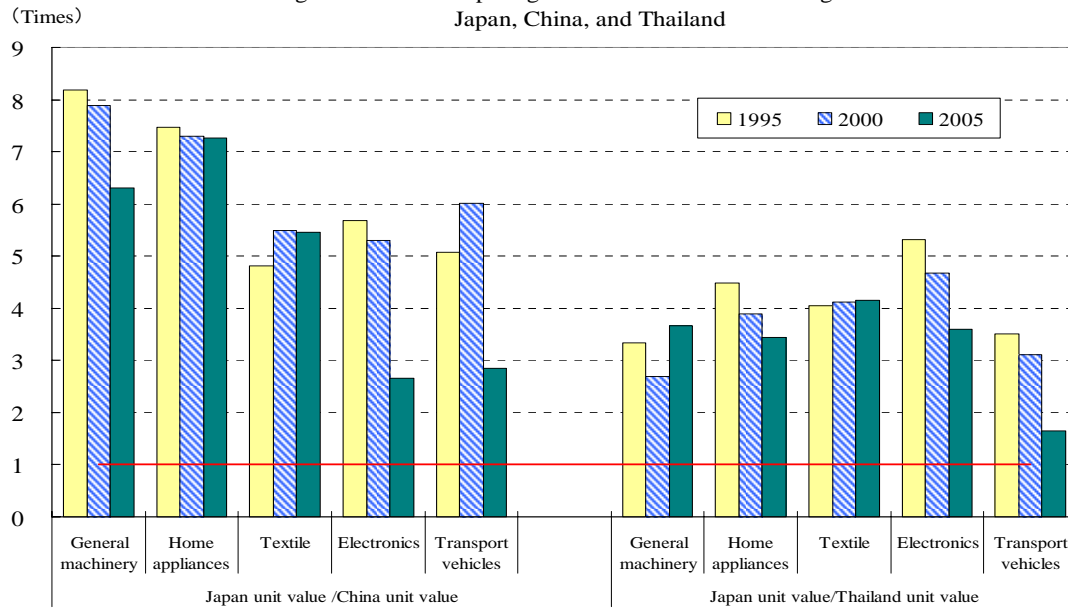
A comparison of the unit export price¹¹ of intermediate goods between Japan, China and Thailand shows that although some differences in the prices of intermediate goods from Japan have shrunk in the past ten years, these prices continue to be higher than those of China and Thailand, indicating that Japan continues to perform most of the manufacturing of comparatively high value-added intermediate goods (Figure 2-2-18). It is therefore likely that triangular trade whereby high value-added parts manufactured in Japan and NIEs are assembled in China and ASEAN and exported to Japan, the U.S. and EU will continue to expand.

Figure 2-2-17 Trends in triangular trade involving East Asia



¹¹ Unit export price is found by selecting from those goods exported by Japan, China and Thailand to world markets that fall within the top 20 items of exported intermediate goods (based on SITC 5-digit code) of each industry and then calculating the export price for each industry by finding the weighted average of the unit price of each item of each country based on the share of export volume of those items.

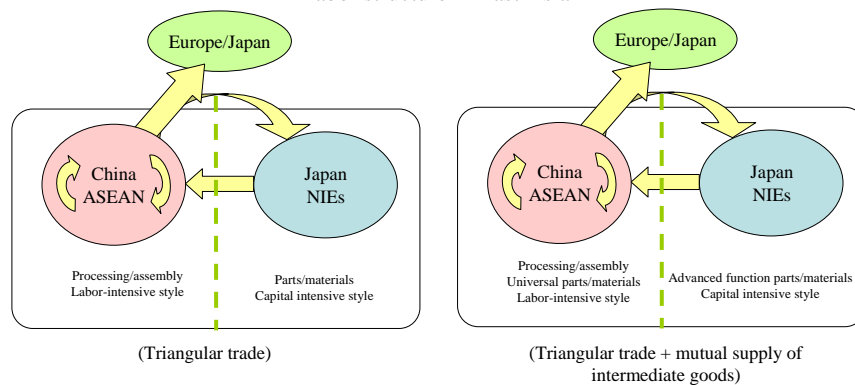
Figure 2-2-18 Comparing trade value of intermediate goods in Japan, China, and Thailand



Source: RIETI-TID2006 (RIETI).

As seen above, the production network in East Asia is forming the nucleus of the triangular trade structure. Thanks to growth in the intra-regional mutual supply of intermediate goods across multiple countries and regions accompanying the expansion of Japanese companies into East Asia, improvements in the production and technical level of local companies, and the lowering of tariff barriers through EPA/FTA, the multilateral division of labor is growing more complex and intertwined (Figure 2-2-19).

Figure 2-2-19 Development of division of labor structure in East Asia



Source: METI.

(6) Concentration of intra-regional production and supply functions accompanying the integration of East Asian markets

(Efforts in pursuit of economies of scale to capitalize on the opportunities provided by EPA/FTA)

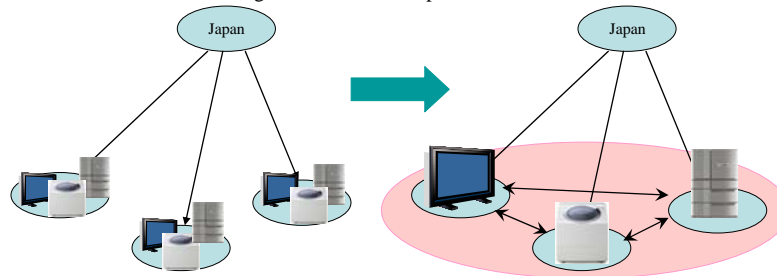
One characteristic movement underway in the East Asian economy recently is the concentration of production and supply functions in pursuit of economies of scale, especially within ASEAN (Table 2-2-20 and Figure 2-2-21). The concentration of production functions was in itself a step taken as a means of integrating overseas bases at the time when restructuring measures, such as the disposal of non-performing loans, were being implemented by Japanese companies. Recent efforts, however, focus on building optimal production systems primarily for intra-regional supply whereby the East Asia region, where integration is progressing thanks to EPA/FTA, is regarded as a unified market, and the aim is to realize economies of scale and the cost reductions and expanded product ranges they foster.

In the East Asian region, networks of agreements are spreading, including AFTA, the ASEAN-China FTA (ACFTA), the ASEAN-South Korea FTA (AKFTA), and the Thailand-India FTA. Prior to the adoption of these agreements, companies were required to create local production systems in each country when participating in their markets because their markets maintained high import tariff rates. However, the elimination of tariff barriers and market opening through EPA/FTA has led to the creation of production and sales systems that regard the region as a unified market, which facilitates the pursuit of scale advantages such as cost reductions and broader product ranges through mass production based on the concept of “selection and concentration.” Amid this changing business environment, Japanese companies which have expanded into East Asia are working to reorganize and improve the efficiency of business networks to align with their own business strategies.

Table 2-2-20 Examples of concentration of production functions by Japanese companies	
Type of industry	Content of concentration of production function
Auto maker A	Established Thailand and Indonesia as passenger vehicle supply bases in ASEAN region
Auto makers B & C	Concentrated pickup truck production bases in Thailand
Electrical appliance maker D	Stopped producing televisions in Philippines, instead concentrating production in Malaysia and exporting from there
	Stopped producing refrigerators and washing machines in Malaysia in 2005, instead concentrating production in Thailand and exporting from there
Electrical appliance maker E	Stopped producing televisions in India in 2004, instead concentrating production in Thailand and exporting from there
Electrical appliance maker H	Stopped producing car stereos in Malaysia and Indonesia, instead concentrating production in Thailand and exporting from there
	Stopped producing DVD players in Thailand, instead concentrating production in Malaysia and exporting from there
Chemical manufacturer I	Stopped producing facial care products, etc., in Malaysia in 2002, instead concentrating production in Indonesia and Thailand, which are positioned as supply bases for the ASEAN region, and exporting from there

Source: Press releases of above companies and Umada & Ohki (2005), *SHINKOKOKU NO FTA TO NIHON KIGYO*, (JETRO).

Figure 2-2-21 Concentration of intraregional supply functions through concentration of production items

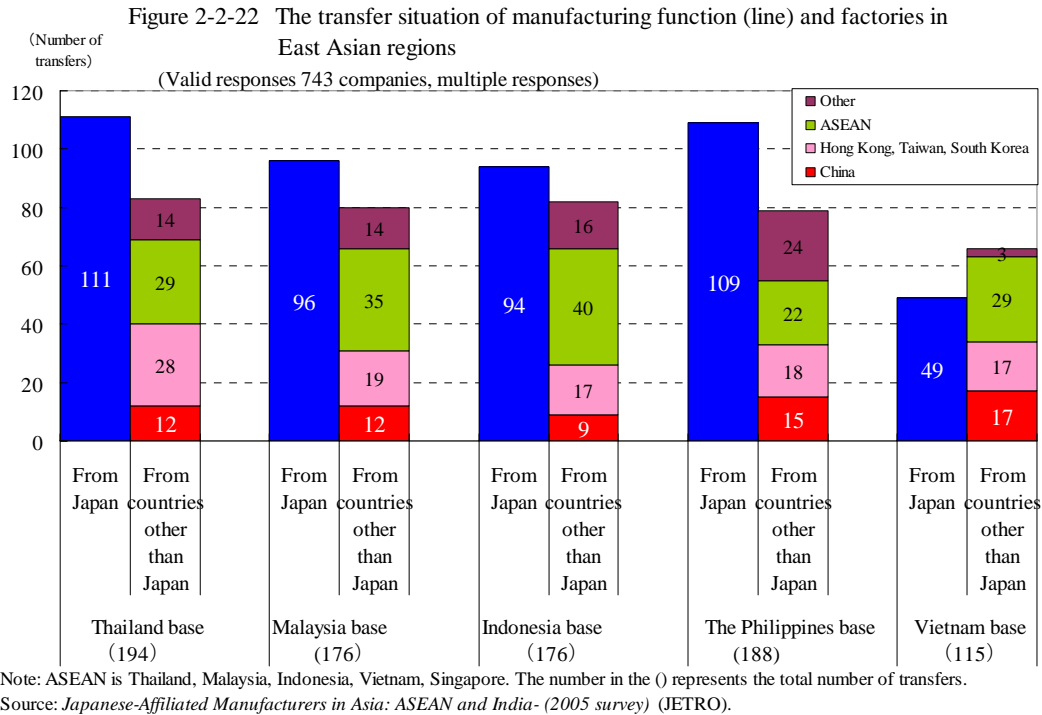


Source: METI.

(Transfer of production functions from within the East Asia region other than Japan)

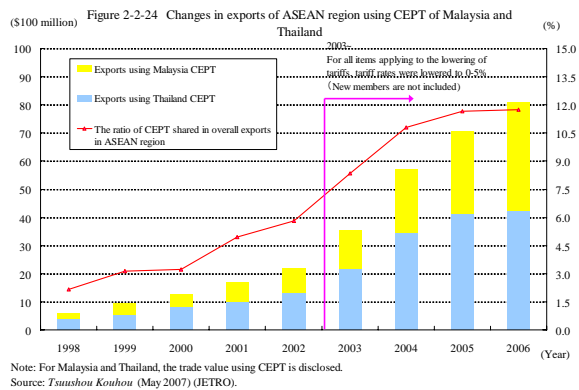
The period from the 1990s to the beginning of the 2000s saw a move toward reducing production bases in Japan in order to maintain price competitiveness while establishing production bases in East Asia. However, the concentration of production and supply functions in recent years aims at reorganizing bases and has no direct relationship to any moves to establish favorable Japanese production bases.

Of the businesses operated in ASEAN by Japanese companies which have expanded into ASEAN, about half have been transferred from outside of Japan, particularly from within the ASEAN region itself. Moreover, much attention has been focused on Vietnam as a new target of investment as a result of its full-fledged participation in AFTA and membership in WTO, and there have been numerous instances of business transfer from East Asian countries other than Japan to Vietnam (Figure 2-2-22). Progress in market integration through AFTA and other trade agreements also lies in the background of this reorganization of the ASEAN region.



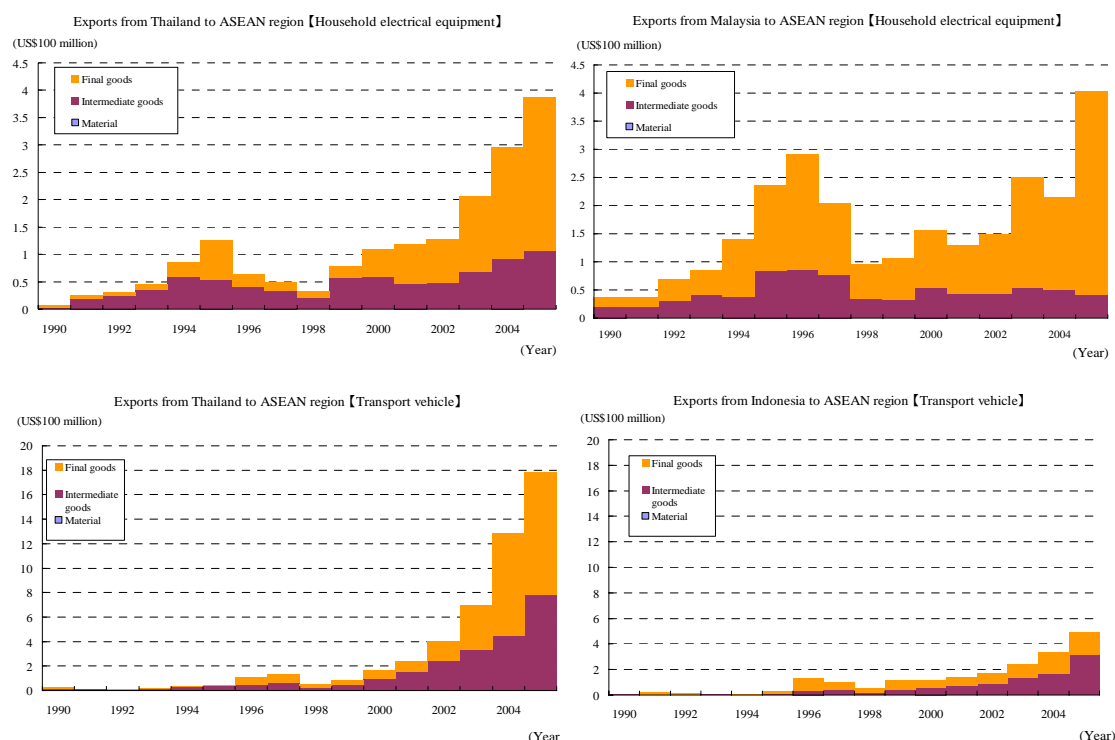
(Expansion of trade within the ASEAN region with effectuation of AFTA)

The changes in trade within ASEAN can probably be attributed to market integration brought by AFTA. Thanks to AFTA, the tariff rate of the original ASEAN member countries (Indonesia, Singapore, Thailand, Philippines, Brunei and Malaysia) was reduced, in principle, to 0-5%, and the amount of intra-regional exports using this tariff rate is increasing (Figure 2-2-23 and Figure 2-2-24).



This trend can be observed by looking at changes in the volume of intra-regional trade in household electrical appliances and transportation equipment, which shows an increase in exports to the ASEAN region since 2003 (Figure 2-2-25).

Figure 2-2-25 Changes in exports from Thailand, Malaysia, Indonesia to ASEAN region (by industry)



In addition, an analysis of changes in the trade relationships within ASEAN4 between 2000 and 2005 by product reveals that specific countries fulfill the role of the supply hub for specific products, with, for example, Thailand supplying refrigerators and washing machines and Thailand and Malaysia supplying air conditioners. Regarding televisions, the increase in exports from Malaysia and Indonesia to the ASEAN region is prominent, and exports from Thailand to India, which have been linked through an FTA, are increasing substantially. Amid this ongoing integration as an intra-regional market, a movement seeking a broad supply of goods throughout the region through the concentration of production functions is emerging (Figure 2-2-26-30).

Figure 2-2-26 Trade in refrigerators (HS8418) in ASEAN4

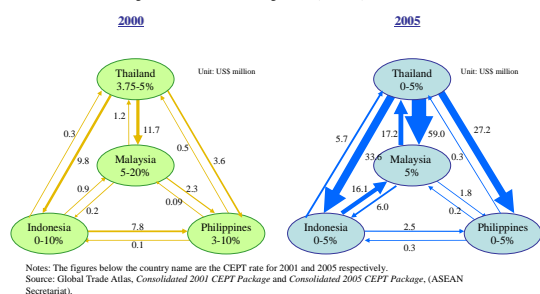


Figure 2-2-27 Trade in washing machines (HS8450) in ASEAN4

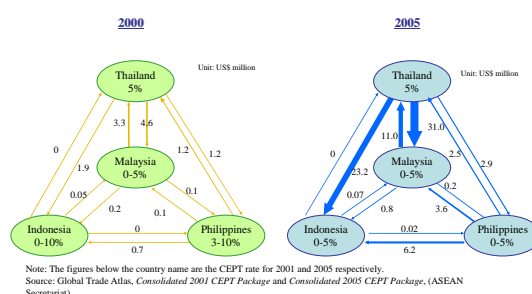


Figure 2-2-28 Trade in air-conditioners (HS8415) in ASEAN4

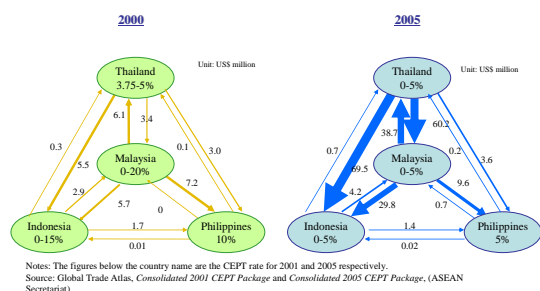


Figure 2-2-29 Trade in batteries (HS8507) in ASEAN4

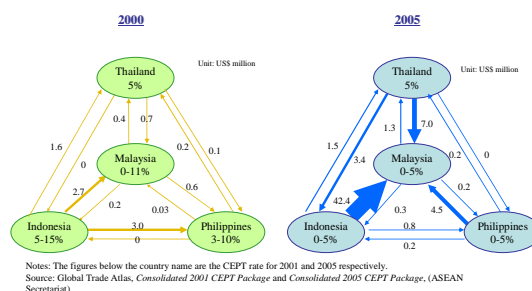
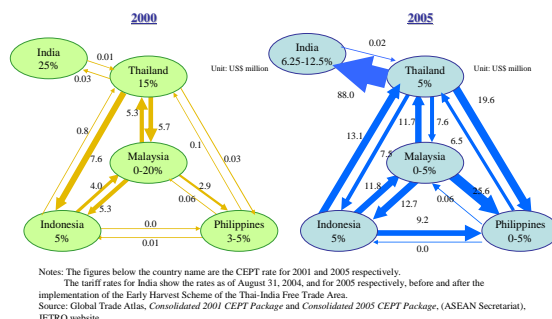


Figure 2-2-30 Trade in televisions (HS8528) in ASEAN4 and between Thailand and India



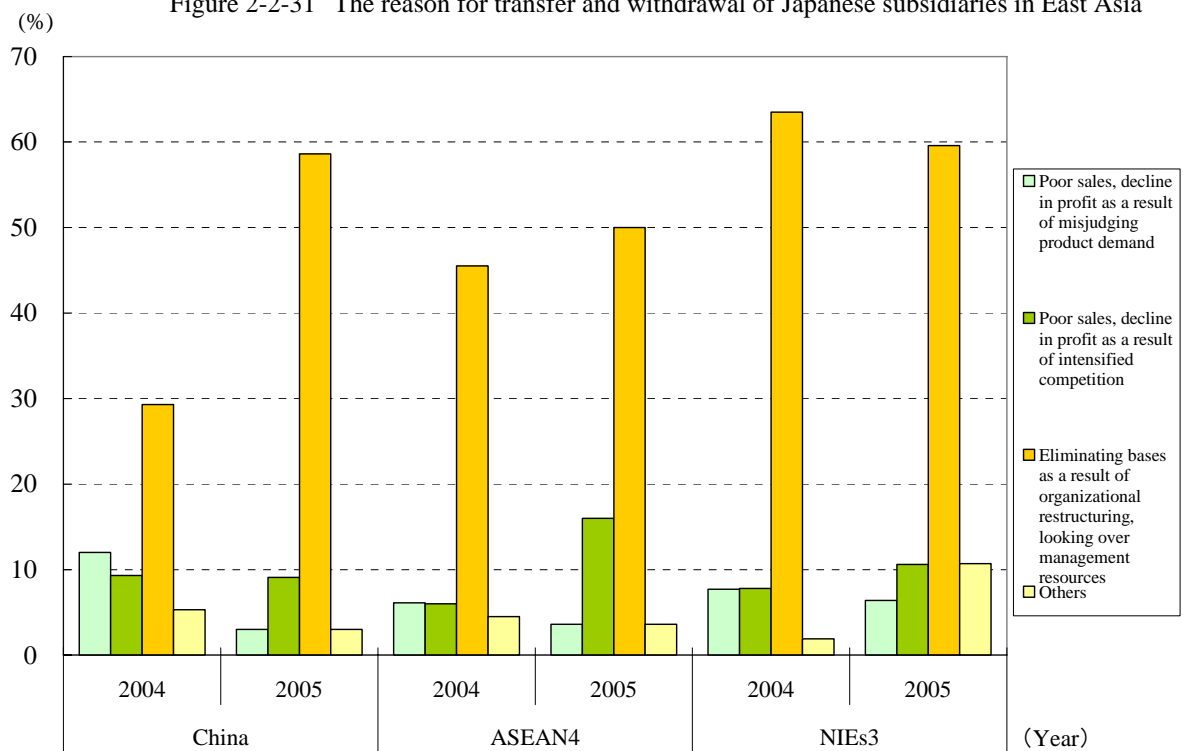
(Achieving a seamless intra-regional market in East Asia and flexible siting of production bases)

With the favor of ACFTA, tariffs between China and ASEAN are scheduled to be gradually reduced. Vietnam is also making progress in opening its domestic markets with its membership in WTO, and its connection with the intra-regional market is expected to deepen. For these reasons, further advances are expected toward achieving an integrated and seamless intra-regional market in East Asia.

