

# Chapter 12

## The Procurement Activities of Japanese Companies in Asian Countries

**Hironobu Kitagawa**  
IDE-JETRO

March 2008

Kitagawa, H. (2008), 'The Procurement Activities of Japanese Companies in Asian Countries', in Lim, H. (ed.), *SME in Asia and Globalization*, ERIA Research Project Report 2007-5, pp.365-399. Available at:  
<http://www.eria.org/The%20Procurement%20activities%20of%20Japanese%20Companies%20in%20Asian%20Countries.pdf>

## Chapter 12

# The PROCUREMENT ACTIVITIES OF JAPANESE COMPANIES IN ASIAN COUNTRIES

*Hironobu Kitagawa*

### Abstract

This paper makes a survey of the global activity of Japanese companies in Asian countries. In particular, it focuses on the procurement activities of Japanese companies that affect the operation of small and medium enterprises in Asia. It discusses the overseas operation of Japanese companies, reviews past researches on the overseas procurement activities of Japanese companies, tackles the results of interviews with Japanese companies regarding their procurement activities, and provides implications.

### INTRODUCTION

This paper is an attempt to understand the overseas procurement activities of Japanese companies in Asia, especially those involved in the automobile, electronics, and electrical machinery industries. It also seeks to check the present condition of direct investment flows to Asia from Japanese companies and to reconfirm the so-called historical transition of direct investment to Asian countries.

The composition of this paper is as follows. The foreign direct investment (FDI) situation of Japanese companies, particularly in the manufacturing industry, is discussed first. Then, the future prospects of the car manufacturing and electronics industries in Asia is tackled next. This is followed by a discussion of the manufacturing activities of Japanese companies in Asia, mainly East Asia. A review of their procurement activities follows. The final section provides the conclusion.

## **2. RECENT SITUATION OF JAPAN'S OUTWARD FDI**

### **2.1. Overview**

The Research Institute for Development and Finance of the Japan Bank for International Cooperation (JBIC) reports that the overseas production ratio in fiscal year (FY) 2005 rose to a total of 29.1 percent in all industries, showing an increase over the previous year for seven consecutive years since 1999 (JBIC 2006). The estimates for FY 2006 and for the medium term up to FY 2009 stood at 30.4 percent and 34.9 percent, respectively, indicating the continued trend of many companies to enhance their overseas production.

When companies that are either conducting business or considering to open one in individual countries or regions were asked to cite where they want to strengthen or expand in the medium term, interesting results were gathered by JBIC (2006). For 2006, the region that got the highest percentage response for “strengthen or expanding” was Russia and other Commonwealth Independent States (CIS). Next to this were China, Central and Eastern Europe, other Asian countries/Oceania, and North America. These results indicate the growing strength of Russia, other CIS, Middle East, Latin America, and other Asian countries/Oceania as areas for expansion considered by Japanese companies. The growth in Latin America is due to an increasing number of Japanese companies wanting to expand in Brazil while the growth of other Asian countries/Oceania is due to the growing clamor for expansion in India and Vietnam. For China, on the other hand, JBIC (2006) reports that the highest response for “strengthening or expanding” was obtained in FY 2004 but for 2006, Russia and other CIS got a higher response thus overtaking China. The Japanese-Affiliated Manufacturers in Asia Survey 2006 (JETRO 2007) also reports that when Japanese companies were asked which country and area they consider as optimal ground to serve as production base of their enterprise in the medium to long term (5-10 years), majority selected Thailand then Vietnam and China.