Amid these developments, Japanese companies are enjoying increasing opportunities to realize optimal and efficient production and sales systems through the concentration and reorganization of production functions in the East Asian region. When companies were asked why they were taking steps to disband, withdraw, or transfer their local corporations, many pointed to the integration of bases accompanying reorganization and review of business resources. The development of an environment in which such measures can be implemented swiftly and flexibly is expected to advance through EPA/FTA. (Figure 2-2-31).

Looking from the standpoint of the countries of East Asia, the development of a seamless intra-regional market could increase a country's potential to attract production and supply bases if the benefits of locating in that country could be promoted, regardless of the size of demand in that country's markets. This potential would have the effect of increasing opportunities to bring in direct investment. These favorable circumstances are linked to efforts by the countries in the region to improve their business environment, and should contribute to the further development of the region's economy.

Figure 2-2-31 The reason for transfer and withdrawal of Japanese subsidiaries in East Asia



notes: NIEs it points to Korea, Singapore and Taiwan

Source: Basic (Trend) Survey on Overseas Business Activities (Ministry of Economy, Trade and Industry).

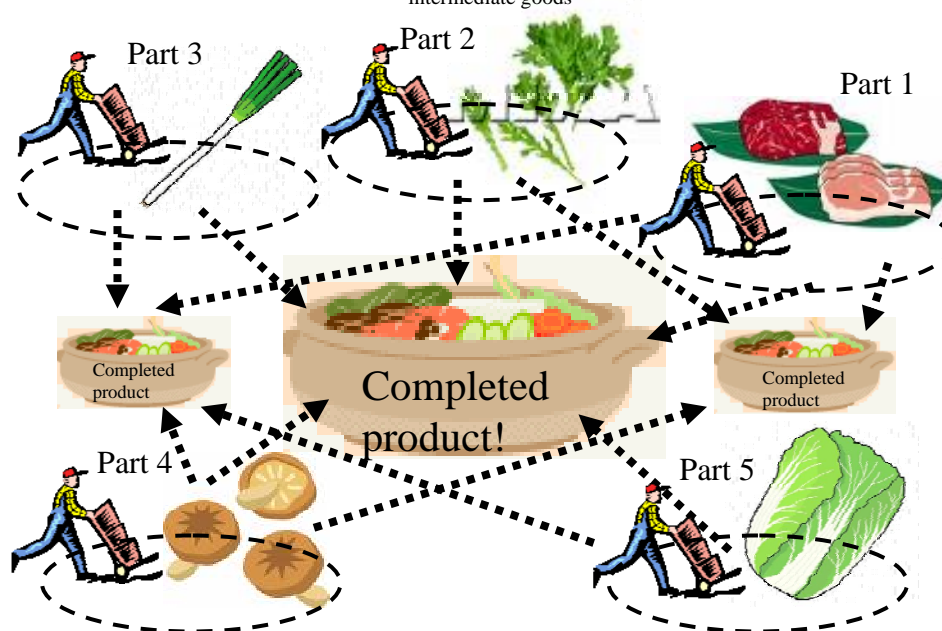
The above indicates that as the process of realizing an integrated and seamless intra-regional economy in East Asia progresses, Japanese companies are moving to expand and deepen their business networks and to improve productivity through a multilateral division of labor by processes and a concentration of production and supply functions, taking advantage of the region's integration as a production base in the former effort and as a market in the latter effort.

(Column 4): East Asian “cooking pot” economic zone characteristics brought about by mutual supply of intermediate goods by “mountaintop” supporting industries

In Sections 1 and 2 of Chapter 2, it was established that the East Asian economy is undergoing an integration characterized by a high proportion of intra-regional trade in intermediate goods compared with EU and NAFTA, and that this mutual supply of intermediate goods is attributable to the expansion of EPA/FTA networks and the development of supporting industries in East Asia.

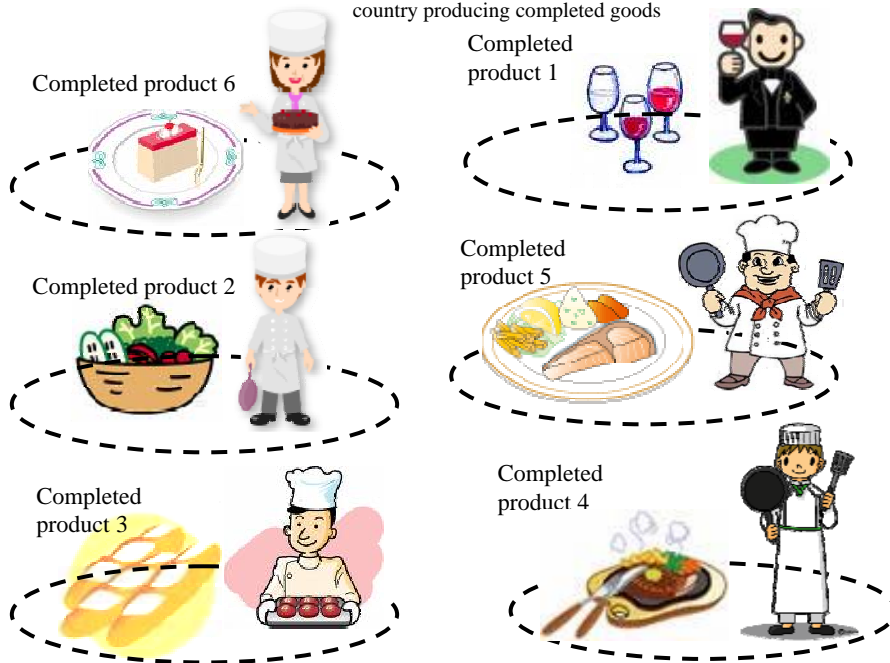
In this column, these characteristics of the East Asian economy will be explained using a comparative illustration. First of all, one of the characteristics of intra-regional trade in the region, unlike in the EU and NAFTA, is that trade in intermediate goods exceeds that of trade in finished goods. This indicates that the countries in the region are specializing in parts and materials in which they possess particular strengths and that a cross-border division of labor is progressing. An economic zone with a production structure in which each country contributes the parts in which they excel can be likened to the making of a complete “stew” assembled from different ingredients (Figure 4-1).

Column Figure 4-1 Image of an economic zone with division of labor processes and mutual supply of intermediate goods



In the EU and NAFTA, on the other hand, the proportion of finished goods in intra-regional trade is high compared with intermediate goods. It is therefore an economic zone with a production structure that can be likened to a food service operation in which each country divides up roles like those of a chef, patisserie, and baker and so on, and then creates their own particular culinary dish to bring to the table as one of several courses (Figure 4-2).

Column Figure 4-2 Image of an economic zone with division of manufacturing processes, with each country producing completed goods



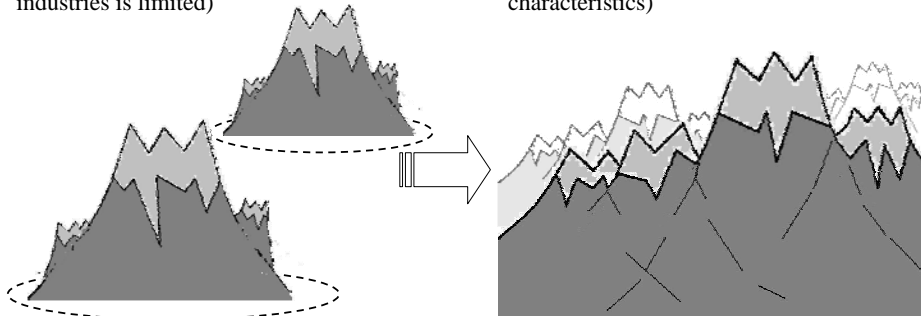
Taking a look at the development of supporting industries in East Asian countries that have achieved mutual supply of intermediate goods as described above, the industrial structure of the region could be said to be one in which support for industry that supplies intermediate goods overlaps between countries, creating a mountain-like structure of supporting industries, which support the industries of each country in a flexible manner (Figure 4-3).

Previously in East Asia, there were more than a few countries and regions that had developed their industries by specializing in assembly relying mostly on Japan and NIEs for basic parts and materials. These numerous countries and regions, which did not have supporting industries of their own, thus formed a part of the supporting industries of a small number of counties including Japan and NIEs. In recent years in East Asia, however, ASEAN and China have joined Japan and NIEs, the previous main suppliers of basic parts and materials, and have expanded their production of parts and materials, particularly general purpose components, meeting demands for quality and price from overseas. Based on their edge in technology and cost, they now constitute supporting industries and have rapidly advanced in the production and export of intermediate goods.

Column Figure 4-3 Image of an economic zone with mountain-like supporting industry characteristics

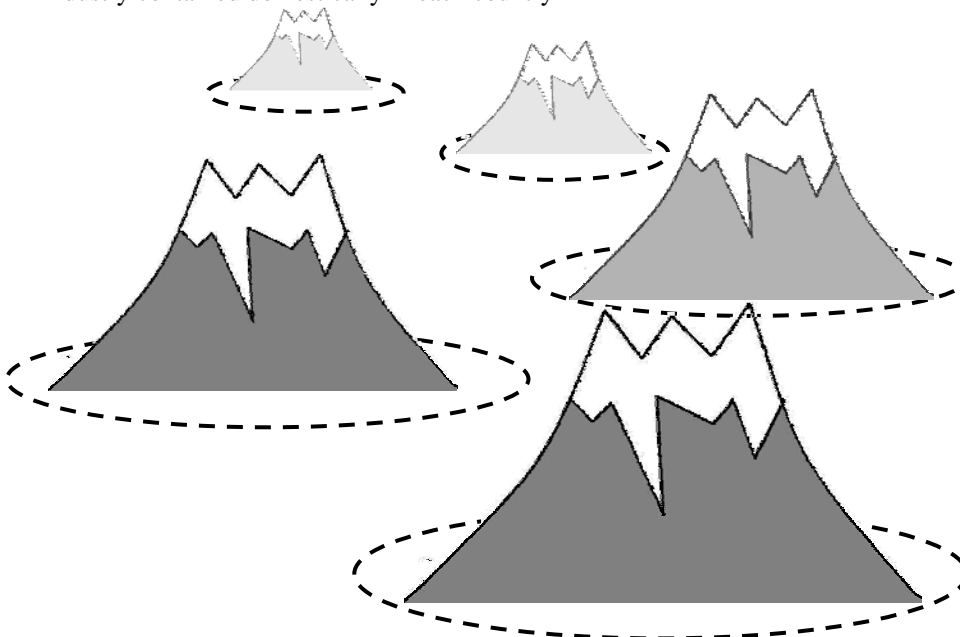
(Image of an economic zone where the number of countries with supporting industries is limited)

(Image of an economic zone with mountain-like supporting industry characteristics)



By contrast, the industrial structure of NAFTA and the EU is one in which there are many industries for which the supporting industry structure is basically complete within the confines of a single country (Figure 4-4). The industrial structure of East Asia, consisting of intra-regional, inter-industry organic partnerships, is thus markedly different from that of the EU and NAFTA.

Column figure 4-4 Image of an economic zone with a mountain-like supporting industry contained domestically in each country



For industry in the various countries and regions of East Asia, efforts to link the dynamism of East Asia's economic development to the industry's own vitality through the use of the region's supporting industries are increasingly important. What is more, the expansion of free trade and investment and the establishment of regulatory systems for the protection of intellectual property rights and for other purposes are urgent priorities for strengthening East Asia's competitiveness as an economic zone.

2. The changing sales front: Full-scale development of intra-regional markets

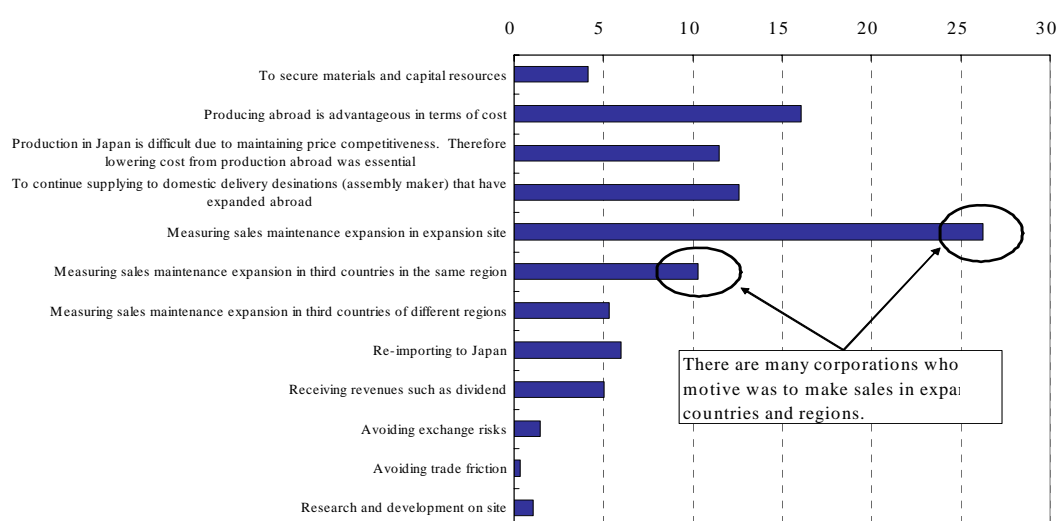
The development of a seamless and integrated East Asian economy through EPA/FTA, along with improved income levels engendered by the high rate of economic growth, have brought changes to the sales activities of Japanese companies in East Asia. Now regarding East Asia not only as a production base but also as a market, Japanese companies are taking steps to strengthen their sales strategies. The following is a discussion of trends in the sales strategies of Japanese companies in East Asia and their expanded efforts to establish overall sales control functions in the region in light of this evolution to a "seamless" market.

(1) Japanese companies strengthen sales efforts aimed at the East Asian market

(Expansion of sales channels takes precedence over low-cost production as an incentive to expand into East Asia)

Many Japanese companies which have already expanded into East Asia state that their motivation for expanding into the region was "to maintain and increase sales in the region in which we have been operating" or "to maintain and increase sales in third countries within the same region." Since Japanese companies are particularly motivated "to maintain and increase sales in the region in which we have been operating," it is likely that they are expanding their operations in the region regarding East Asia not only as a production base but also as a market (Figure 2-2-32).

Figure 2-2-32 Motive of Japanese companies to expand overseas subsidiaries

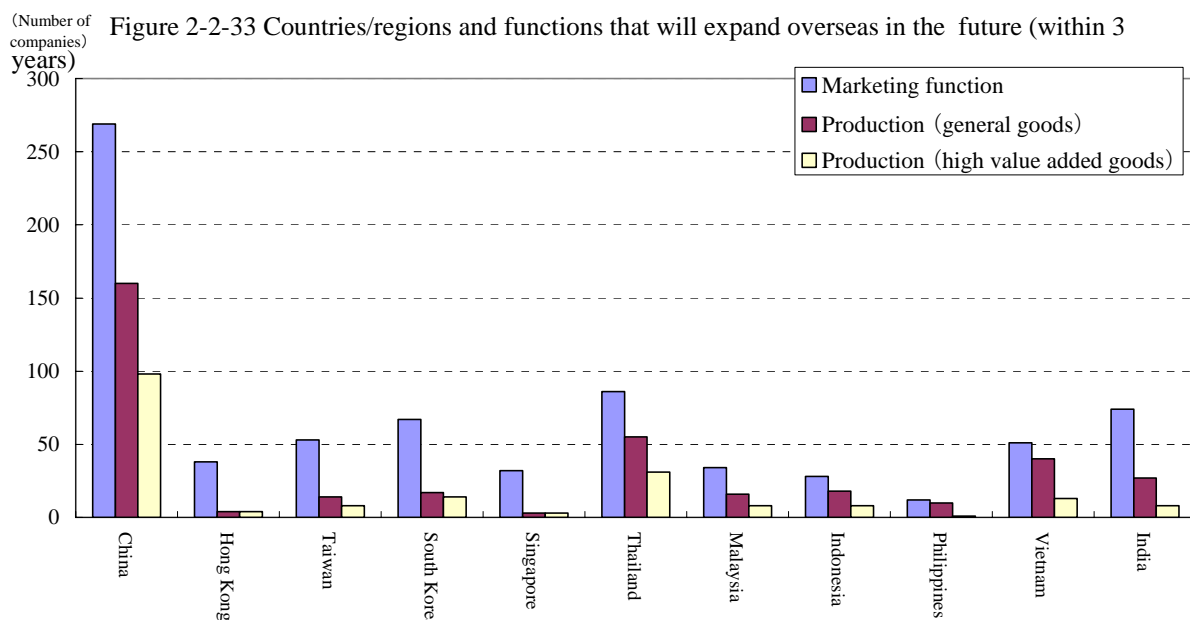


Note: Oversea subsidiaries of Japanese companies expanded in Asian regions selected 3 choices that are relevant to their motive to expand overseas. Total number of companies covered n=15,654.

Source: *Basic (Trend) Survey on Overseas Business Activities 2004* (Ministry of Economy, Trade, and Industry).

(Many companies have made the expansion of sales functions a key element of their business strategy in East Asia)

Many Japanese companies that are considering an overseas expansion wish to strengthen their sales functions, more so than their production functions, in all of the countries of East Asia (Figure 2-2-33). A breakdown by country indicates that most companies wish to expand their business in China, whose markets have become more attractive thanks to high economic growth in addition to the country's large population. Next is Thailand with its high rate of industrial development, and then India with its large population and high economic growth on par with China's. Fourth place is occupied by South Korea, which is attractive for its income levels—comparatively high for East Asia—and for its proximity to Japan. It is for these reasons that Japanese companies intend to expand their operations into East Asia, and it appears that their management plans place particular importance on expanding sales functions.



Notes: Companies who responded that they will expand overseas in the future, made multiple responses to countries/regions and functions that will expand overseas. Number of responses n=477 companies.

Source: *Questionnaire Survey on Foreign Business Activities by Japanese Companies FY2006* (JETRO).

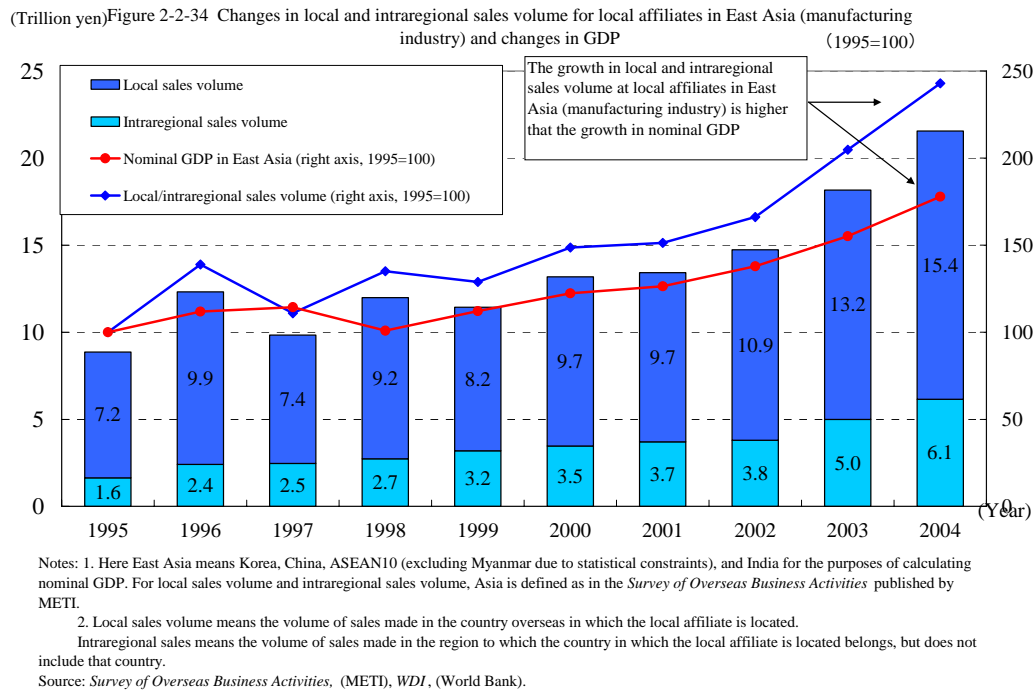
(Expansion of sales aimed at the East Asian market)

Both the local sales¹² and intra-regional sales¹³ of the local corporations of Japanese companies that have expanded into East Asia have been growing steadily since 1999 (Figure 2-2-34). Because this sales growth is higher than the growth of nominal GDP in the countries of East Asia, it can be attributed not only to sales increases resulting from growth of the East Asian market but also to the efforts of Japanese companies to strengthen their sales strategies.

¹² Local sales indicate the volume of sales recorded in a country or region where a local corporation has been established.

¹³ Intra-regional sales indicate the volume of sales recorded in the East Asia region excluding the countries or regions where local corporations have been established.

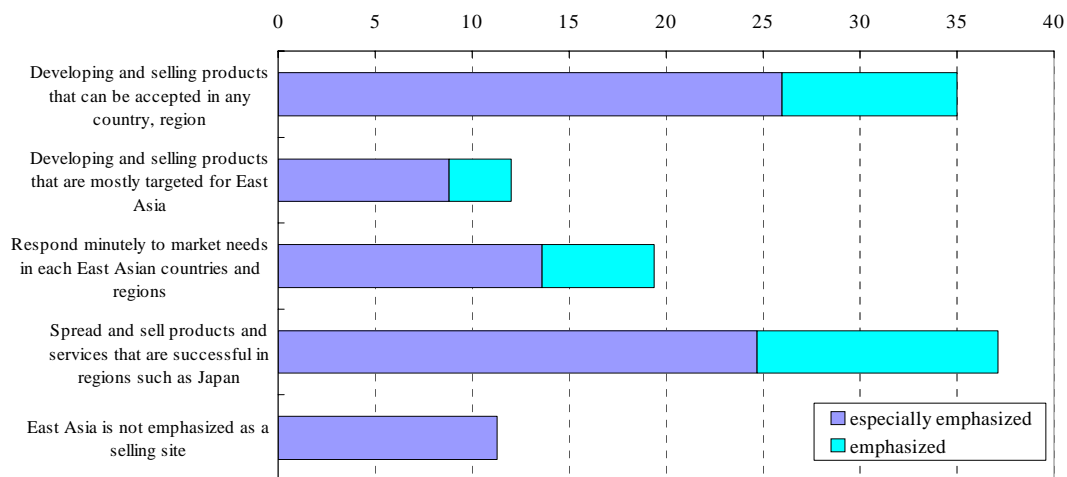
In addition, a comparison of local sales and intra-regional sales between 1995 and 2004 shows that intra-regional sales have increased four fold, as opposed to a two-fold increase in local sales. This suggests that Japanese companies have changed their sales strategies and no longer approach East Asia as a group of individual countries but rather as an integrated whole.



(Japanese companies implement various sales strategies in East Asian markets)

In a survey of the sales strategies of Japanese companies in East Asia, only 10% of companies responded that they do not place importance on East Asia as a sales target, whereas the remaining 90% recognized East Asia as an important sales target (Figure 2-2-35). Many companies responded that their sales strategies aimed at developing and selling products and services that were acceptable in any country or region or that were successful in other countries such as Japan. Thus, with the expansion of the middle class in East Asia, Japanese companies are moving to sell products with the same quality as those they sell in Japan and major Western countries. Moreover, because selling the same products in many markets allows companies to perform mass production, they can enjoy the benefits of economies of scale. This explains why Japanese companies regard the East Asian market as an integrated whole, why they are developing products that can be sold over a broad area, and why they are moving to establish efficient production and sales systems.

Figure 2-2-35 Marketing strategy of Japanese companies in East Asia



Note: Companies (manufacturers) who answered or plan to have business activity abroad in East Asian regions other than Japan, selected one strategy they emphasize the most, and multiply selected the ones they emphasize. The numbers are in proportion to the number of companies. Number of responses n=434 companies.

Source: *SEICHO WO TOGERU CHUGOKU-INDO KEIZAI NO GENJOBUNSEKI TO SERVICE SANGYO WO FUKUMU WAGAKUNI KIGYO NO KAIGAITENKAI NI KANSURU CHOSA KENKYU*, (Japan Industrial Policy Research Institute (2007)).

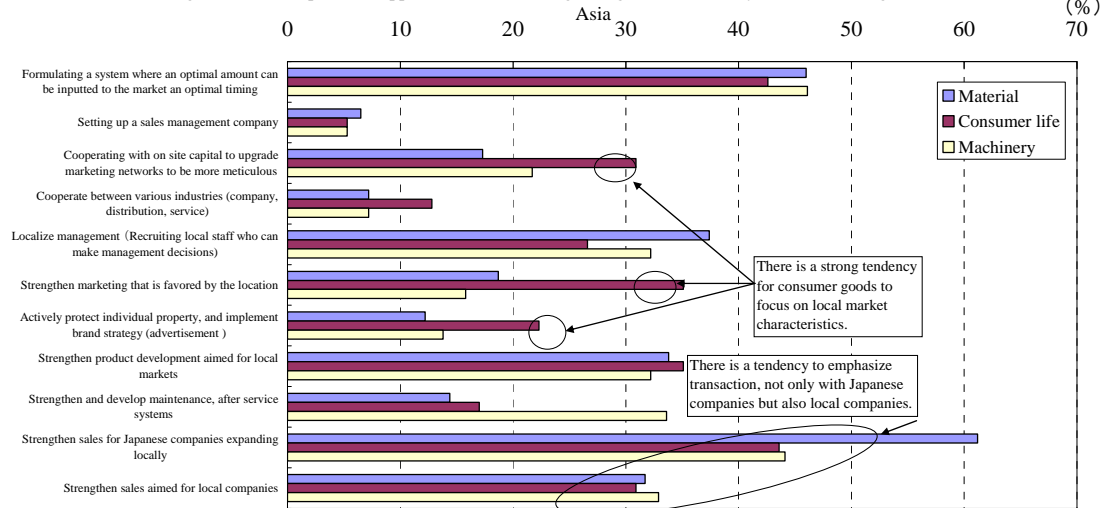
(Efforts to strengthen and improve the efficiency of sales functions)

A look at specific efforts considered important by companies for strengthening and improving the efficiency of sales functions in the East Asian region reveals that in various industries about half of the companies place emphasis on building systems capable of moving products and services into markets in the optimal quantity with the optimal timing (Figure 2-2-36). This suggests that companies require a business environment that allows swift and reliable procurement of parts and materials and that facilitates the import and export of products.

Many companies emphasize sales to Japanese-affiliated companies as their sales target in East Asia. As previously shown, approximately 50% of the suppliers of the local corporations of Japanese manufacturing industries in East Asia are Japanese-affiliated companies, which indicates that companies consider it important to solidify their business base by first securing business with Japanese-affiliated companies in the local area. In addition, Japanese-affiliated companies also account for 30% of those companies that are increasing sales to local companies and strengthening their product development activities, which indicate that companies also place emphasis on efforts to expand their share of sales in local markets. For this reason, localization of operations by, for example, appointing local personnel who can make management decisions is increasingly important.

A prominent feature of these efforts is an emphasis on adopting an awareness of the characteristics of local markets by tying up with local capital and performing marketing geared to local tastes and preferences in lifestyle-related sectors such as food products and clothing and other textiles. These could be termed efforts to strengthen and improve the efficiency of sales functions by shifting to flexible strategies that can be adapted to markets.

Figure 2-2-36 Emphasized approaches in measuring strength and efficiency of the marketing function in East Asia (%)



Notes: Number of responses by company, Material (chemical, steel) 139, Consumer life (food, clothes, other textiles) 94, Machinery (electrical equipment, transport vehicle) 152.

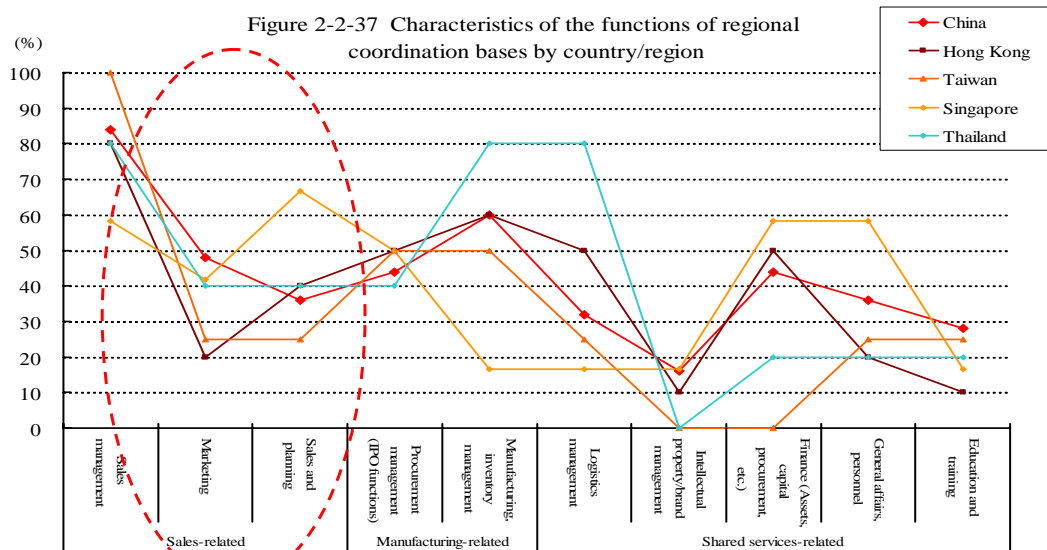
Companies who answered or plan to have business activity abroad in East Asian regions who didn't answer that "they do not emphasize East Asia as a selling site" made multiple selections on emphasized approaches in measuring strength and efficiency of the marketing function. The numbers are in proportion based on each industry.

Source: *SEICHO WO TOGERU CHUGOKU-INDO KEIZAI NO GENJOBUNSEKI TO SERVICE SANGYO WO FUKUMU WAGAKUNI KIGYO NO KAIGAITENKAI NI KANSURU CHOSA KENKYU*, (Japan Industrial Policy Research Institute (2007)).

(2) Strengthening functions by establishing a base for overall sales control regarding East Asia as a unified market

(Functions of bases of regional control shift emphasis to sales-related functions)

A recent characteristic of the sales operations of Japanese companies in the East Asian market is an effort to utilize the base of regional control primarily to support sales. A look at the principal functions of bases of regional control currently being established by Japanese companies indicates that the emphasis is being placed on functions associated with sales, including sales management, marketing, and planning. (Figure 2-2-37).



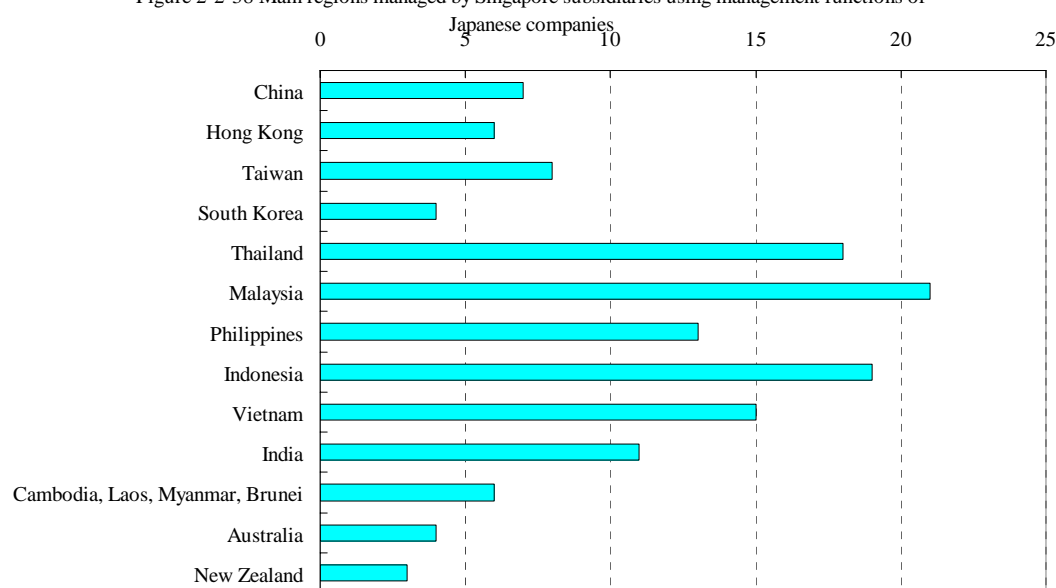
Source: *SEICHO WO TOGERU CHUGOKU-INDO KEIZAI NO GENJOBUNSEKI TO SERVICE SANGYO WO FUKUMU WAGAKUNI KIGYO NO KAIGAITENKAI NI KANSURU CHOSA KENKYU*, (JIPRI)(2007).

(Strengthening of sales control functions spurred by expansion of sales markets through promotion of EPA/FTA)

Like the concentration of production and supply functions, the strengthening of the sales functions of the bases of regional control can be attributed to the development of a seamless intra-regional economy made possible by the removal of trade barriers thanks to EPA/FTA. Companies are also shifting away from their previous business strategies whereby planning was conducted by country and business division to a strategy that regards East Asia as an integrated whole, placing greater emphasis on swift decision making through comprehensive planning at the corporate group level.

More specifically, with the improvement of income levels and other developments, the tastes and preferences of consumers in the East Asian market are beginning to approach those of consumers of developed countries, and as differences between countries become less pronounced, marketing and advertising activities can be—and must be—conducted rapidly over a broad geographical area. For example, one Singapore-based overseas local corporation of a Japanese company has general control over operations in regions including not only ASEAN, but also India, China and Australia, indicating that the geographical area which Japanese companies regard as a unified whole has broadened (Figure 2-2-38)

Figure 2-2-38 Main regions managed by Singapore subsidiaries using management functions of



Note: Multiple responses by Singapore subsidiaries using management functions of Japanese companies

Total number of responses n=28 companies.

Source: *SEICHO WO TOGERU CHUGOKU-INDO KEIZAI NO GENJOBUNSEKI TO SERVICE SANGYO WO FUKUMU WAGAKUNI KIGYO NO KAIGAITENKAI NI KANSURU CHOSA KENKYU*, (Japan Industrial Policy Research Institute (2007)).

Thus, the development of the East Asian market by Japanese companies has made genuine advances not only because of the growth potential of the East Asian economy but also as a result of moves to open markets through FPA/FTA. It could also be said that the establishment of efficient sales bases considering East Asia as an integrated whole is leading to the expansion and deepening of business networks in East Asia.

(Column 5) Deregulation by various countries to expand the freedom of action of companies

(1) Deregulation moves forward in the countries of East Asia

When a company expands its operations to another country for the first time and begins to develop its business, it may not be able to utilize its strengths because of that country's systems and regulations, which can restrict the company's management. Thus, the reform of systems and regulations has a major impact in terms of expanding companies' freedom of action, allowing them to build efficient business networks and implement other strategies. This column outlines the deregulation measures implemented in East Asia since 2000 (Table 5-1).

Column Table 5-1 Deregulation in major East Asian countries after 2000 (related to accepting investment)

China	2004	After Measures for the Administration on Foreign Investment in Commercial Fields (June), commission (purchase sales work) and franchise management became possible. Minimum capital fund for retail and wholesale was lowered. After the revision of the Foreign Trade Law (July), external trade rights changed from an approval system to a notification system.
	2006	After the revision of the Corporate Law, even without being an investment corporation, establishing an affiliate company became 100% recognized.
Thailand	2000	After the revision of the investment grant policy, by being a manufacturing industry, expansion by 100% foreign capital became possible.
	2002	Reviewing the zone system ¹ for automobile assembling industries, if the value of total investment including related parts companies and total investment is greater than 10 billion baht, regardless of location, it is possible to enjoy the benefit of eliminating machinery import tariff also became possible. Also for automobile part industries, zones expanded and elimination of tax was enabled even in concerning zones.
Indonesia	2000	After the revision of the industries covered by investment regulations from the Presidential Decision Directive 96 and 118, foreign capital entry for company oriented services and medical services were recognized.
Malaysia	2003	For manufacturing industries, 100% foreign capital became possible. For non-manufacturing industries, the prior capital contribution regulation "foreign capital 30%, non-bumiputra capital 40%, bumiputra capital 30%" except for bumiputra capital 30%, foreign capital up to 70% was now recognized. ²
	2007	Prior approval from the Central Bank of Malaysia became unnecessary if the foreign borrowing amount limit of a resident company was between 50 million Ringgit (approx. 1.7 billion yen) and 100 million Ringgit (approx. 3.4 billion yen) of the overall business group's borrowing cost.
Vietnam	2006	Various laws (to lose internal and external disparities) were developed for the WTO (July 2007). From the business law (January), foreign capital towards categories such as communication and circulation was accented. From the bidding law (April), disclosure and transparency of bids were increased. And in order to have a safe competition amongst contractors, each process related to bidding was defined. Before the business law (July), foreign affiliated companies, except in special cases, were allowed only to establish companies with limited liability. But now, domestic companies and foreign affiliated companies, are allowed 4 types of business structures; companies with limited liability, stock companies, general partnerships, and personal businesses. After the investment law (July), large initiatives with investments greater than 30 billion dong (approx. 2.2 billion yen) and specialized investment initiatives must be reviewed within 30 days by submitting an application, and within 45 days even for peculiar cases. The position for approving investment assures that even if the law or policies are later changed towards unfavorable directions, the rights can continue to be enjoyed.
India	2000	As for the industry types applying to automatic approval, the way of approval had changed from "positive list method" which requires government approval if the industry was not enumerated on the list of industries which was allowed to apply automatic approval and the maximum foreign capital limit, to "negative list method" which requires government approval if the industry was enumerated on the list of industries which was not allowed to apply automatic approval.
	2001	For automatic approval cases, 100% foreign capital became possible.
	2006	On the government message (Press note No.3) partial opening was officially decided for retails who were forbidden foreign capital entry and was immediately enforced. For foreign input to retail companies, (1) Acquiring prior approval by the Foreign Investment Promotion Board, and (2) Ratio of foreign capital contribution must be less than 51%, are the requisites Also, as a guideline, (1) Products being sold are limited to "one brand." (2) For the same product, the brand name of a product must be the same as the brand name used internationally. (3) The brand name of the product is obliged to be granted during the manufacturing process On the government message (Press note no.4) the foreign capital regulation was deregulated for many companies such as retails on cash and carry method 3 included on the "negative list" as well as trading companies focusing on exports.