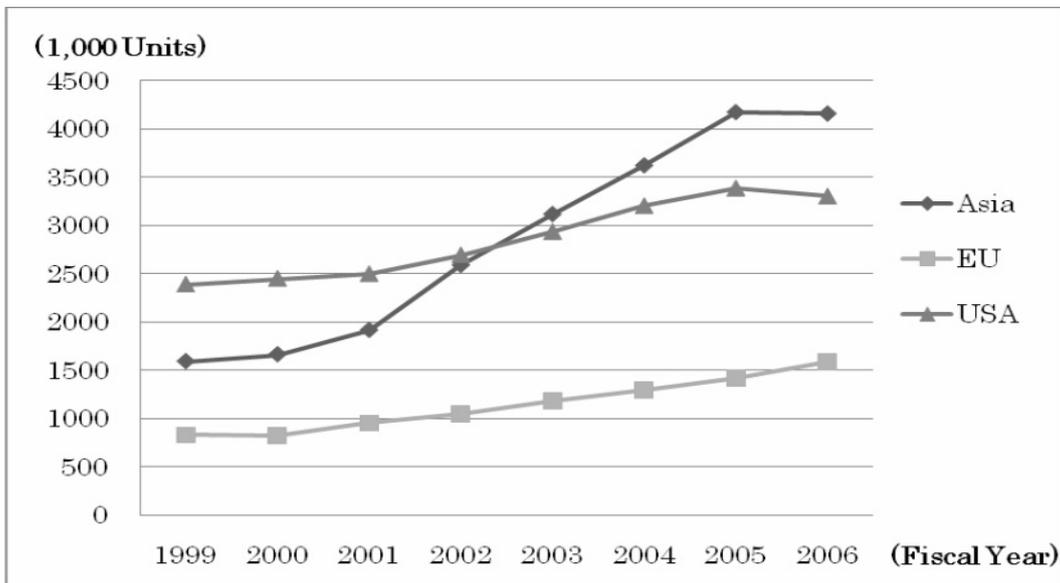
## 2.2. The Automobile Industry

Automobile manufacturers have a quite positive outlook on Thailand, South and Eastern China, and North America as areas for expansion or strengthening (JBIC 2006; JBIC 2005). However, with most companies wanting to strengthen and expand in Thailand, this country is increasingly overtaking South China and North America. While the increase in overseas operation of Japanese automobile companies in India and Northeast China is evident, that in North America, Indonesia, EU15, Central-Eastern Europe, and Africa is decreasing.

Moreover, JETRO (2006, 2007) reports that in terms of optimal ground evaluation of production base, Thailand was rated highest by Japanese companies, particularly in terms of “car and two-wheeled vehicle parts” and “electricity and electronics components.”

Data from the Japan Automobile Manufacturers Association also show that the pace of expansion of overseas production slowed down a bit in FY 2005 but began to catch up in FY 2006 (Figure1).

**Figure 1: Overseas Production of a Japanese Car Manufacturer**



Source: Created by author from the Japan Automobile Manufacturers Association data

### **2.3. The Electronics Industry**

JBIC (2006) notes that the electrical and electronics machinery, which is a key industry in Japan, holds a large propensity for expansion in East and South China. With respect to ASEAN4, Thailand has the strongest prospect as area for expansion while Indonesia has the weakest prospect.

Overseas production of electrical and electronics machinery decreased in 2006 in many areas but an increase was seen in Vietnam and Central-Eastern Europe. JETRO (2007) also indicates that Vietnam and China are highly evaluated as optimal production base of “electricity and electronics components,” with Vietnam getting the highest commendation from Japanese companies.

## **3. FUTURE PROSPECTS OF THE AUTOMOBILE AND ELECTRONICS INDUSTRIES IN ASIA**

Based on a trend quarterly survey of overseas subsidiaries conducted by the Ministry of Economy, Trade and Industry (METI) in April 2007, the sales track record in Asia of Japanese companies grew by 11.6 percent from last year. Meanwhile, transportation machinery, which includes car manufacturing, grew by 21.4 percent, and electrical machinery by 4.1 percent. On the future car demand in Asia, Okiyama and Minato (2007) of the Japan Automobile Research Institute note that car sales have a strong correlation with GDP. It is anticipated that car sales will change from this year through 2030 given the predicted pace of expansion of around five percent annually in Asian countries (IEA Energy Balance of OECD Countries 1971-2005). Therefore, the full-scale motorization of Asia is expected to progress. Moreover, as electronic products are supported by the penetration of emerging markets including India and China, IMF (2007) sees a very good picture in the intermediate term and also predicts that the price and technical innovation competition that intensify in one side will soon spread and eventually affect the performance of each country. Thus, the expansion of the electronics and automobile industries in Asia is expected.

## **4. HISTORICAL REVIEW OF MANUFACTURING ACTIVITIES OF JAPANESE COMPANIES IN ASIA**

Various views are expressed by critics on the direct investment activities of Japanese and other East Asian companies in the automobile and electronics industries (Ikemoto et al. 1981; Okamoto 1998; Sasaki 1986; Nakajima 2000; Yasumuro 2007; Yoshihara et al. 1988; Yoshihara 1992). This paper reviews the trend in the automobile and electronics industries from the 1960s to the 2000s.