¹ Aiming for local development and environmental operations, possible local zones by industries (regions, mostly by state) are prescribed, and by corporate tax exemptions, a benefit of disparity is established in each zone. The system has a goal to foster investment towards local regions and promote transfer.

² Mostly capital owned by bumiputra who are native of Malaysians.

For Malaysians, even prior to its independence, the Chinese had a strong influence on its economy. Since there were economic disparities between Malaysians and Chinese, the bumiputra capital ownership was a measure to promote the economic status.

³ Normally, "cash settlement, taking home products" means the retail industry category, but in India, the category has an expanded meaning including selling on credit, and delivery selling.

Source: "FY2005 HIGASHI AJIA KEIZAI RENKEI NI KANSURU CHOSA HOUKOKU SHO." *JETRO white paper on trade investment* (JETRO) (2005), *Investment Guidebook* (Bank of Tokyo-Mitsubishi UFJ) (2006), Website of Japan ASEAN center.

Next, let us look at the impact that these deregulation measures are having on corporate behavior.

(2) Deregulation in China and its impact

In keeping with a pledge made at the time of membership in WTO on December 11, 2001, China has implemented various deregulation measures in the logistics field (Table 5-2). Examples include the Law Concerning the Control of the Scope of Investment and Commercial Activities by Foreign Merchants implemented on June 1, 2004, the Foreign Trade Law amended on July 1, 2004 and the Company Law amended on January 1, 2006. For Japanese and other foreign-affiliated firms, this legislation has increased freedom in the implementation of their sales strategies in China. The impact exerted by these deregulation measures on corporate behavior will be described in detail below.

Prior to the implementation of the Law Concerning the Control of the Scope of Investment and Commercial Activities by Foreign Merchants, foreign-affiliated companies other than investment-based *gongsi* were only allowed to sell the products they themselves manufactured in China and were not allowed to stock and sell the products of other countries. Consequently, corporate groups which entered China by establishing separate companies for each field of business were required to invest a large amount of capital of at least US\$30 million and establish an investment-based *gongsi* in order to sell all of the group's products. Under the new law, however, stocking and wholesale and retail sales are allowed, and the minimum capital amount required for a wholesale or retail business has been substantially reduced, thereby facilitating the sale of all of a group's products by a foreign-affiliated company.

This law also lifted the ban on franchise operations. If a convenience store attempts to expand into China and open a chain of stores, that company must spend a considerable amount of money and time to get up and running since, under a direct-management scheme, it must perform virtually all capital investment, logistics network development, and other necessary activities itself. Under this law, however, a foreign-affiliated company can build a chain of stores under the same trade name with a small amount of investment by concluding a franchise agreement with a local company and utilizing China's infrastructure and human resources.

In addition, the Foreign Trade Law changed the system for acquiring external trade rights, which was the qualification needed to conduct import/export operations under the previous licensing system, to a notification system. Prior to the law's amendment, foreign-affiliated companies could under law obtain external trade rights if they applied,¹⁴ but the number of instances where approval was granted is said to have been small. The shift to a notification system under this amendment has simplified the acquisition of external trade rights, and has given companies the freedom to build their own sales system whereby the products they are able to sell are not limited to their own products they manufacture in China but also include products manufactured in other countries and imported products.

Furthermore, the amendment of the Company Law in 2006 permitted the establishment of single proprietorship/one-man limited companies, allowing all foreign-affiliated companies to establish

¹⁴ Prior to amendment, production-based foreign-affiliated companies could obtain trade rights which allowed the import of equipment and raw materials and the export of products.

wholly-owned subsidiaries, whereas prior to amendment, only investment-based *gongsi* were allowed to do so.

Column figure 5-2 Deregulation in China
Implementation of deregulation for large of domestic circulation rights and foreign trade rights
 Deregulation after the enforcement of Foreign Investment Sectors Management Law (June 1, 2004),
 and reform of Foreign Trade Law (July 1, 2004)

Major institutional reforms	Before enforcement	After enforcement	Major influences to business management
Commission (Purchase sales duty) (*1)	Only investment corporations (with a capital greater than 30 million yen) were recognized to sell products manufactured at affiliated businesses.	Purchases sales duty became possible for wholesale and retail industries from companies with unrelated capitals.	It is no longer required for companies to establish investment corporations to sell bundle products manufactured by their own group inside of Chinese market.
Franchise management (*1)	To make a chain store, expanding the direct managed company store was necessary.	Chain store expansion became possible making contracts with regional enterprise.	Measuring the expansion of the sales network became easier.
Drop of minimum capital fund for retail and wholesale (*1)	Wholesale; 80 million Yuan (approx. 1.24 billion yen) Retail; 50 million Yuan (approx. 770 million yen) (*3)	Wholesale ; 500 thousand Yuan (approx. 8 million yen) Retail; 300 thousand Yuan (approx. 5 million yen) (*3) (*4)	The cost for establishing investment corporations to bundle products, was greatly lowered.
Foreign trade rights (*2)	Foreign companies within bonded area was allowed only to sell in the bonded area and to export abroad, and domestic sales were not permitted. (It was under a registration system, if applications were sent, it was possible from a legal standpoint, but it could not be received because of the mutter of policy.	Obtaining import and exportation rights became easier for all companies as a result of the change to a notification system.	Actively using global procurement, sales network became easier.

(*1) As a result of the enforcement of the Foreign Investment Sectors Management Law (June 1, 2004) (*2) Deregulation as a result of Foreign Trade Law reform (July 1, 2004). (*3) Calculated as 1 Yuan=15.5yen. (*4) After the reform of the corporate law (January 1, 2006), it is currently 30,000 Yuan.

Deregulation for establishing a company

Reform of Corporate Law (Enforced January 1, 2006)

Major institutional reforms	Before enforcement	After enforcement	Major influences to business management
Establishing a limited liability company by one person.	To establish a company, co-funding from more than two people (corporation) was necessary.	One-man (corporation) establishment became possible.	Even without being an investment corporation, establishing an affiliate company became 100% recognized.

The potential for an efficient sales system and establishing a circulation network within the company has enlarged.

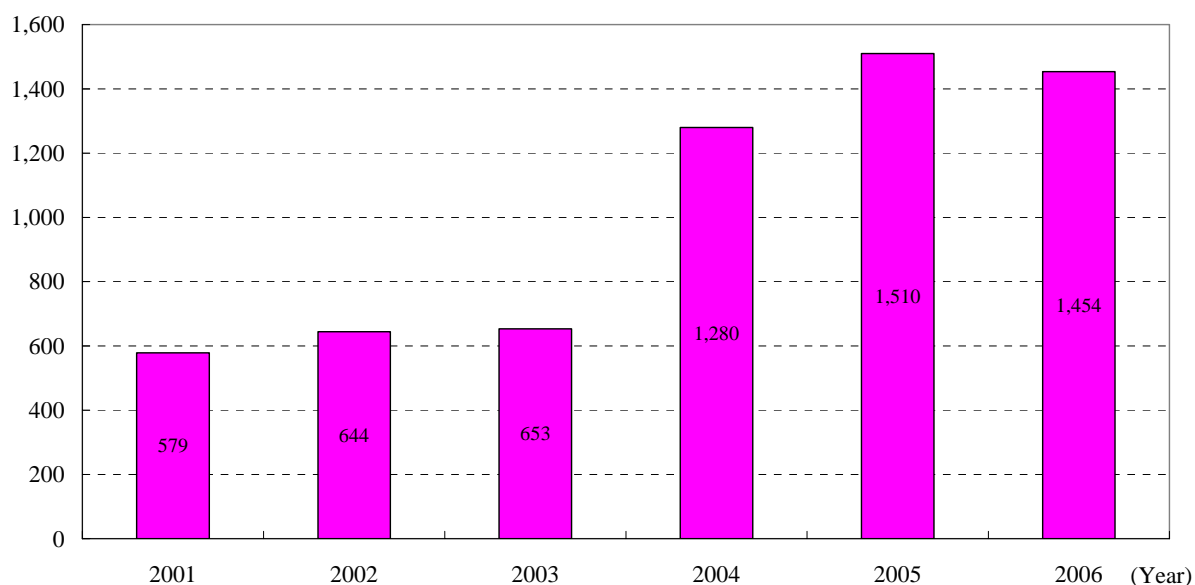
Because of the effect of regulations previously in China, it was common for foreign-affiliated companies to conduct separate operations for each business division. Thanks to deregulation, the various restrictions imposed on foreign-affiliated companies concerning their sales operations in China's domestic market have been removed. In order to consolidate their bases of operations spread out through China and thereby strengthen their sales aimed at the vast Chinese market, Japanese companies are moving to establish bases for overall sales management in China and making other changes. Thus, the impact of deregulation on Japanese companies has been substantial.

This reform of regulatory systems has been well received as one step toward reform, but continued deregulation in the financial area, including company fund raising, and in labor laws, would be desirable. In addition, at the time of implementation of the Law Concerning the Control of the Scope of Investment and Commercial Activities by Foreign Merchants operational regulations were not available and thus details of enforcement were unknown, leading, it was said, to some confusion. Consequently, some have pointed out that even though legal systems have been changed, their implementation is not transparent. It is hoped that review of China's regulations and systems, including their implementation, continues.

(3) Deregulation in Thailand and India and its impact

In 2002, Thailand implemented measures to deregulate its automobile industry for the purpose of promoting its development. As a result, the amount of direct investment in Thailand since 2003, including direct investment by Japanese-affiliated automobile companies, has increased, and in 2004 the general machinery and transportation machinery sector including the automobile industry recorded growth nearly double that of the previous year. Deregulation is thus having a certain impact on corporate behavior (Figure 5-3).

Column figure 5-3 Changes in inward direct investment for general machinery and transport machinery in Thailand (net-based flow)
(\$ million)



Notes: 2005 and 2006 are estimates.
Source: Bank of Thailand website.

Deregulation is moving forward in India, which regulation on foreign investment in the retail business became relaxed to allow investments of up to 51% in foreign capital for the sale of single brand products. The region is thus witnessing the development of a business environment that expands companies' freedom to build efficient production systems and sales strategies.

3. Changes in development operations: Development functions linked to production and sales functions expand into East Asia

In addition to their vigorous production and sales activities in East Asia, Japanese companies are actively promoting development functions to reinforce these activities. The following is a discussion of the expansion of product design and development functions by Japanese companies in East Asia, which is expanding as a market and growing in importance as a base of production.

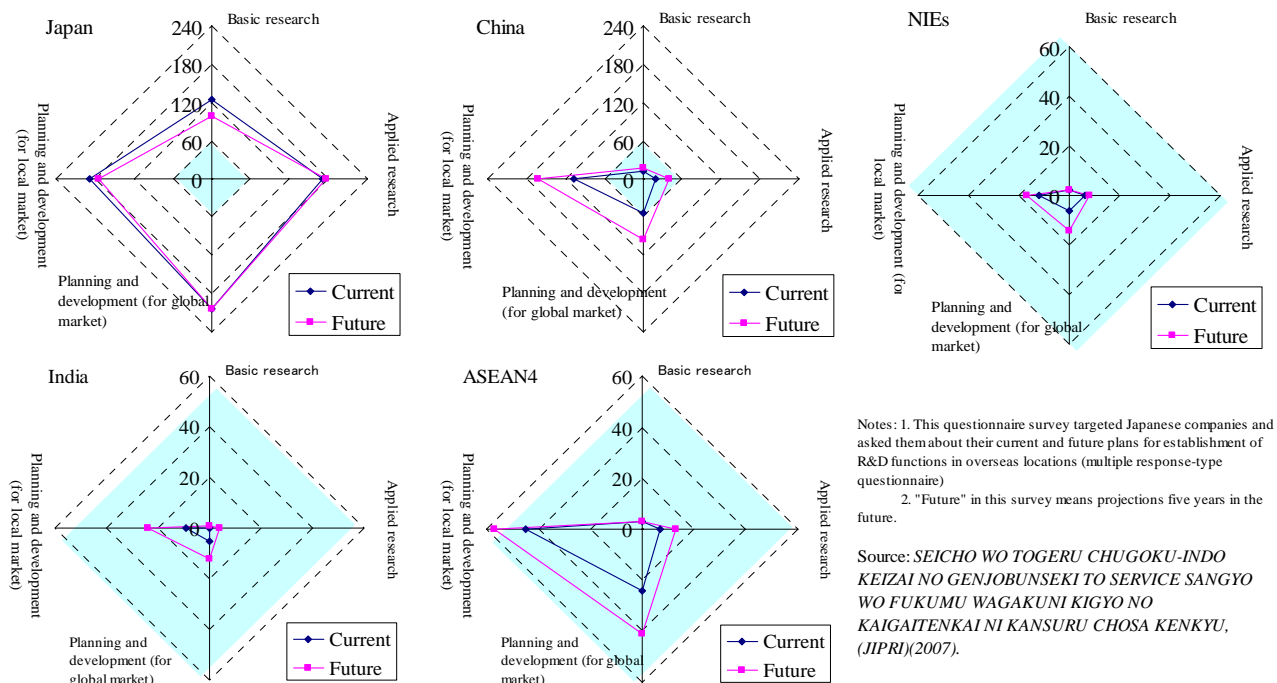
(1) Expansion of product design and development in East Asia

(R&D in China and ASEAN focuses on product design and development aimed at local markets)

Recent years have seen an aggressive expansion of product design and development functions in East Asia, which is increasing in importance as a market and as a base of production. A questionnaire survey of Japanese companies found that while most companies locate or plan to locate their R&D facilities in Japan, the number of companies that are considering locating these facilities in China and ASEAN has increased dramatically (Figure 2-2-39). Although Japanese companies prefer to leave important functions such as the development of practical technology in Japan, there is an emerging

trend toward expanding product design and development overseas, particularly into local markets such as China.

Figure 2-2-39 Status of the establishment of R&D functions by Japanese companies

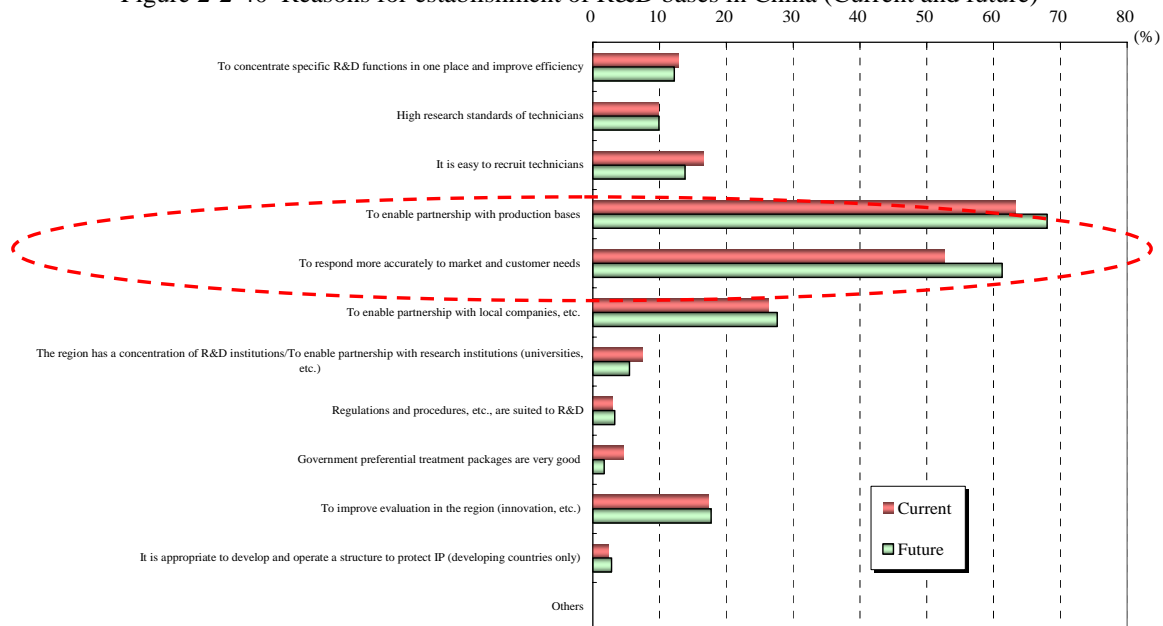


(R&D functions reinforcing production and sales functions in East Asia)

Of the reasons companies mention for establishing R&D functions in East Asia, the most frequently heard by far are "to form partnerships with production bases" and "to respond accurately to customer needs," with implementation taking place "now" or "in future." (Figure 2-2-40 and 2-2-41). These responses indicate that companies intend to establish R&D bases in East Asia upon or after expanding production bases there. It seems that companies are seeking to keep production and development bases in close proximity in order to introduce new products with optimal timing and to reduce lead time in a market environment where product cycles are short, as well as to resolve production site challenges through development and design. Another reason why Japanese companies wish to perform R&D in the highly promising East Asian market is to simplify the problem of ascertaining market needs and to collaborate closely with local companies. This expansion of development functions into East Asia stands as proof that production and sales activities by Japanese companies have deeply penetrated the East Asian economy.

While Japanese companies regard China and ASEAN favorably for the proximity of their production bases and markets, India is valued not only for these reasons but also for the ease with which engineers can be recruited and the high level of research of its engineers (Figure 2-2-42).

Figure 2-2-40 Reasons for establishment of R&D bases in China (Current and future)



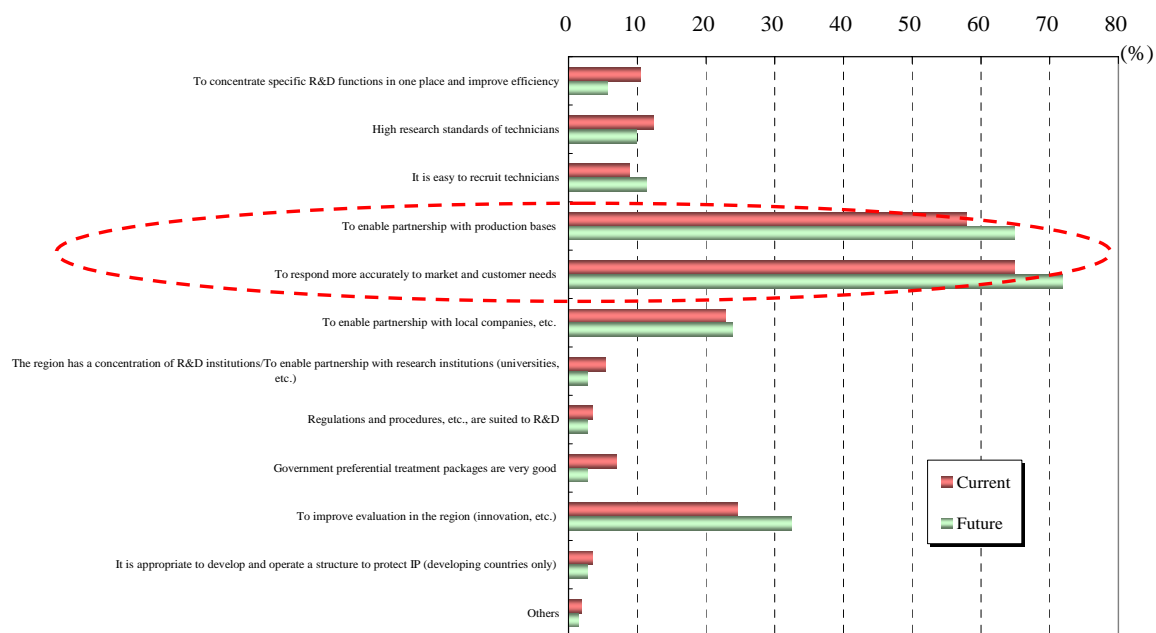
Notes: 1. Share of total responses by reason for establishment (multiple responses).

2. Total number of responses: Current=133, Future: n=181.

3. "Current" means the reason for establishing R&D functions already existing at the time of the questionnaire, and "future" means the R&D functions being considered to be created within five years from the time of the questionnaire.

Source: SEICHO WO TOGERU CHUGOKU-INDO KEIZAI NO GENJOBUNSEKI TO SERVICE SANGYO WO FUKUMU WAGAKUNI KIGYO NO KAIGAITENKAI NI KANSURU CHOSA KENKYU, (JIPRI)(2007).