### **4.1. 1960s**

In this period, each country took import substitution as an industrial policy. Importation was restricted by imposing high custom duties on finished imported products (Nakajima 2000). Thus, Japanese companies entered into joint ventures with local companies to develop the local industry. The reasons are two-fold: (1) product supply needed to be sustained and the only way to do this was to tap the local market, and (2) the domestic production policy was a widely occurring phenomenon taken by countries in East Asia (Amano 2004). Said policy was also implemented with support from the local government and thus, there were a lot of joint ventures with the local capital (Okamoto 1987).

Produced locally, almost all parts and components for automobile production were exported out of Japan and assembled in overseas factories—otherwise known as the semi knocked down (SKD) or knocked down (KD) process (Amano 2004; Nakajima 2000). However, KD production by commissioning the local market was also promoted by setting up local firms and joint corporations, which expanded the rate of the local content (Morimoto 2006; Tsuchiya et al. 2006)

Meanwhile, electronics, especially the household appliance industry, started the offshore production in Southeast Asia of electronic components (common parts), which are labor-intensive processes. Taking advantage of the cheap labor force, Japanese companies set up production bases in Taiwan and South Korea (Nakajima 2000). A Japan-US set maker established an assembly plant in an export processing zone (EPZ)

in Taiwan and this became the prototype of the electronics export industry in East Asia, which was dependent on capital goods and imported intermediate materials (Takeuchi 2004).

Meanwhile, Japanese household appliance industries also set up offshore companies. Among them are Matsushita Electric (Thailand, 1961), SANYO Electric (Malaysia, 1967), and Toshiba (Malaysia and Thailand, 1969). The investment of a Japanese company in Asia in those days was for the purpose of positioning through “an extension of export” (Amano 2004).

#### **4.2. 1970s**

In this period, Japan performed two currency exchange adjustments. It fixed the exchange rate to 308 yen per US dollar in 1971 and then shifted to a floating exchange rate system in 1973. Furthermore, the first oil crisis happened in 1973. The strong yen in 1971 affected the management of Japanese companies in Southeast Asia. Many companies implemented improvements in business modality, promoted rationalization, and endorsed the education of local engineers (Nakajima 2000).

The KD production in the automobile industry, which was the domestic production policy of each country in the 1960s, was continued. As time went by, the disadvantages of this type of production became obvious. It turned out to be inefficient as it does not consider the comparative economies of scale of each country. In Malaysia and Indonesia, their assembly automobile industry, which was tied up with foreign companies in Europe, US, and Japan, became flooded with various kinds of small-scale companies that made production inefficient. Although the ASEAN countries adopted the import-substitution-industrialization policy in the 1970s, even the autoparts manufacturer of ASEAN country was not brought up (Morimoto 2006). The automobile company that invested in this area early on was Toyota and Mitsubishi Motors (Shimokawa 1998). According to Morimoto (2006), Mitsubishi Motors developed the first Asian car in the Philippines in 1974.

In electronics, especially the household electrical products industry, many joint venture arrangements emerged. For example, Toshiba set up its semiconductor and electronic components assembly plant in Malaysia in 1973. By this time, the high labor cost in Japan, fluctuating exchange rates, and the negative effects of the oil crisis

prompted many Japanese companies to invest in Asia to maintain cost competitiveness. The variation in the cost of labor was a primary consideration in the choice of location. For example, when the labor cost in South Korea or Taiwan went up, the electronic components (common parts) production was transferred to Malaysia or Thailand, where the cost of labor was cheaper.

### **4.3. 1980s**

The 1980s was the time when Japanese companies' FDI decisions changed significantly. The most influential factor driving this change was the appreciation of the yen following the Plaza Accord in 1985. In the automobile industry, production processes advanced to a great extent. Japanese companies observed that the Asian currencies are interconnected with the US dollar. Hence, they expanded their foreign investments in their production facilities in Asia and aimed for a production base equivalent to that in Japan. They developed the production base in Asia into a total production base for exports to the West (Tsuchiya et al. 2006). Moreover, toward the late 1980s, the industrialization level of ASEAN4 (Indonesia, Malaysia, Philippines, Thailand) went up. In addition, the automobile domestic plan of each country also began to get off the ground through the Brand to Brand Complementation Scheme (BBC). Under the BBC, a particular automobile company manufactures the parts of a specific brand type of car. Said scheme reduces the import duties of parts. Toyota, Mitsubishi, Nissan, and other car manufacturers began to utilize the BBC (Shimokawa 1998).

The sharp rise of the yen triggered the transfer of the production base from Japan to the newly industrialized countries (NICs) and Southeast Asia, especially the household electrical products industry. Thus, the production base in the NICs and Southeast Asia turned into a "re-export" and "part supply" base for advanced nations. This movement spread quickly to the household appliance and semiconductor sectors (Okamoto 1987). Japanese companies came to transfer low value added products and multi-use parts to the production base in Southeast Asia. This made many Japanese small and medium enterprises (SMEs) producing associated parts to invest in Asia. (Nakajima 2000) Moreover, with many countries affected by the high tariff barrier within East Asia, which affects the intermediate materials used for production of export

products, a break on custom duty was taken as an export promotion strategy. Intra-industry specialization progressed easily between processes (perpendicular target). Therefore, in the case of an electronic item with easy separation of a process, “fragmentation” progressed easily, and expansion of the intermediate goods trade within the area was promoted. (Takeuchi 2004)

#### **4.4. 1990s**

The global competitiveness of products exported from Japan declined remarkably with the strong yen after the Plaza Accord in 1985 and the significant rise of personnel expenses caused by the “bubble economy.” Japanese companies thus transferred their production activities to East Asia, which has continued to industrialize. They either re-exported the products to advanced nations or expanded the route by returning them to Japan (re-import). The formation of such a route resulted in trade frictions with advanced nations and reduced roundabout export (Amano 2004).

The increase of direct investment of Japanese companies to East Asia in the 1990s was strengthened during the Asian currency crisis of 1997. In the automobile industry, onshore procurement of parts has advanced partially. The ASEAN concentrated in the production of parts such as transmission, steering gear, floor panel, and radiator, which it supplied to other countries. The automobile industry in East Asia is considered a “national industry” where the government intervenes, except in Singapore. Therefore, part import duties are in still at a higher level like in ASEAN. Moreover, the uncertainty that a future tariff rate is influenced by the government follows (Okamoto 1998).

Moreover, according to Shimokawa (1998): “The international division of labor in the automobile industry in the ASEAN has just started. Therefore, it is limited to division of work in parts or components. This can be attributed to the fact that the local content ratio of the parts in this area is still low, and there are many parts, and the materials and intermediate materials must be brought from Japan.” Thus, although the aim was for a full-scale international division of labor, this is hampered by the difficulty of procurement in ASEAN.

Meanwhile, electronics, especially the household appliance industry of Japan, has expanded inter-firm trade among Asian local subsidiaries and head offices through

the 1990s. The network of various sales and supply has been simultaneously formed within Asia. With the onset of the Asian currency crisis in the summer of 1997, the possibility of export expansion of an affiliated company increased and the global competitiveness of local production activities was simultaneously strengthened by the fall of the local currency through the reconstruction of enterprises (Amano 2000a). Moreover, in most cases, the onshore procurement in the electrical machinery and electronics industry in Asia is made with suppliers outside the border. The transaction is done by the company's international procurement office or IPO (Okamoto 1998). In addition, subcontracting activities and location of labor-intensive processes in East Asia were promoted through the progress in modular production in the electronics industry. China became the biggest recipient. It appears that all aspects of producing an electronic product are attracted to China. (Takeuchi 2004)

#### **4.5. After 2000**

Amano (2004) noted that in the last 15 years, "the production shift to East Asia of Japanese companies was a structural adjustment through international division of labor rather than the hollowing out of Japanese industry." Although Japanese companies were performing measures of "internal resource utilization types," such as "maintenance of a new base," "localization of research and development," "introduction of a supply chain," and "reexamination of a procurement and sales" in Asia, management risk would still be quite high. Therefore, it is important that Japanese companies carry out a strategic alliance with the West and with Asian companies (Uchibori 2004).