Figure 2-2-41 Reasons for establishment of R&D bases in ASEAN4 (Current and future)



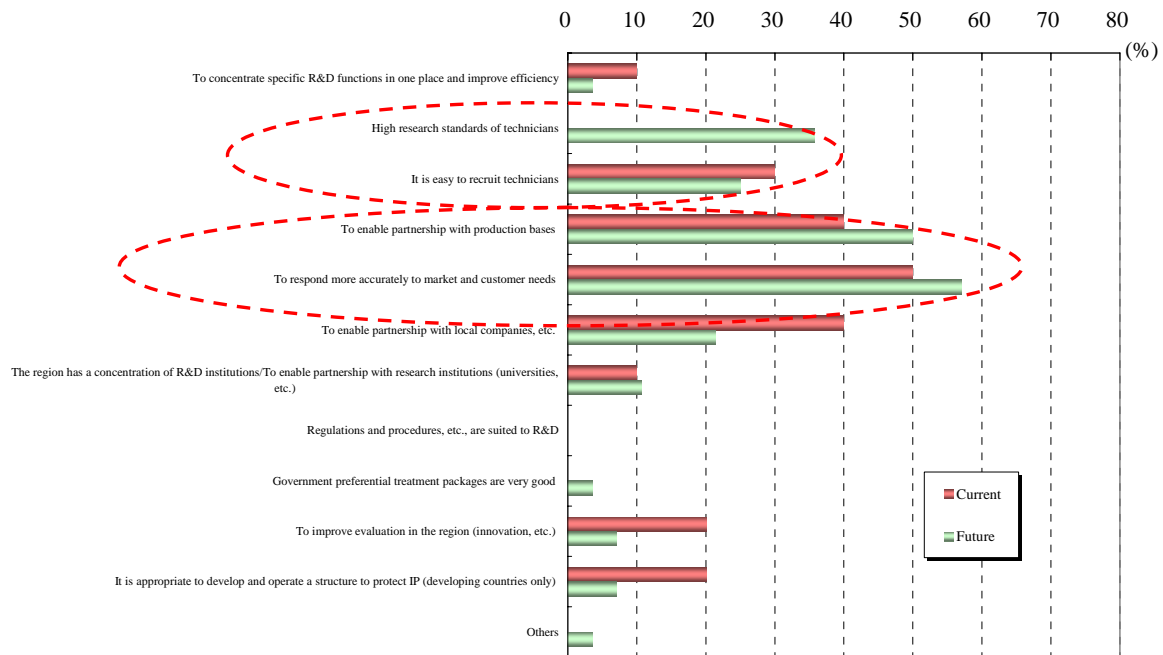
Notes: 1. Share of total responses by reason for establishment (multiple responses).

2. Total number of responses: Current=57, Future: n=71.

3. "Current" means the reason for establishing R&D functions already existing at the time of the questionnaire, and "future" means the R&D functions being considered to be created within five years from the time of the questionnaire.

Source: SEICHO WO TOGERU CHUGOKU-INDO KEIZAI NO GENJOBUNSEKI TO SERVICE SANGYO WO FUKUMU WAGAKUNI KIGYO NO KAIGAITENKAI NI KANSURU CHOSA KENKYU, (JIPRI)(2007).

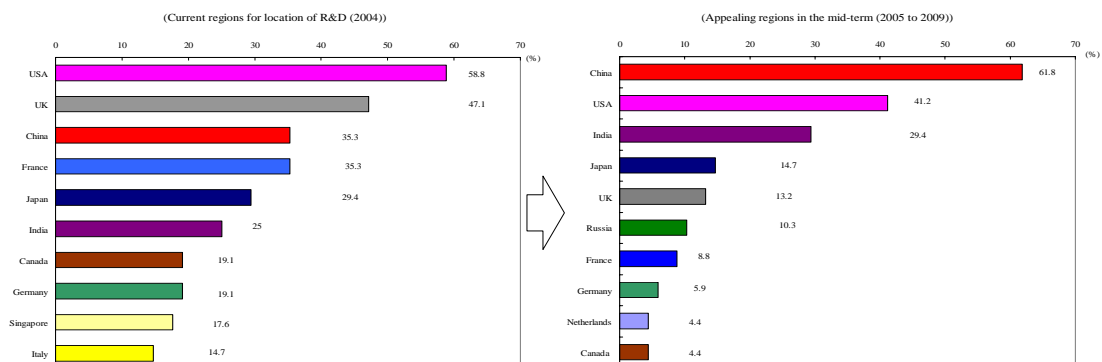
Figure 2-2-42 Reasons for establishment of R&D bases in India (Current and future)



Notes: 1. Share of total responses by reason for establishment (multiple responses).
 2. Total number of responses: Current=10, Future: n=28.
 3. "Current" means the reason for establishing R&D functions already existing at the time of the questionnaire, and "future" means the R&D functions being considered to be created within five years from the time of the questionnaire.
 Source: SEICHO WO TOGERU CHUGOKU-INDO KEIZAI NO GENJOBUNSEKI TO SERVICE SANGYO WO FUKUMU WAGAKUNI KIGYO NO KAIGAITENKAI NI KANSURU CHOSA KENKYU, (JIPRI)(2007).

In East Asia, Japanese companies have established most of their R&D bases in China, whose appeal as an R&D base is also rapidly growing among companies of other countries around the world (Figure 2-2-43). According to statistics of China's Ministry of Commerce, the number of R&D institutes established by foreign-affiliated companies in China has reached more than 700, and over half of these are said to have been established since 2004.¹⁵ In addition, the number of students graduating from science and technology universities in China has increased sharply, and thus China's appeal is also enhanced by the availability of R&D personnel (Figure 2-2-44).

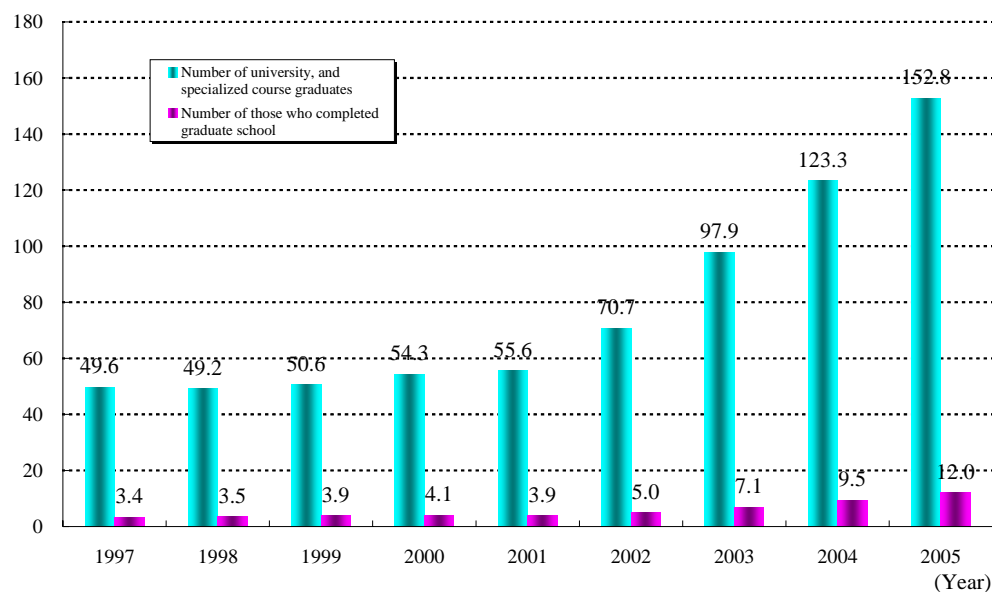
Figure 2-2-43 Location of R&D activities of global companies by country



Notes: Survey implemented by UNCTAD targeting 316 companies selected on the basis of the size of their R&D expenditure (November 2004 to March 2005). Total number of responding companies: 68.
 Source: World Investment Report 2005 (UNCTAD).

¹⁵ Jin, J. (2006), *CHUGOKU NI OKERU GAISHIKIGYOU NO R&D KATSUDOU TO NIKKEI KIGYOU* (Research Report, June 2006, No. 270, Fujitsu Research Institute, Economic Research Center).

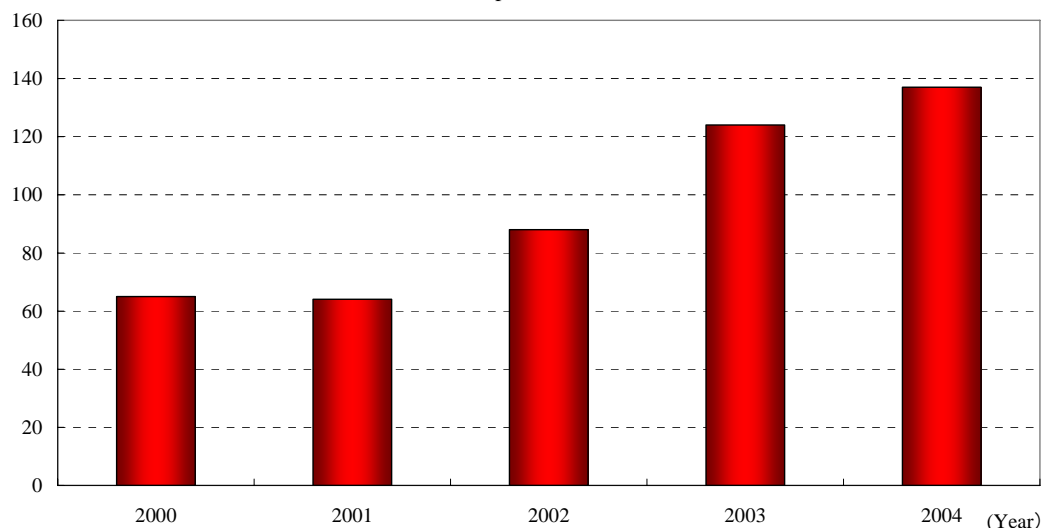
Figure 2-2-44 Changes in science and technological human resources in China
(10,000 people)



Source: CEIC Database.

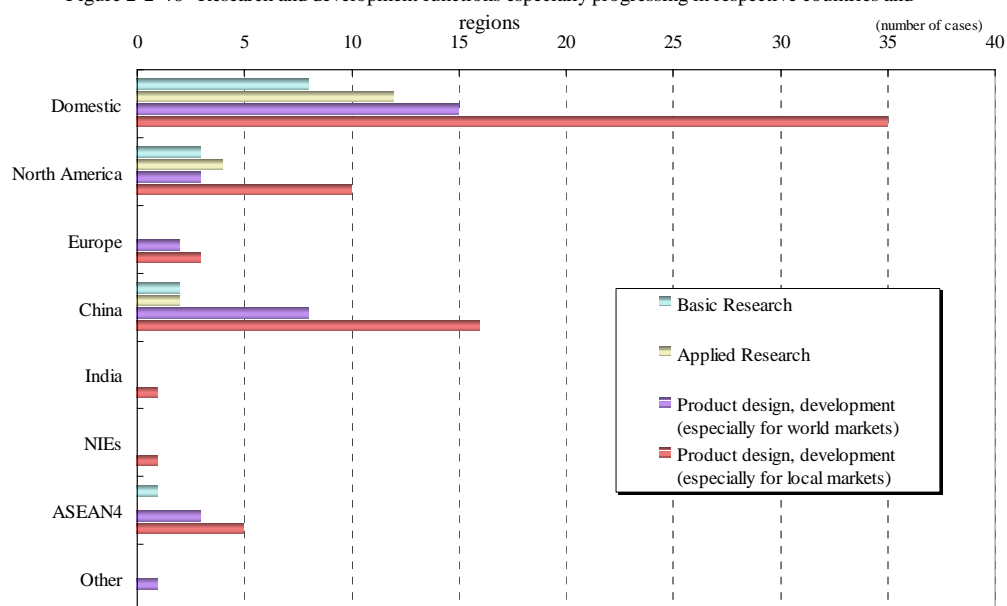
Amid this expansion, Japanese companies doubled their R&D expenditures in China between FY2000 and FY2004 and have achieved significant results in product development and design. These activities indicate that Japanese companies have begun to position China as an important base for R&D (Figure 2-2-45 and 2-2-46).

Figure 2-2-45 Changes in research and development costs of China in Japanese corporations
(100 million yen)



Source: Basic (Trend) Survey on Overseas Business Activities (Ministry of Economy, Trade, and Industry).

Figure 2-2-46 Research and development functions especially progressing in respective countries and



Note: 1. Answers to "Out of the functions in use, compared to domestic, things that are progressing especially efficiently."

2. Total number of responses, n=99.

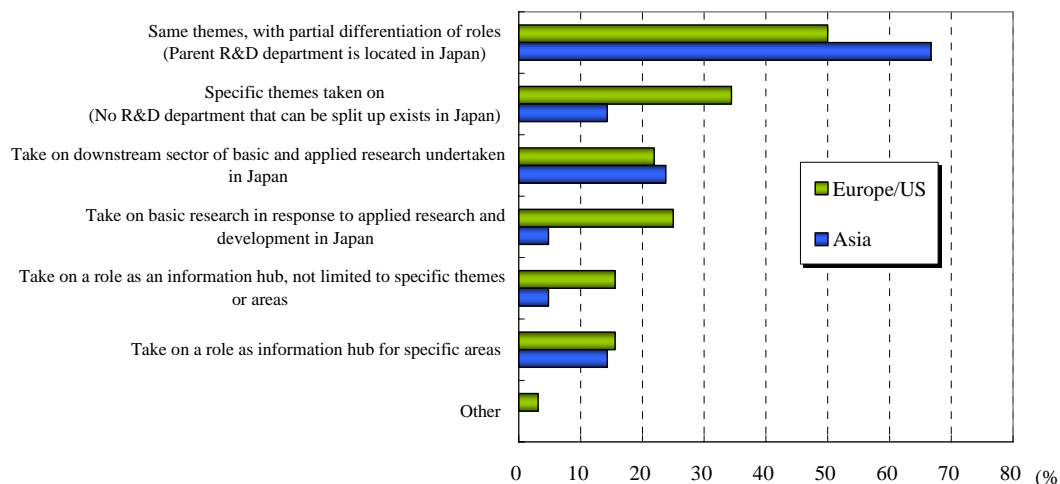
Source: SEICHO WO TOGERU CHUGOKU-INDO KEIZAI NO GENJOBUNSEKI TO SERVICE SANGYO WO FUKUMU WAGAKUNI KIGYO NO KAIGAITENKAI NI KANSURU CHOSA KENKYU, (Japan Industrial Policy Research Institute (2007)).

(2) The aspect of East Asia from the view point of global R&D network

(International division of labor is arising in R&D networks)

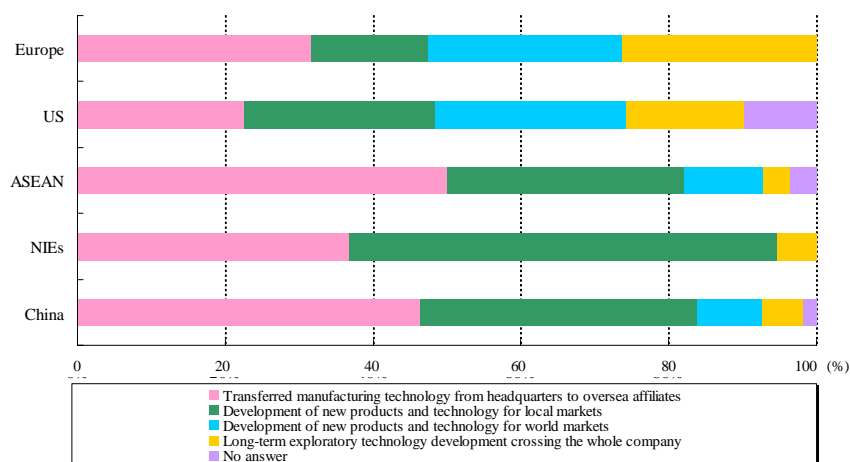
According to a questionnaire survey of Japanese companies that have established research bases in East Asia and the West concerning the division of roles in R&D between those performed in and outside of Japan, Japan has established research bases in Western countries not only to conduct research in the same fields in which they conduct research in Japan, but also in fields where research is not performed in Japan or in fields in which Europe and the U.S. have taken the lead. In East Asia, by contrast, Japan performs design and development geared to local East Asian specifications concerning products whose basic design work was performed by the parent R&D division in Japan, indicating that Japanese companies perform R&D in East Asia to complement R&D performed in Japan (Figure 2-2-47). Looking at the differences in R&D activities between regions shows that the proportion of Japanese companies that perform product and technological development aimed at local markets is high compared with that performed in Europe and the U.S. (Figure 2-2-48).

Figure 2-2-47 Division of roles between overseas and domestic (Japan) R&D bases



Notes: 1. Answers received were in response to the question, "In what way are the functions that you possess split in terms of role division with R&D departments in Japan?" (multiple responses).
 2. Japanese companies where the parent organization has R&D functions located overseas. Total number of responses: Europe and US: n=32, Asia: n=21.
 Source: KENKYU KAIHATSU KINOU NI OKERU KOKUSAI BUNGYO NO SHINTEN TO SANGYO GIJUTSUSEISAKU NI KANSURU CHOSA, (2005)(NRI).

Figure 2-2-48 Undertaking development and research activity in Japan (by region)

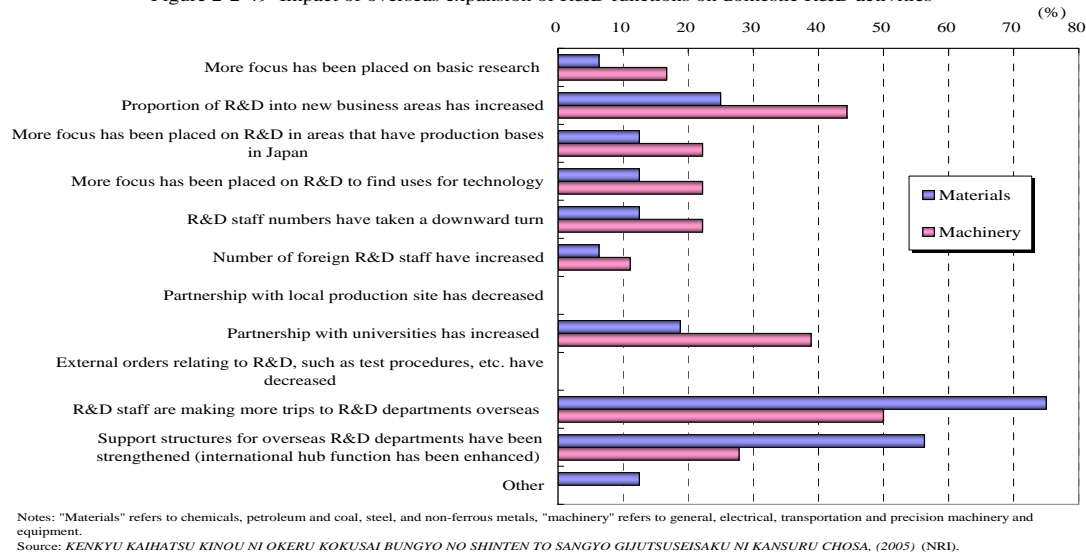


Notes: For each region, the proportion of activities in answers from companies with research and development bases are shown.
 Europe: n=19, US: n=31, NIEs: n=19, ASEAN: n=28, China: n=56.
 Source: CHUGOKU NI OKERU TAKOKUSEKI KIGYO NO ARATANA CHOURYU - KOUFUKAKACHIKA KEIEI NI MUKETA TORIKUMI TO ARATANA GAISHI SEISAKU NO TENBOU (Mizuho Research Institute) (2007).

(R&D functions in Japan shift to high value-added fields)

The establishment of R&D bases in East Asia for the purpose of collaborating with production bases and adapting to markets has, along with R&D performed in the West primarily for acquiring new technology, brought changes to R&D activities conducted in Japan, one of which is a shift to R&D activities relating to new fields of business. In other words, Japanese companies are building an international division of labor in R&D whereby development that can be performed overseas is moved overseas and development in new fields is performed in Japan (Figure 2-2-49). Through this shift, Japanese companies are pursuing a strategy of "selection and concentration" in high value-added fields in Japan.