Because of trade liberalization, the competition in the automobile industry has intensified globally. Thus, a car manufacturer has come to realize the positive effects from a global viewpoint of reorganizing his production base in Asia. There are new movements that include (a) the formation of an export base in Thailand, (b) further maintenance of regional division of labor, and (c) having a regional base for the ASEAN4. Japanese companies thus built regional division of labor to compensate for the constraints of ASEAN4 (i.e., their small domestic markets). They began to utilize this regional division of labor as a global strategy (Mori 2004).

Keeping in sync with current themes like "China market," "supply chain management (SCM)," and "environmental technology" is the key to the growth of the

Asian car manufacturing industry. Moreover, progress in the international division of labor within Asia by the Toyota IMV (Innovative International Multi-purpose Vehicle) design will be raised. From a procurement viewpoint, the auto parts suppliers in ASEAN will have a high possibility of being further exposed to the wave of selection strengthening (Yamada 2006) from now on. This is also likely to happen in the household electrical products industry. While economic growth was experienced by countries in East Asia in the 1990s, personnel expenditures in Japan soared due to the bubble economy and the appreciation of the yen. To expand the re-export for local selling or the third country in a Japanese company, or to avoid domestic cost overrun and to promote re-import, the local production base of a Japanese company was established and extended in East Asia. However, the inter-firm trade or international division of labor between the local base and the domestic base in Asia in machine industries other than electronics is not yet fully developed (Amano 2000a). Even if the international division of labor between the East Asian countries and Japan entails transferring of labor-intensive assembly process to countries in East Asia, such as China, most of the parts and components industry tends to stay at the domestic area for the moment; Japanese-made parts and components are assembled in East Asia, such as in South Korea and China, and then the finished products are re-exported to Japan (Onodera 2006). In general, however, the transfer of production to East Asia through increased direct investments of Japanese companies has developed the supply and distribution network that connects the investing country and the recipient country. This has also enhanced the trade of electronic products in East Asia. Therefore, a company should be selective in terms of choosing the right location for its production base while the government of each country should examine its current position and strive to achieve dominance through efforts to attain differentiation and distinction (Takeuchi 2004).

## **5. LITERATURE REVIEW OF PROCUREMENT ACTIVITIES OF JAPANESE COMPANIES IN ASIA**

This chapter reviews past researches on the procurement activities in Asia of Japanese companies.

### **5.1. Automobile industry**

In an article published in JAMAGAZINE (2001), Mr. Takemoto, former president of Toyota Motor Asia Pacific Pte Ltd., disclosed that Toyota's procurement policy has three directions:

- (a) Aim for a 100 percent local content in ASEAN
- (b) From a view of strengthening competitiveness, raise the second and third tiers that are locally situated.
- (c) Advance specialization with sufficient balance in ASEAN; examine lengthening the supply ratio in ASEAN.

Meanwhile, Lecler (2002) studied the role of clustering in the development of the Thai car industry. He studied the business activity of Toyota, Mitsubishi, and The Summit Auto Group in Thailand. His findings are as follows:

- (a) The move of a vehicle manufacturer to a new IE (Industrial Estate) immediately pushes its affiliated suppliers to follow. Such dynamism results in agglomeration of firms in the new location.
- (b) Purely Thai suppliers are still too few to be directly involved. A tremendous improvement of the supporting industry and training (or education) of the labor force is needed. A broader transfer of technologies is on the agenda of Japanese buyers. The capacity of Thai SMEs to absorb new or more sophisticated technologies is still low.

Lecler's study is based on the argument of location predominance (company accumulation). It pointed out that the promotion of the parts industry has strongly influenced technology transfer.

Meanwhile, Ishida (2002) studied the auto parts supply strategy and technology transfer of Toyota. He sent the questionnaires to the suppliers in Indonesia (nine companies of Japanese origin and two local companies) in 2001. This author found two points:

- (a) The automaker obtains convenience by using the ASEAN industrial cooperation (AICO) scheme. On the other hand, local auto parts manufacturers do not use the said scheme.
- (b) Toyota has to support and raise the local auto parts manufacture as well as the companies of Japanese origin.

Although the practical use of the AICO scheme brought convenience to the assembler Ishida showed it has some disadvantages to companies (e.g., for the parts industry, etc.). For the improvement of the Indonesian part industry, it is important that Toyota should bring up local suppliers as well as support for the Japanese-parts manufacturer in Indonesia.