Figure 2-2-49 Impact of overseas expansion of R&D functions on domestic R&D activities



(A global R&D network and an East Asian business network)

In order to increase productivity, Japanese companies should deepen the collaboration between local production and sales functions and R&D functions in East Asia, which is expected to undergo a market expansion. At the same time, they should promote an effective division of roles and functions in their domestic bases. To achieve these objectives, Japanese companies will be required to create an environment in which intellectual property rights are protected and other rules and safeguards are established so that they can build optimal R&D networks and business networks.

4. Developing infrastructure and expanding services to enhance the logistics functions that support business networks

It has been shown that Japanese companies are building efficient business networks by creating optimal production systems through a multilateral division of labor by processes and concentration of production functions and by establishing bases for overall control of sales aimed at developing intra-regional markets. These efforts have been encouraged by the creation of a seamless economic zone in East Asia through EPA/FTA. However, another important element has been the development of a distribution infrastructure to support these networks. Although the countries of East Asia still have inadequacies, the development of distribution infrastructure is proceeding rapidly. The expansion of various services using this infrastructure is broadening the possibilities for a division of labor by processes and expansion of sales channels and is also enlivening corporate business activity reinforced by the effect of EPA/FTA, which in turn is helping to stimulate the East Asian economy. The following is an overview of the current state of logistics functions and related issues.

(1) The broadening logistics network in East Asia

(The broadening logistics network in China and ASEAN)

Amid the deepening of business networks resulted from developments such as the transition to a seamless economic zone in East Asia and the promotion of a multilateral division of labor by processes, the requirements for distribution between bases operating in East Asian countries are

growing. As the countries of East Asia work to stimulate their own economies, efforts to enhance the attractiveness of bases through the development of a distribution infrastructure that can meet users' needs is important. For this reason, countries are promoting the development of cross-border surface distribution infrastructure including expressways, railways, and sea routes, between China and ASEAN, the countries within ASEAN, ASEAN and India, and China and India (Figure 2-2-50).

To begin with, the development of distribution infrastructure between China and ASEAN includes the opening of an expressway linking China's logistics network and the Vietnamese economy (between Nanning and Youyiguan on the Vietnam border in December 2005) and the commissioning of a container sea route between China and Vietnam (Guangdong – Haiphong in March 2007). Thanks to the opening of the expressway between Nanning and Youyiguan, the time required from Nanning to Hanoi via the connecting Vietnam National Road No. 1 was reduced from seven hours to five hours.¹⁶ The new sea route between Guangdong and Haiphong takes advantage of Hong Kong's excellent connecting transportation capacity and links in a short period of time the southern region of China, which is the country's largest industrial zone, with Vietnam, which is attracting interest as a production base.

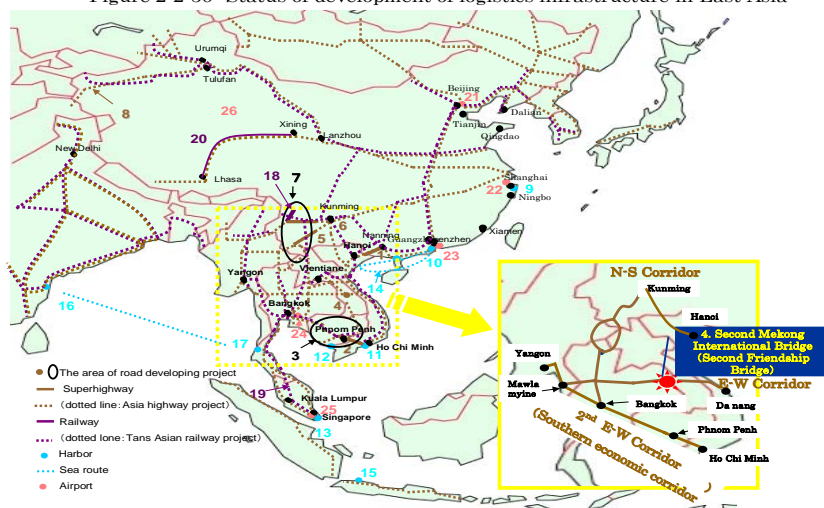
Distribution infrastructure within ASEAN, includes the No. 2 Mekong International Bridge (No. 2 Friendship Bridge)¹⁷ between Laos and Thailand opened in December 2006. This bridge joins the opposite shores of the Mekong River, which previously could only be crossed by ferry, and is located at the mid-point of a distribution highway that traverses the Indonesian peninsula known as the East-West Corridor. This highway, which links the countries of Vietnam, Laos, Thailand and Myanmar, is expected to contribute significantly to the development of a divided labor network, whereby, for example, parts procured from Thailand could be assembled in Vietnam.¹⁸

¹⁶ Stated in an article dated December 28, 2005 in Shinkasha Tsushin.

¹⁷ This bridge was completed by means of a Japanese yen loan, the first provided for a project encompassing two countries.

¹⁸ Previously, distribution between Bangkok and Hanoi was performed by means of sea transport, which took about two weeks. The opening of the No. 2 Mekong International Bridge (No. 2 Friendship Bridge) has raised expectations for increased use of overland transport, which takes about three hours.

Figure 2-2-50 Status of development of logistics infrastructure in East Asia



	Infrastructure	Country	Overview
Road	1 Construction of Nanning-Youyiguan Expressway	China	179.2 km between Nanning and Youyiguan. Opened in 2005.
	2 Development of Phnom Penh-Ho Chi Minh Expressway	Cambodia, Vietnam	Part of second east-west corridor. Loan of total of 1.4 million dollars approved by ADB in Cambodia and Vietnam in November 1998. Neak Luong-Ho Chi Minh section opened. Phnom Penh-Neak Luong section scheduled to be opened in 2010.
	3 Improvement of Roads in Cambodia	Cambodia,	Loan of 50 million dollars approved by Asian Development Bank (ADB) in November 2002. Ongoing as of March 2007.
	4 Construction of the Second Mekong International Bridge (Second Friendship Bridge)	Laos, Thailand	Strategic point for distribution connecting east-west corridor. Yen loan provided by Japan. Opened in 2006.
	5 Construction of Yuanjiang-Mohei Expressway	China	147 km. Loan of 250 million dollars approved by ADB in July 1999. Opened in December 2003.
	6 Construction of Dali-Chuxiong Expressway	China	200 km. Loan of 150 million dollars approved by ADB in September 1994. Opened.
	7 Development of roads in Western Yunnan Province	China	Loan of 250 million dollars approved by ADB in October 2003. Ongoing as of March 2007.
	8 Asia Highway Project	Japan, Singapore, Malaysia, Thailand, Cambodia, Vietnam, China, others	Promoted by United Nations Economic and Social Commission for Asia and the Pacific (UNESCAP). Plan for road network connecting Asia and Europe. 32 countries involved. Participation by Japan in November 2003. Total length of 141,000 km. (Part
Railway	9 Construction of Lijiang-Dali Railway	China	167km Complete in December 2009
	10 Construction of Trans-Asian Railway	Singapore, Malaysia, Thailand, Cambodia, Vietnam,	UNESCAP promotes and plans 80,900km railway connecting Asia and Europe (A part is described on the map)
	11 Construction of Qinghai Tibet Railway	China	Connecting Operation starts July, 2006. Plan to add
Port	12 Development of Shanghai-Yongshan Deep Water Port	China	The 3rd stage, 30 berths, Annual container handling expands to over 15 million TEU. The project is to be completed in 2012. After completion of the whole construction, a total of 53 berths and annual handling volume is to be expanded to 25 million.
	13 Development of Guangzhou Nansha Port	China	Start using 4 berths jointly in September, 2004. The 2nd construction was started, planning to be completed with 10 berths.
	14 Development of CaiMep-Thi Vai International Port	Vietnam	Construction container terminal at CaiMep Port, general cargo terminal at Thi Vai Port by means
	15 Emergent Rehabilitation of Sihanoukville Port	Cambodia	Expand container berth, planning to be completed in November 2007 by a means of Japanese yen loan.
	16 Expansion of Pasir Panjang Container Terminal	Singapore	Plan to add 15 more berths.
	17 Container route between Guandong (Zhanjiang Port) and Hi-phong Port	China, Vietnam	One ship passage per week. Container vessel is capable to load 360 standard containers. Service started in March, 2007
	18 Emergent Rehabilitation of Tanjung Priok Port	Indonesia	Dredge the bottom of searoutes, anchor regions, etc. To be completed in November, 2007 by means of Japanese yen loan.
	19 Development of Chennai Port	India	Develop the second container terminal
Airport	20 Expansion of Ranong Port	Thailand	Expand to be responded to cargo vessels over 12,000 deadweight t
	21 Development of Beijing Capital International Airport	China	Add 3,800m runway by 2007.
	22 Development of Shanghai Pudong International Airport	China	Add three runways by 2007.
	23 Development of Guangzhou Baiyun International Airport	China	Add two 3,800m and one 3,600m by 2010.
	24 Construction of Suvarnabhumi International Airport	Thailand	Japan provided yen loan. Opened in September, 2006. The existing two runways are to be added up to four runway in the total
	25 Development of Changi Airport	Singapore	3rd Terminal is under construction, to be completed in 2008. This helps increase passenger handling capacity up to 20 million persons. Construction for 3rd runway is also being planned.
	26 Development of airport in Western China	China	Plan to start construction of 37 new airports by 2010.

Source: Various sources compiled by METI.

In addition, an expansion of Thailand's Ranong Port is underway. If this port is used for trade with India, passage from Bangkok, formerly through the Strait of Malacca, is expected to be cut from almost one month to four to seven days, substantially reducing transportation time and cost. Since September 2004, Thailand and India have implemented a tariff reduction through the "Early

Harvest”¹⁹ scheme based on an FTA framework agreement concluded in 2003, and accordingly, the volume of trade is expected to rise. It is therefore likely that this route of commerce with India using Ranong Harbor will become increasingly important.

With respect to railway infrastructure, branch lines will be added to the railway linking China’s Qinghai Province with Tibet, which opened in July 2006. One of these branch lines will extend to the town of Domo on the border with India²⁰ and is expected to stimulate trade between China and India. Also planned is a trans-Asia railway linking China, Singapore and Thailand. This surface distribution infrastructure network linking the countries of East Asia is expected to facilitate the development of efficient business networks.

(Expansion of logistics networks in China)

The logistics network extending over the vast area of China, which up to now tended to be fragmented, is now expanding. The slow development of infrastructure was once a major impediment in China’s logistics network. Since 2000, however, the development of various types of infrastructure has rapidly advanced, and although continued improvements are necessary, this infrastructure is supporting vigorous business activity.

Of these infrastructure networks, expressways and railways have advanced the furthest in China. In line with the 10th five-year plan, a road network consisting mainly of expressways running north-south (five roads) and east-west (seven roads) is under rapid development and is scheduled for completion in 2007 (Figure 2-2-51 and 2-2-52). These expressways will account for most of transportation within China and will allow trucks to travel by road over wide expanses. Development of railways is also advancing, particularly a project running eight lines each north-south and east-west, and the construction of a west-north and west-south frontier railroad is in planning. In addition, gradual but steady progress is being made in areas such as increasing train speed, containerizing freight transportation, and improving service through regularly-operating trains with fixed arrival/departure stations, routes, car numbers, timetables, and fares.

Regarding airports, in addition to three major hubs—the Beijing Capital International Airport, the Shanghai Pudong International Airport and the Guangzhou International Airport—plans for western regional airports that will facilitate travel inland are moving forward, with the construction of 37 new airports in China’s western regions scheduled to begin by 2010. In addition, development of water transport, as in the Changjiang River, is also progressing, and the Changjiang route linking Shanghai with Chongqing is becoming an important distribution route with the world’s largest freight capacity. Development of the Changjiang River is included in the 11th five-year plan and is expected to expand. This development of distribution infrastructure, coupled with China’s high rate of economic growth, is leading to a rapid increase in freight transport volume (Figure 2-2-53).

Japanese companies look favorably on these improvements in China’s distribution infrastructure (Figure 2-2-54). However, there are many quality issues remaining such as undeveloped areas,

¹⁹ This refers to the reduction of tariffs on specified items through framework agreements and the like in advance of tariff reductions through EPA/FTA freight agreements.

²⁰ JETRO, *Trade Bulletin* (July 3, 2006).

vibration during travel due to trains in developed locations, and road congestion. In addition, the time required for distribution is unstable. It is hoped that these and other problems are resolved through further improvements.

Figure 2-2-51 China’s “Five downs and seven acrosses” highway development plan situation



Source: Various sources compiled by METI.

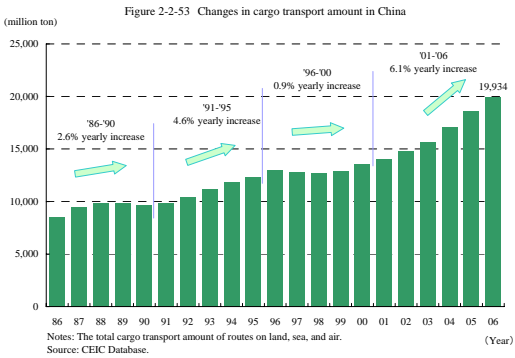
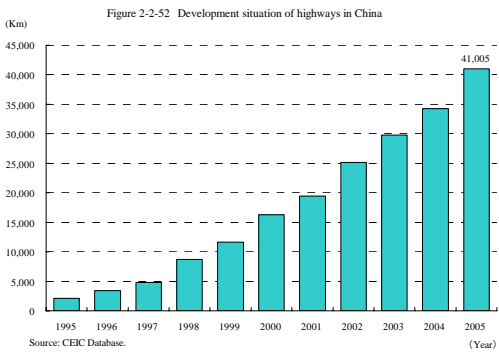
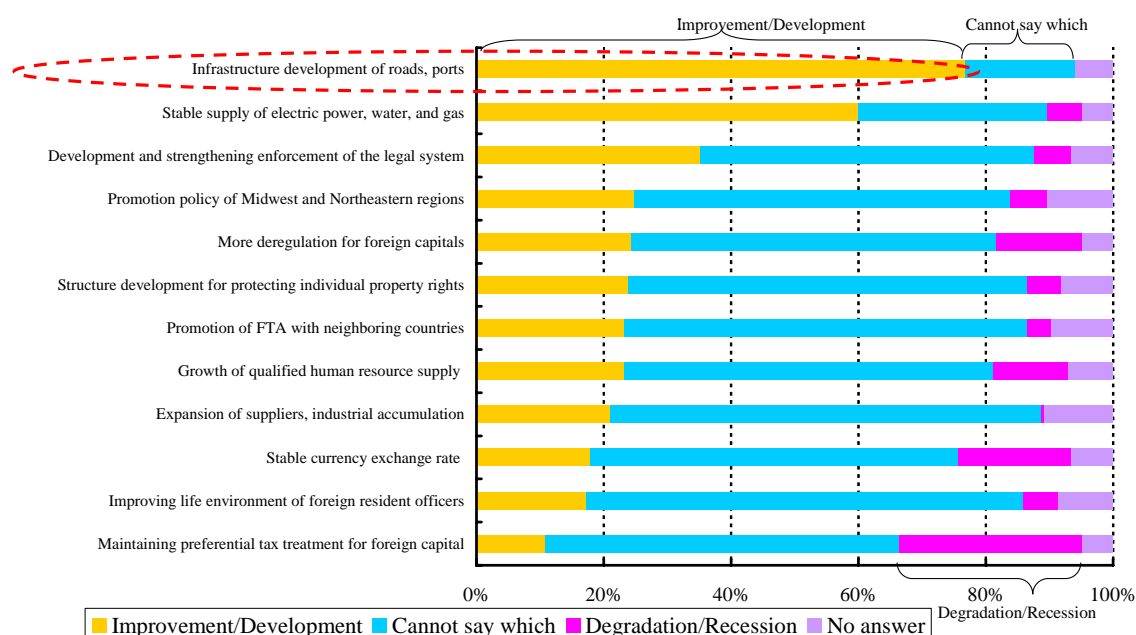


Figure 2-2-54 The evaluation of Chinese investment climate from Japanese companies



Notes: n=185 companies.

Source: IKYOKU SHUCHU WO ZESIE SHINAGARA, GENCHI JIGYOU NO KOUJOKA WO NERAU NIHON KIGYOU NO CHUGOKU SENRYAKU - 7th Survey about Asian businesses (2006) (Mizuho Research Institute) (2006).

(Developing more advanced international logistics bases such as ports and airports)

With the expansion of trade volume (international distribution), particularly in East Asia, the development of infrastructure such as ports and airports is steadily advancing. The lack of development of ports and airports, which are the arrival and departure gates for international distribution, is a bottleneck for distribution and trade, for this reason, the countries of East Asia are pushing forward with improvements.

Regarding ports, the rankings for global container handling capacity by port and by country put East Asian ports in the upper rank. Of the top 30 ports in the world in terms of container handling capacity, East Asia accounts for 68.4% of this capacity and thus freight handling is booming (Table 2-2-55). This shows that the development of infrastructure capable of handling substantial quantities of freight is advancing in East Asia. The rate of growth in freight handling capacity is especially high in Chinese ports. In Shanghai, where demand is large, development of the Shanghai Yangshan deep-water port is underway with the goal of developing it into an international hub port. Upon completion in 2020, the port will have 53 container berths and an annual container handling capacity of 25 million TEU²¹ as called for by plans.²² The completed port will be about 10 times as large as the present facility, and will be 2.5 times larger than Kobe Port—Japan's largest—in terms of number of container berths²³ and 7.4 times larger than Tokyo Port in terms of freight handling capacity. In

²¹ TEU (Twenty-foot Equivalent Units) is a measure of a container ship's loading capacity (ITEU = one 20-foot container).

²² The Japan-China Economic Association website.

²³ Informa UK Ltd. (2007), *Containerisation International Year Book 2007*. Kobe Port has 21 container berths.

addition, plans for the development of Nansa Port in Guangzhou Port are moving forward, with service having begun in September 2004 in the first phase and with second phase development now proceeding. Similarly, Vietnam and India, which have become new investment targets in recent years, are also substantially increasing their container handling capacity. If, for the top 20 countries, container handling capacity per nominal GDP is examined in order to offset the effect of size of economy on distribution volume, East Asian countries occupy the upper rank (Figure 2-2-56). In these countries, freight handling capacity is large relative to the size of their economies, and distribution is brisk. At the same time, infrastructure is being developed to meet the expansion of transportation volume.

Table 2-2-55 Ranking of the number of major containers treated in the World (by port, country)

						(10,000 TEU)			
Position	Name of ports	Name of country	2005	2004	Growth rate (%)	Position	Name of country	2005	2004
1	Singapore	Singapore	2,319	2,133	8.7	1	China	8,855	7,473
2	Hong Kong	China	2,243	2,198	2.0	2	US	3,852	3,490
3	Shanghai	China	1,808	1,456	24.2	3	Singapore	2,319	2,133
4	Shenzhen	China	1,620	1,366	18.6	4	Japan	1,678	1,644
5	Pusan	South Korea	1,184	1,149	3	5	South Korea	1,511	1,436
6	Gaoxiong	South Korea	947	971	-2	6	Germany	1,351	1,248
7	Rotterdam	Holland	930	828	12.3	7	Taiwan	1,279	1,303
8	Hamburg	Germany	809	700	15.6	8	Malaysia	1,202	1,151
9	Dubai	UAE	762	643	18.5	9	Italy	986	947
10	Los Angeles	US	748	732	2.2	10	UAE	985	866
11	Long Beach	US	671	578	16.1	11	Holland	952	848
12	Antwerp	Belgium	648	605	7.1	12	Spain	917	827
13	Qingdao	China	631	514	22.8	13	UK	860	833
14	Port Klang	Malaysia	554	524	5.7	14	Belgium	789	728
15	Ningbo	China	521	401	29.9	15	Brazil	560	506
16	Tianjin	China	480	381	26.0	16	Indonesia	550	537
17	New York/New Jersey	US	479	448	6.9	17	Thailand	512	488
18	Guangzhou	China	469	330	42.1	18	India	494	433
19	Tanjung Pelepas	Malaysia	418	402	4.0	19	Australia	483	506
20	Leamchabang	Thailand	377	353	6.8	20	Canada	416	393
21	Bremen/Bremenhaven	Germany	374	347	7.8				
22	Tokyo	Japan	359	336	6.8				
23	Amoy	China	334	287	16.4	23	Philippines	363	368
24	Tanjung Priok	Indonesia	328	317	3.5				
25	Algeciras	Spain	318	294	8.2				
26	Gioia Tauro	Italy	316	326	-3.1				
27	Yokohama	Japan	287	272	5.5				
28	Jeddah	Saudi Arabia	284	243	16.9				
29	Felixstowe	UK	270	270	0.0				
30	Jawaharlal Nehru	India	267	237	12.7	28	Vietnam	269	227

Notes: 1. East Asian countries, Taiwan, Hong Kong, and their ports are filled in.