Kamo (2003) studied the Asian strategy of the Japanese automobile industry after 1998. This author reported that although the international division of labor within the area itself is favorable, the parts needed by Japanese companies were exported from Japan, and thus, whether the international division of labor could maintain the balance for each country is somewhat doubtful.

Mori (2004) studied the factors that strengthen the global inclination about the East Asia strategy of a Japanese automaker and identified the “unification of the East Asia market including China” and the “importance of promotion of cooperation.” This author also predicted the expansion of the procurement of Japanese automakers in Thailand and China in the near future.

Tomozawa (2003) studied the evolution of the automobile industry in Asian countries principally focusing on Southeast Asia and India. This author found three important points:

- (a) From the viewpoint of international division of labor, Thailand, Malaysia, and Indonesia have strong links with Japan. Japan is the most important country for them in terms of automobile-related investment and the origin of imports.

- (b) It is expected that the flow of trade between Japan and these countries will become bilateral to some extent in the near future because of the incremental global procurement of car components by Japanese motor companies.
- (c) An automaker applies the strategy of accumulating production in a specific place and practices economies of scale. Therefore, the automobile industry will change location when needed. As an example, Tomozawa mentioned the Toyota Kirloskar Motor. He also studied the location of a Japanese automobile company and the construction of a production system in India.

Takeo (2005) studied the changes in the auto parts procurement strategy. His contributions are as follows:

- (a) First, he pointed out the six major movements in auto parts procurement, namely:
  - (1) delivery with module parts and unit parts;
  - (2) sharing and specializing in parts;
  - (3) globalization of the materials market through information technology that enables networking;
  - (4) globalization of procurement's physical distribution;
  - (5) procuring "the proposal of the planning and reduction in cost" to carry out development concurrently;
  - and (6) expansion of auto parts market's competition area through expansion of electronic parts procurement.
- (b) Next, he noted that the automobile industry will change its business model from a multinational manufacturing enterprise to an SCM enterprise that can adopt to multiple markets and therefore, all related companies need a logistics management that merges the stock of the intermediate product and materials. The change in procurement that Takeo pointed out is practically important indication. Moreover, from the viewpoint of strategic theory, this sharply indicates the importance of corporate management not from an "assembly" viewpoint but from an SCM viewpoint.

Meanwhile, Fukao et al. (2006) conducted an empirical analysis of Japanese firms that have failed to catch up in localization and a case study of the automobile industry in China. Their most important finding is that "Japanese assemblers may well be choosing business partners whom they expect to realize sustainable productivity increases in the future rather than focusing on present productivity levels." They continuously indicated the "evidence of business practices based on a long-term perspective characteristic of Japanese enterprises," which has a significant implication for business and academics.

Kishimoto (2006) studied the case of the component physical distribution of a Japanese automaker in China, particularly in Guangdong Province. He indicated the following points.

- (a) The supplier tends to locate near the place of the finished product maker. However, the supplier also has dealings with customers in far-off places.
- (b) Compared with production in Japan, there are much finished goods inventory for customer delivery and volume of inventories of the supply component from a secondary supplier. Therefore, it turned out that enforcement of just-in-time is very inconclusive.
- (c) Located in Guangzhou, Guangdong's capital, are Honda, Nissan, and Toyota. Therefore, a Japanese parts maker has active dealings with several manufacturers, which is beyond the vertical relation in Japan.

Kishimoto also shared Tomozawa's (2004) findings that the automobile industry also takes into consideration factors such as economies of scale. He discovered in Guangzhou the same thing performed in India which was found the facts by Tomozawa (2004).

Finally, Nomura (2007) studied Toyota's IMV project in India through interviews with Toyota Kirloskar Motor and Toyota Kirloskar Autoparts in 2005 and 2006, respectively. He found out two points:

- (a) The R-type transmission units are being manufactured in India under the Innovative International Multipurpose Vehicles (IMV) project.
- (b) In India, the local content has attained 82 percent. Nomura noted that the supplier system to Tier2 level has been built, and that many Indian companies had participated in the supplier system. He praised the Toyota project in India for its dynamism.