2. The positions are the 2005 number of treatments ranking.

Source: *Containerisation International Yearbook 2007* (Informa UK Ltd.) (2007).

Table 2-2-56 Nominal GDP per containers treated in top 20 major container treating countries

						(TEU)	
Position	Country name	2005	Position	Country name	2004		
1	Singapore	198,708	1	Singapore	198,594		
2	Malaysia	91,871	2	Malaysia	97,163		
3	UAE	75,620	3	UAE	83,443		
4	China	39,466	4	Taiwan	40,428		
5	Taiwan	36,896	5	China	38,687		
6	Thailand	29,054	6	Thailand	30,245		
7	Belgium	21,168	7	South Korea	21,080		
8	Indonesia	19,167	8	Indonesia	20,895		
9	South Korea	19,089	9	Belgium	20,270		
10	Holland	15,113	10	Holland	13,924		
11	Spain	8,130	11	Spain	7,918		
12	Australia	6,780	12	Australia	7,914		
13	Brazil	6,349	13	Brazil	7,626		
14	India	6,327	14	India	6,488		
15	Italy	5,562	15	Italy	5,478		
16	Germany	4,839	16	Germany	4,548		
17	UK	3,855	17	Canada	3,954		
18	Japan	3,682	18	UK	3,865		
19	Canada	3,673	19	Japan	3,568		
20	US	3,093	20	UK	2,980		

Notes: 1. East Asian countries, Taiwan, and Hong Kong are filled in.

2. The containerisation (TEU) of the top 20 countries of the world treating major containers in 2005 containers in 2005 divided by the yearly nominal GDP (US dollars).

3. The 2005 nominal GDP of UAE is an estimate by the IMF.

Source: *Containerisation International Yearbook 2007* (Informa UK Ltd.) (2007), *World Economic Outlook Database April 2007* (IMF).

Next, with regard to airports, the development of large-scale airports with multiple runways is progressing in East Asia. For example, in China work is underway on the aforementioned Beijing Capital International Airport, the Shanghai Pudong International Airport, and the Guangzhou International Airport, the three hub airports for the northern, central, and southern regions of China. In Thailand, the Suvarnabhumi International Airport opened in September 2006, and South Korea's Incheon Airport and Malaysia's Kuala Lumpur Airport plan to add new runways. Thus, many countries in East Asia are promoting airport development in order to meet booming transportation demand (Table 2-2-57 and 2-2-58).

Table 2-2-57 Ranking of world airport cargo treated

Position	Name of airport	2006	
		Name of country	Cargo treated (ton)
1	Memphis International Airport	US	3,692,205
2	Hong Kong International Airport	China	3,608,789
3	Anchorage International Airport	US	2,803,792
4	Incheon International Airport	South Korea	2,336,571
5	Narita International Airport	Japan	2,280,026
6	Shanghai Pudong International Airport	China	2,159,321
7	Frankfurt and Main International Airport	Germany	2,127,797
8	Louisville International Airport	US	1,982,985
9	Changi International Airport	Singapore	1,931,881
10	Los Angeles International Airport	US	1,907,173
11	Charles de Gaulle International Airport	France	1,854,950
12	Miami International Airport	US	1,830,592
13	Taiwan Taoyuan International Airport	Taiwan	1,698,808
14	JFK International Airport	US	1,660,158
15	Chicago O'Hare International Airport	US	1,618,331
16	Schiphol Airport	Holland	1,559,787
17	Dubai International Airport	UAE	1,503,696
18	Heathrow Airport	UK	1,343,932
19	Suvarnabhumi International Airport	Thailand	1,181,814
20	Indianapolis International Airport	US	1,044,293
21	Beijing Capital International Airport	China	1,028,908
22	Newark International Airport	US	969,936
23	Kansai International Airport	Japan	842,085
24	Haneda Airport	Japan	832,854
25	Guangzhou Baiyun International Airport	China	824,906
26	Luxembourg International Airport	Belgium	751,645
27	Dallas/Fort Worth International Airport	US	748,056
28	Atlanta International Airport	US	746,500
29	Brussels International Airport	Belgium	691,250
30	Cologne Bonn Airport	Germany	691,110

Notes: 1. Airports in East Asian countries, Taiwan, Hong Kong are filled in.

2. Data are preliminary figures (as of March 16, 2007).

Source: Website of ACI (Airport Council International).

Table 2-2-58 Comparing major airport sizes of East Asia, Taiwan, and Hong Kong

Name of airport (location)	Current runways	Future plans
Narita International Airport (Japan)	4,000m×1 2,180m×1	Expanding existing 2,180m runway to 2,500m.
Kansai International Airport (Japan)	3,500m×1	4,000m×1 will newly be constructed, in August 2007 a limited plan in service will begin.
Chubu Centrair International Airport (Japan)	3,500m×1	
Changi International Airport (Singapore)	4,000m×2	Newly designing a third 4,000m runway plan.
Kuala Lumpur International Airport (Malaysia)	4,124m×1 4,056m×1	According to the overall plan, there will be five runways.
Suvarnabhumi International Airport (Thailand)	3,700m×1 4,000m×1	According to the overall plan, there will be four runways.
Hong Kong International Airport (Hong Kong)	3,800m×2	
Taiwan Taoyuan International Airport (Taiwan)	3,660m×1 3,350m×1	The adjacent military runway will be extended to 3,850m, and after 2015, it will be in service as a civilian runway.
Incheon International Airport (South Korea)	3,750m×2	Newly constructing 4,000m×2, and plans to develop a third by 2008. According to the overall plan, there will be four runways.
Beijing Capital International Airport (China)	3,800m×1 3,200m×1	Newly constructing 3,800m×1, completing in 2007.
Shanghai Pudong International Airport (China)	4,000m×1 3,800m×1	Newly constructing three runways, completing in 2007.
Guangzhou Baiyun International Airport (China)	3,800m×1 3,600m×1	Newly constructing 3,800m×2, 3,600m×1, completing in 2010.

Source: Various sources compiled by Ministry of Economy, Trade and Industry.

(Column 6) China is strengthening logistics functions through use of bonded areas

In the distribution sector, China is using systems such as bonded areas to attract foreign capital and thereby promote economic growth. To provide bonded areas, China has established bonded districts, export processing centers, and, in 2004, bonded logistics parks, which are drawing interest for specializing in logistics functions. The principal merits of these areas are: (1) at the point in time when freight from within China is brought into a bonded logistics park it is regarded as an export, and therefore the seller can immediately apply for a refund of price-increase tax²⁴; (2) customs procedures are simplified, and (3) transshipment is possible within the port district, which enhances the convenience of international transport and entrepot trade (Column Table 6-1 and Column Figure 6-2).

²⁴ Price-increase tax is a value-added tax levied on the domestic purchase and sale of goods. The refund of price-increase tax is a system under which a buy-in price-increase tax on raw materials and parts stocked for the production of export products is deducted from domestic sales tax without taxing export sales, and when this deduction is not settled, the tax is refunded at a fixed rate.

By taking advantage of these special characteristics, distributors in China and overseas can build various international logistics models such as international procurement, international distribution, and international entrepot trade using bonded logistics parks as their hub. The Chinese government has positioned bonded logistics parks as bases for development of the international distribution industry and has spelled out plans for their operation,²⁵ with a view to expanding the utilization of bonded logistics parks (Column Figure 6-3).

Column Table 6-1 Comparing bonded areas of China

	Bonded area	Export processing zone	Bonded Logistics Zone
Establishing period	1990	2002	2004
Outline	It is a bonded area aimed for export and import trade, processing trade, and for materials and parts imported from abroad. tariffs and additional taxes are reserved. When products are exported, tariffs and additional taxes are eliminated.	Special privileges such as, eliminating additional tax for products manufactured and processed within processing region and eliminating additional tax for work related to tariff, exist centering makers.	Neighboring bonded areas, it is premised that it is part of a port. Just carrying goods is seen as exporting, and carrying out goods is seen as importing.
Establishing area	Dalian, Tianjin, Qingdao, Shanghai Wai Gao Qiao, Zhang Jiagang, Ningbo, Fuzhou, Xiamen, Shantou, Guangzhou, Shenzhen Futian, Shenzhen Shatoujiao, Shenzhen Yantian, Zhuhai, Haikou	Jilin Hunchun, Dalian, Beijing Tianzhu, Tianjin, Yantai, Weihai, Jiangsu kunshan, Suzhou Industrial Zone, Shanghai Sungchiang, Hangzhou, Xiamen Xinglin, Shenzhen, Guangzhou, Wuhan, Chengdu, Shenyang, Qingdao, Jinan, Lianyungang, Urumqi, Nanjing, Zhenjiang, Suzhou high-tech zone, Shanghai Qingpu, Shanghai Cao He Jing, Shanghai Minhan, Jiaxing, Beihai	Shanghai Wai Gao Qiao, Zhang Jiagang, Qingdao, Dalian, Tianjin, Ningbo, Xiamen, Shenzhen Yantian
Foreign exchange settlement for freights	Foreign exchange settlement of overseas procured goods is possible. Foreign exchange settlement of Chinese procured goods depends on the view of administration outside the area. Not possible within Shanghai area.	Foreign exchange settlement possible	Foreign exchange settlement possible
Requirements for establishing companies	Manufacturing companies, trade, commodities, bank, consulting.	Manufacturing companies, transportation/warehouse supporting manufacturing.	Commodities and trading industry (having a warehouse is a principle).
Selling restrictions to area (within China)	None for imports and products processed and manufactured within area (100% manufacturing amount is possible).	Not possible in general (Products manufactured within area may partially be allowed). Products manufactured outside area are not possible.	Because they are products of companies within the area, there are no limits to the number of products sold outside the area.
Exports of Chinese products going through the area	possible	not possible	possible
Additional export tax refund	Tax refund (Application for refund) issued only for those that have been exported to overseas. But not possible in reality.	Tax refund issued when exported (loaded) from processing makers outside the area to export processed area.	Tax refund issued when exported (loaded) from outside the area to bonded logistics zone.
Companies with merit	Applying to manufacturing companies wanting to export a lot of products to markets within China and companies are trying to sell products imported from overseas to domestic inventoreis.	Applying to manufacturing makers who try to export most of their products overseas.	Applying to companies supplying Chinese manufactured products to Chinese users and companies exporting Chinese manufactured products abroad (Possible to be used as inventory base and supply base).

Note: 1.Requirements for free trading zone administration is different between free trading zone and is not the same. There are also no nationwide laws and regulations covering zones. Therefore, even within the same region, management, usage situation are different, and they are not settled.

2.The establishing period indicates the time the State Council approved.

Source: Various sources compiled by METI.

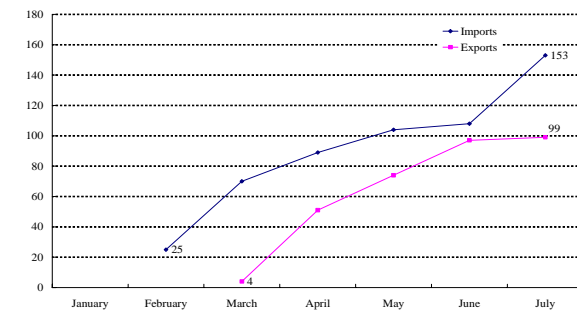
²⁵ Law for the Control of Bonded Logistics Parks (Customs Bureau Ordinance No. 134, November 28, 2005).

Column Figure 6-2 Bonded logistics zone in China



Source: Various sources compiled by METI.

Column Figure 6-3 Changes of trade value in bonded logistics zone of China (2006)



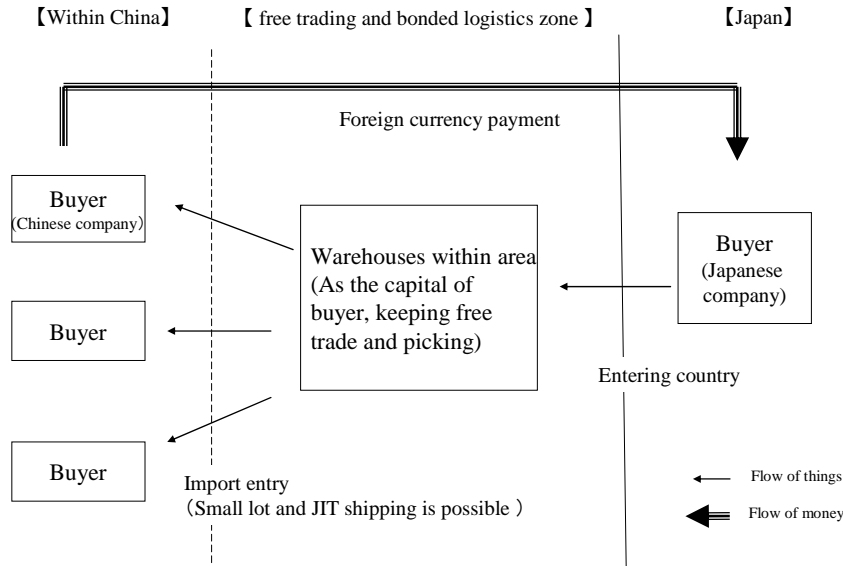
Notes: Data of Customs Statistics of China.
Source: JETRO website.

(Example of use of a bonded logistics park)²⁶

(1) Bonded stock: Optimizes customs clearance costs of seller, facilitates inventory control by buyer

Bonded stock is a system whereby the Japanese seller stores goods in a bonded logistics park as its own asset, and when orders are received from buyers within China, the goods pass through import customs and are shipped. With bonded logistics parks, it is possible to make one application for small-lot multiple shipment with a permission by custom. For this reason, the seller can reduce customs clearance costs (e.g., multiple customs clearance procedures and payment of customs duties on inventory) and distribute goods flexibly in small lots using a just-in-time delivery scheme in response to orders from buyers (Column Figure 6-4).

Column Figure 6-4 Application example (1) of free trading and bonded logistics zone in China



Source: *Trade Consultation News*, Vol. 132 (Shinkin Central Bank)

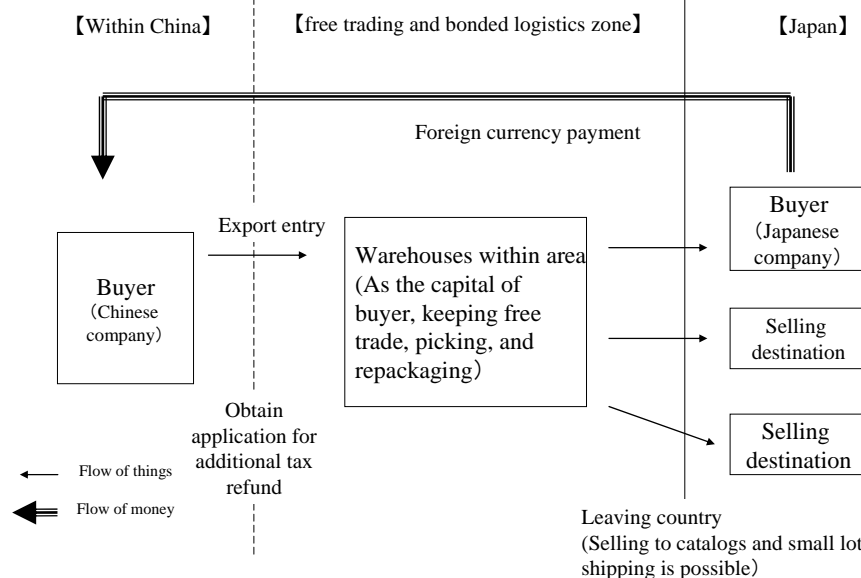
(2) Buyers' consolidation: Reduces buyers' control costs and allows flexible shipment

Buyers' consolidation is a system whereby, for example, Japanese buyers procure goods from sellers in China on condition that the goods are delivered to a bonded logistics park. After storing the goods in the bonded logistics park as its own asset and repackaging, the buyer ships the goods to destinations

²⁶ Shinkin Central Bank, *Trade Consultation News*, Vol. 132.

within Japan as necessary. By moving distribution center functions to China, goods can be stored at lower warehouse expenses than in Japan, Hong Kong or Taiwan. The system also offers the seller in China the ability to quickly obtain documents required for refunds of price-increase tax (Figure 6-5).

Column Figure 6-5 Application example (2) of free trading and bonded logistics zone in China

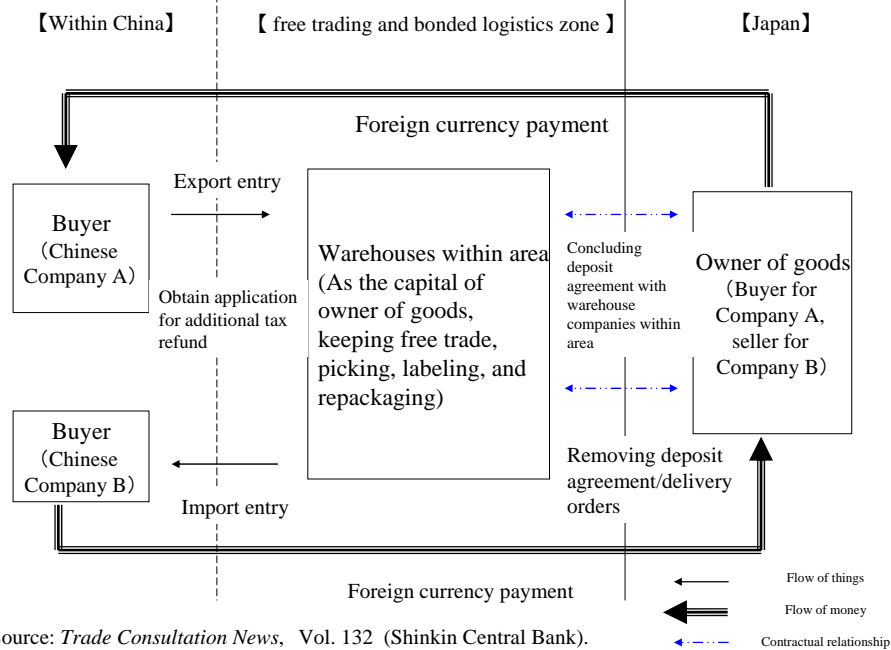


Source: *Trade Consultation News*, Vol. 132 (Shinkin Central Bank).

(3) Deemed import/export transactions: Substitutes for actual export, reducing expense and time

Under this system, a Japanese company operating initially as a buyer procures goods from a seller in China (Chinese company A) on condition that the goods are delivered to a bonded logistics park, then stores the goods in the bonded logistics park as its own asset. After repackaging, the Japanese company operates as a seller and ships the goods to a buyer in China (Chinese company B). With a bonded logistics park, when company B, operating outside of the logistics park, purchases freight, it can make an overseas settlement in foreign currency by using, as documentary evidence, a freight depositing agreement concluded with the warehousing company and the Japanese company operating inside the logistics park. Since, under this system, it is possible to pay the Japanese shipping company in foreign currency while processing the movement of goods within China, transportation expenses and lead time can be reduced compared with the method of importing the goods to China after first actually exporting the goods to Japan (Figure 6-6).

Column Figure 6-6 Application example (3) of free trading and bonded logistics zone in China



It should be noted that like other bonded areas, bonded logistics parks ultimately have precedence relating to China's internal regulations and systems. In addition, the utilization of bonded logistics parks is not uniform and differs depending on location. What is more, the operation of bonded logistics parks is yet to be entirely specified, and legal provisions differ by district. However, by keeping these caveats in mind and employing these parks strategically, the value of their use can be high, as illustrated in the above example.

(2) Efforts aimed at strengthening logistics functions

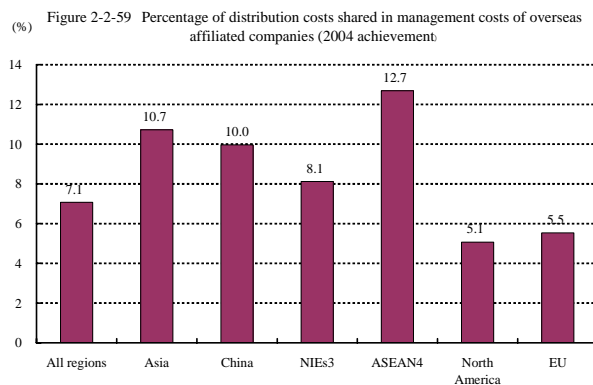
(High-cost structure of distribution in East Asia leaves room for efficiency improvements)

Although the development of distribution infrastructure in East Asia is progressing, distribution costs are high by international comparison. If the proportion of sales and general administrative expenses accounted for by distribution costs of local overseas corporations is compared, distribution costs in Asia are double that in North America and the EU. The proportion of sales and general administrative expenses accounted for by distribution costs is especially high in China and ASEAN4 (Figure 2-2-59). Moreover, if East Asia and Europe are compared in terms of the time required to complete customs clearance procedures, more time is required in East Asia (Table 2-2-60).

These high costs have been attributed to an infrastructure that is insufficient to meet rising distribution needs, problems involving laws and regulations relating to distribution, complicated customs clearance procedures, and a lack of technology and know-how on the part of local distributors. In ASEAN countries, for example, overland distribution by truck, the principal means of transport, hits a major bottleneck due to transshipment when crossing national borders. At the borders between Singapore and Malaysia, Thailand and Laos, and Laos and Viet Nam, transshipment of cargo is not

required because mutual entry of vehicles between two countries is allowed, but transshipment is required between other countries, which not only takes time but also makes the theft of freight possible. In addition, the lack of cargo handling equipment for transshipment is an obstacle to reducing lead time.

Regarding seaborne goods, Japan also needs to further shorten lead time between entry of ships into port and receipt of freight.



Notes: 1. (Percentage of distribution costs) = (Package transport cost) / (Sales management cost x General management cost) x 100.
2. NIEs3 is South Korea, Taiwan, and Singapore.
Source: 35th Basic (Trend) Survey on Overseas Business Activities (Ministry of Economy, Trade and Industry).

Table 2-2-60 Comparing the time it takes for clearance procedures in each country

Country name	Sea freight	Air freight
Germany	1-2 days	1-2 days
France	2 days	2 days
Italy	2 days	2 days
Austria	1 day	1 day
Belgium	0.5 days	0.5 days
US	12-15 days	5 days
Canada	1 day	1 day
Japan	5 days	2 days
China	3-4 days	2-3 days
Hong Kong	2-3 days	1-2 days
Taiwan	5 days	3 days
Singapore	2-3 days	2-3 days
Thailand	14 days	7 days
Malaysia	3 days	1-2 days
Indonesia	2-4 days	2-4 days
Philippines	3 days	4 days
Vietnam	7 days	5 days

Notes:
1. Sea freight uses FCL data.
2. This data is that of 2002.
3. For Japan, from the 2006 8th Import procedure time survey results, the import procedure time has improved for sea freight: 2.7 days, and 0.6 days for air freight.

Source: Website of International Exhibition Logistic Associates.

(ASEAN positions logistics as a new field for priority integration)

Given the state of distribution infrastructure in East Asia, ASEAN, which is promoting economic integration, is moving to streamline customs procedures. At the ASEAN Summit Conference held in 2003, it was decided to bring to realization the ASEAN Single Window,²⁷ Agreement was reached at the 2005 summit conference, and efforts to standardize procedures are underway. Under the ASEAN Single Window, export and import procedures implemented by each concerned agency when borders are crossed will be simplified, which is expected to enhance the effectiveness of EPA/FTA and further increase intra-regional trade.

In 2006, moreover, ASEAN agreed to add distribution services to fields designated for priority integration²⁸ with a view to strengthening logistics functions. A “roadmap” for this effort was

²⁷ Single Window (SW) refers to one-stop service for completing import/export procedures. The ASEAN Single Window plan seeks to actuate a National Single Window (NSW) which will allow, through computerization of tariff procedures, application and notification to concerned agencies to be completed by a one-time input and transmission of information in each of the ASEAN countries. The plan seeks to realize a common ASEAN Single Window (ASW) by standardizing the information stated in necessary documents, narrowing the technical gaps between the member countries, and strengthening tariff administration by each country in ASEAN.

²⁸ At the ASEAN Summit Conference held in October 2003, it was agreed to designate 11 fields for priority integration, including automobiles, electronics, IT, aviation, wood-based industries, agriculture-based industries, fisheries, tourism, rubber-based industries, textiles, apparel, and health care products. In addition, at the ASEAN Summit Conference held in November 2004, a framework agreement was adopted concerning fields for priority integration in ASEAN. This agreement confirmed the 11 fields previously designated as fields for priority integration and also provided that when important fields are

prepared outlining specific measures for strengthening capacity, including the streamlining of trade procedures through deregulation, standardization, and computerization, and the introduction of a qualification system for distribution businesses.

Amid the ongoing expansion of business networks in East Asia, improving the efficiency of the logistics functions that link bases is important for Japan's economy. From this perspective, Japan established the Committee on Partnership for International Logistics Competitiveness consisting of 12 economic organizations including the Federation of Economic Organizations, as well as the Minister of Economy, Trade and Industry and the Minister of Land, Infrastructure and Transport, in August 2006. In December, the Action Plan for Strengthening International Logistics Competitiveness was prepared designating as the implementing body the concerned Japanese government offices, private sector companies and organizations, and the concerned government offices of the ASEAN countries, for the purpose of enhancing the efficiency of distribution within ASEAN. The objectives of this plan are to reduce by half both distribution costs and lead times within ASEAN over the medium to long term, with a view to the economic integration of ASEAN by 2015. The plan calls for the formulation and implementation of specific policy measures aimed at achieving these objectives (Table 2-2-61).

Figure 2-2-61 Overview of the Action Plan to Strengthen Japan's Competitiveness in International Logistics by the Committee on Partnership for International Logistics Competitiveness

	Development of wide-area logistics network	Human Resource development related to logistics and customs procedures	Utilization of logistics materials	Facilitation of customs procedures
Logistics challenges in ASEAN	<ul style="list-style-type: none"> •Development of basic infrastructure and logistics management facilities, etc., is still insufficient 	<ul style="list-style-type: none"> •Low awareness of logistics quality by local manufacturers •Lack of logistics management specialists, etc. 	<ul style="list-style-type: none"> •Lack of movement toward the utilization of RFID tags •Insufficient use of logistics materials and equipment (pallets, fork lift trucks, etc.) 	<ul style="list-style-type: none"> •Lack of customs capacity •Opaque customs systems •Lack of information sharing about customs and among related institutions, and delays in operational integration, etc.
Specific measures	<ul style="list-style-type: none"> •Realize soft and hard infrastructure development on routes where Japanese company needs are high →FY2007: Implement land route tests in the Mekong region 	<ul style="list-style-type: none"> •Export of the Japanese logistics qualification program, etc. →FY2007: Collection of basic data in order to enable selection of model region for program expansion 	<ul style="list-style-type: none"> •Export of Japanese know-how, including introduction of RFID tags, etc. →FY2007: Implementation of trials utilizing RFID tags and logistics materials and equipment 	<ul style="list-style-type: none"> •Computerization of customs procedures (Creation of single window for each country and support for mutual interconnectivity) →FY2007: Implementation of survey into system requirements, etc.
Expected effects	<ul style="list-style-type: none"> •Eliminate infrastructure bottlenecks •Comprehensive logistics management •Facilitation of cross-border transportation links 	<ul style="list-style-type: none"> •Halt downturn in and improve operations quality 	<ul style="list-style-type: none"> •Cost reductions through operations efficiency •Advanced logistics services through freight status management, etc. (location, status, etc.) 	<ul style="list-style-type: none"> •Significant simplification and enhanced efficiency of operations through unified one-stop processing of customs procedures

Source: Action Plan to Strengthen Japan's Competitiveness in International Logistics, (December 22, 2006) (Committee on Partnership for International Logistics Competitiveness).

(Strengthening cooperative relationships concerning logistics among Japan, China and South Korea)

Efforts aimed at facilitating and improving the efficiency of distribution are underway in Japan, China and South Korea. These include, at the private sector level, interchange concerning distribution technology. In recent years, cooperation has been moving forward at the government level: at the 1st Japan-China-South Korea Ministerial Conference on Logistics held in September 2006, the countries adopted a joint statement of cooperation aimed at building a seamless logistics system in Northeast Asia, and an action plan²⁹ for resolving issues relating to logistics systems and procedures and

identified in the future, they will added by agreement by the member countries.

²⁹ "Joint Statement of the China-Japan-Korea Ministerial Conference on Maritime Transport and

standardizing logistics facilities in each country was included in the accompanying document. In the Japan-China-South Korea Summit Conference held in January 2007, it was agreed to add logistics to the priority fields for trilateral cooperation and to promote the development of a seamless trilateral logistics system that offered excellence in terms of safety, efficiency and cost. These efforts are raising expectations for vigorous business activities between Japan, China and South Korea.

(Column 7) Challenges to Japan in seeking an Asian gateway

Japan's infrastructure and customs clearance system has been criticized for the slow pace of reform and for its inadequacy in responding to corporate needs.³⁰ In addition, airports and ports, which are built to serve as advanced logistics hubs are located in outlying areas in Japan, and there is concern that the relative status of Japan's airports and ports will decline. Compared with South Korea's Incheon International Airport, from which next-day deliveries can be made to Chicago's O'Hare Airport, a shipment from Japan's Narita Airport to the same destination takes an additional 12 hours. Concerning ports, the number of ports of call along sea routes to Europe and sea routes to North America declined by 8% and 17%, respectively, between 2001 and 2006, which is probably attributable to the growing size of ships. Amid this trend, although the number of ships visiting Shanghai and Pusan has increased, the number of ships calling at Japan is declining.³¹

In response to these circumstances, the aforementioned action plan of the Committee on Partnership for International Logistics Competitiveness calls for reform of Japan's export/import regulatory system and the development of operation systems and infrastructure. Efforts aimed at realizing internationally competitive trade systems and developing an environment adapted to the international division of labor are required, as is the development of infrastructure functions aimed at strengthening international competitiveness, such as improved access to airports and ports.³²

(3) Development of distribution services in East Asia

(Demand for advanced distribution services)

With the expansion and deepening of the business networks of Japanese companies in East Asia as a result of the development of a multilateral division of labor by processes and concentration of production and supply bases, demand for distribution services, which could be termed the lifeline of these networks, is increasing (Figure 2-2-62). For example, the business operations of Japanese companies in China are shifting from the processing trade (i.e., importing raw materials and exporting manufactured products) to sales within China. Not only do distributors provide services related to import and export, but they are also expanding the provision of logistical support in China as provided

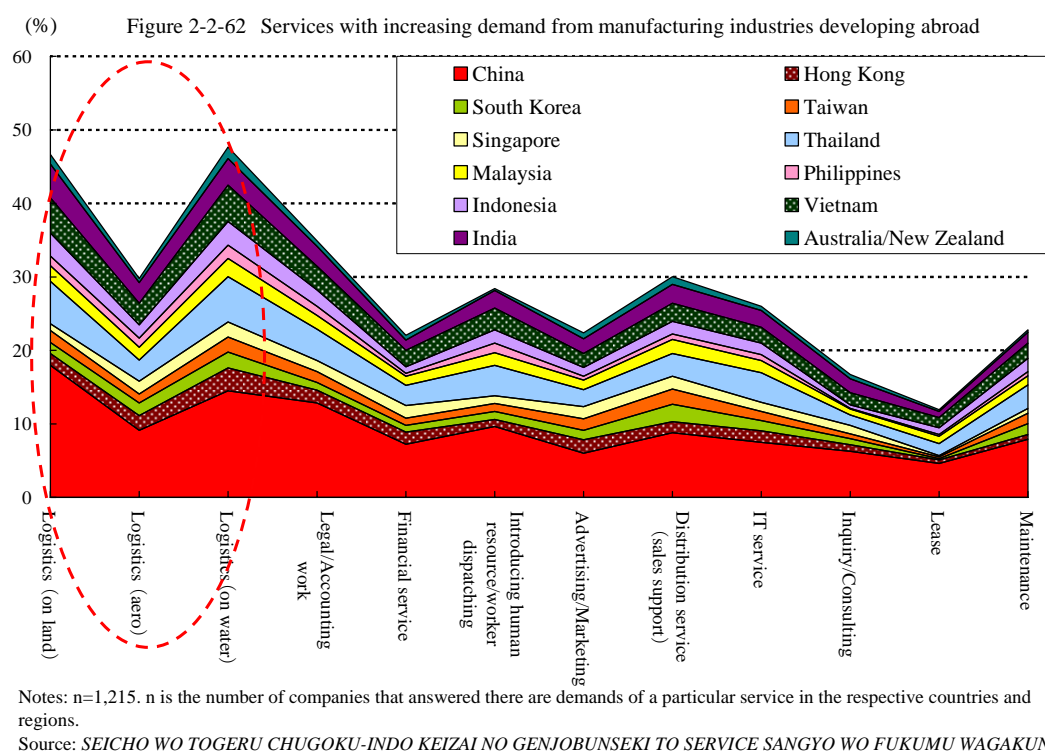
Logistics”(2006).

³⁰ Japan Federation of Economic Organizations, *BOUEKI SHOSEIDOU NO BAPPONTEKINA KAIKAKU WO MOTOMERU—GUROUBARU SAPURAICHEIN WO FUMAETA GUTAIKAIKAKU NO HOUKOU*— (November 21, 2006).

³¹ Asia Gateway Strategy Committee (2006) DAI3KAI SHIRYOU1. *JINRYUU/BUTSURYUU INFURA KINOU NO KYOUKA TO KANRENSEIDOU NO KAIKAKU*, 2. *JINRYUU/BUTSURYUU INFURA KINOU NO KYOUKA TO KANREN SEIDOU NO KAIKAKU* (SANKASHIRYOU), (December 19, 2006).

³² Japan's efforts are discussed in Chapter 4, Section 4.

in Japan, including Milk Run³³ and JIT delivery,³⁴ raising expectations for the provision of high value-added services by distributors.



(East Asian expansion of Japan's distribution service business)

In response to these growing needs, Japanese logistics service businesses are building high-quality and efficient logistics service networks across East Asia. For example, some Japanese logistics service businesses which provide services separately in Japan are collaborating in order to combine their strengths in fields in which they mutually specialize, while others are building service networks developed in collaboration with local companies in order to expand local logistics networks to meet increasing local demand for distribution. Distribution service businesses are also proposing logistics models which make effective use of infrastructure development such as the previously mentioned No. 2 Mekong International Bridge (No. 2 Friendship Bridge).³⁵

One network-related effort by Japan is a new high-speed sea transportation service linking Shanghai and Hakata. Using a RORO³⁶ system which allows direct loading and unloading by means of trailers and the like, the service facilitates rapid cargo work and high-speed transport and thus

³³ “Milk Run” refers to a circulating freight pick-up service whereby parts and materials are collected from various shippers handling small or multiple quantities for delivery. This service is effective in reducing the distribution cost owe to mixed loading.

³⁴ Just-In-Time delivery, in which strict delivery control is performed so that the necessary parts or materials are delivered at the required time in order to keep inventories small.

³⁵ JETRO prepares an “ASEAN Logistics Map,” which contains information on distribution infrastructure and legal systems in ASEAN countries, for the purpose of providing basic information on distribution that is necessary when Japanese companies consider the development of efficient business networks.

³⁶ An abbreviation of Roll on / Roll off.

substantially reduces transport time. In addition, by using the Hakata Port's excellent access to domestic transportation points and the availability of import customs clearance services on holidays and at night, the service achieves express delivery to various places in Japan from Hakata Port (Table 2-2-63).

United States and European logistics companies are also channeling effort into the expansion of logistics networks in East Asia. For example, the U.S. distribution company A plans to establish a freight transshipment center for the Asia Pacific region in China's Guangzhou Airport. In addition, the German-affiliated distribution company B has obtained a license in China to launch a domestic air freight transport service, and also plans to invest US\$6 million for the establishment of a collection and logistic base and service center in Vietnam. The future should see further business expansion by foreign-affiliated companies in East Asia.

Table 2-2-63 Logistics network of Japanese logistic companies in East Asia

Company A	<p>○After the completion of the Second Mekong International Bridge (The Second Friendship Bridge), the large truck transportation network between Shanghai-Singapore is planned to complete in 2007. As a result, shipping which would take more than two weeks by vessel, is prospected to be shortened to around 10 days.</p> <p>○Through affiliated companies in the Philippines, a new company for domestic shipping depository is established. The business will open October 2006.</p> <p>○March 2007, the Japanese freight railway company will cooperate with the Korean railway corporation as a Japan-Korea joint company. RAIL-SEA-RAIL service connecting all of Japan to Uwang terminal in Seoul, Korea will begin (Logistics by sea connecting Hakata port-Pusan port will use shuttle operation vessel).</p> <p>○February 2007, cooperation with the Chinese vehicle maker distribution affiliate company was established, and a pick-up type part procurement distribution service (Milk run) was begun.</p> <p>○An Indian logistics company was acquired and made into an affiliate. Starting April 2007, it will expand to 17 bases in 10 cities and there will be around 300 workers, making it the largest scale Japanese logistics company in India.</p>
Company B	<p>○To deal with the needs of logistics by sea in Japanese companies expanding to neighboring industrial complexes, "Hai-phong office" in Hai-phong, Vietnam was opened. Business will commence in October 2006. Also in February 2007, a new company specializing in logistics will be established in Hanoi, dealing with increasing needs in northern regions for advanced logistics services.</p> <p>○In 2007, an Indian corporation opened a new business base in Coimbatore. Continuing the jurisdiction over local customer industries at the Chennai sales office, the quality of community-based service will be ameliorated, and the export business of the apparel industry, which is the major corporation, will be strengthened.</p>
Company C	<p>○July 2005, cooperating with Japanese companies, a logistics business for corporations was begun in Thailand. July 2006, a free trade depository was established and operated in Northern Vietnam. August, 2006 an affiliated company was established in Malaysia. Bases were also held in the Philippines, Singapore, and Indonesia, dealing with the demand expansion for goods by AFTA.</p> <p>○December 2006, cooperating with an affiliated corporation of the Chinese State Bureau, a Japan-China mutual base was shared. 66,000 base networks of the Chinese State Bureau and 50,000 delivery vehicles became available for use.</p>
Company D	<p>○August 2006, a cooperation was established with the prior national postal corporation.</p> <p>○January 2007, a cooperation was established with the Malaysian postal corporation. Taking advantage of the network, the international small cargo service provisional region was expanded throughout Malaysia.</p>
Company E	<p>○November 2003, 4 Japanese businesses and logistics companies established a joint venture, beginning a high speed logistics by sea service through the RoRo vessel between Hakata and Shanghai. Seamless transport was developed for all freight stations between all of China at the Shanghai point and the Hakata terminal for Japan.</p>

Notes: RoRo vessel (RoRo=Roll on/Roll off) is a vessel where trucks and trailers loaded with goods can run itself over ramp ways of vessels, and can transport its whole vehicle, loaded with goods.

Because goods can directly be loaded and unloaded without using cranes, an efficiency for large amounts of goods being transported can be enhanced, and cutting the cost of transporting is possible.

Source: Various companies' press releases, compiled by METI.

(Development of an environment aimed at the expansion of logistics services)

These innovative moves by logistics service businesses are enhancing the benefits of using new infrastructure and related systems. At the same time, they are contributing to vigorous economic activity by the manufacturing industry and other sectors and improvements in productivity. It is anticipated that cross-border transactions will expand as East Asia moves toward an integrated, seamless economy. Amid intensifying global competition, the East Asian economy is experiencing a gradual rise in personnel costs along with economic development. In order to maintain a competitive edge in the area of costs as well, it is important to provide efficient and advanced logistics services to support business activities that aim at the manufacture and supply of goods only in the necessary quantities at the necessary time in order to meet diversifying customer needs. These requirements are relevant not only to the development of Japanese companies but also to the development of the East Asian economy as a whole. For this reason, building a business environment that is free of excessive restrictions and barriers is an important priority whose realization will enable logistics businesses to provide a diversity of services.