In addition, Nomura showed the "gap of manufacturing and sale" in India which was not pointed out in past studies. This, he said, merits further evaluation.

## **5.2. Electronics Industry**

Ohmori et al. (1999) studied the condition and strategic know-how of Matsushita Electric in terms of importing manufactured goods from Asia. They pointed out that

serious consideration should be given to the training of the local company that supplies the imported goods.

Meanwhile, Yamachika (1999) studied the importation from Asian countries and the international procurement process based on the experience of Toshiba. This author noted the improvement in the local content of Japanese companies and showed how this is affected by different business practices.

Ohyagi (2000) studied the optimal sourcing activities of Japanese electrical and electronics manufacturers in the Zhu Jiang delta area. She found that

- (a) In the Zhu Jiang delta, only a few manufacturers are into online procurement, yet it is expected that the adoption rate will increase in the near future. When the merits of online procurement and industrial accumulation are compared, both are found to be beneficial in terms of cost reduction, acquisition of new transaction, etc.
- (b) Industrial accumulation has its merits. On the design/development side, it facilitates exchange of ideas between the maker and the supplier in the neighborhood and this makes the execution of improvements and changes in specification easier. Furthermore, the face-to-face exchange between the maker and the supplier is an effective means to find out the suitable business contacts for carrying out an effective division of labor.
- (c) Internet procurement is not yet dominant in the study area. Until now, most manufacturers use traditional ways of procurement.

Noda (2000) studied the direction of the future ASEAN activity of Japanese household appliance industry. His findings are as follows:

- (a) At present, Japanese companies procure most of their materials from Japanese suppliers. However, it is anticipated that they will increase their procurement from local part makers as localization of design becomes more widely practiced.
- (b) Japanese companies have achieved significant progress in making their procurement operation more efficient. They are doing this through the installation of IPOs in their production base in ASEAN. Another strategy is by localizing the design to reduce cost. Moreover, they localize the inspection function of the parts supplied within ASEAN. They are also making great strides in shortening the production time and reducing the production cost.

Iketani and Sasaki (2000) studied the distribution and procurement in the electrical machinery industry of ASEAN countries by focusing on supporting industries. They noted that an electrical machinery-related supporting industry should not only consider the important role that a parts supplier plays in the local assembly machinery industry but should likewise try to develop a good business relationship with the overseas export market in order to grow. They also suggested that research and development (R&D) is very crucial in achieving competitiveness. Particularly in the ASEAN, it is important to improve the R&D climate further and to train talented people to engage in R&D activities.

Kuwatsuka (2002) studied the placement of IPOs in Singapore by Japanese electronic firms and the consequent specialization of the purchasing function. His findings are as follows:

- (a) The buyer-supplier relations formed by the IPOs in Singapore can be characterized by their close proximity in terms of both physical and “cultural“ distance.
- (b) Although it is recognized that many IPOs also conduct transactions in a Japanese way with their Japanese suppliers, the specialized relation between buyers and suppliers in Singapore can make purchasing operations smoother and steadier, and can help reduce the transaction costs for firms. In addition to the accessibility function of IPOs, Kuwatsuka said that cultural proximity enriches the procurement function further.

The Japan Finance Corporation for Small and Medium Enterprise (2003) compiled studies on the changes in the division-of-labor structure between Asian countries in the electrical and electronics industry and the compatibility of Japanese SMEs to international supply/production strategy. In general, the report noted the transfer of suppliers from ASEAN to China.

Yamachika (2003) contributed some insights based on his business experience with Toshiba and his study on the actual condition of the global procurement operation of Toshiba. His findings are as follows:

- (a) Previously, the IPO of Toshiba performs the role of procuring exports solely for Japan. However, as of 2002, procurement that is not for Japan (or the Out-in-Out and Out-Out) was remarkable at 81 percent of the total global procurement of Toshiba.

- (b) Second, the global procurement of Asian countries is characterized by the following: (1) in the case of the household appliance industry, it is labor intensive and utilizes an abundant labor force paid with low wages, (2) manufactures consigned goods (such as IT apparatus), and (3) re-import goods from a local manufacture base in China.
- (c) Toshiba mainly procures from its Japanese maker in China. However, Yamachika predicted the increase of procurement from China's local brand item as outsourcing progresses.

Yoshimoto (2004) studied the actual condition of a household appliance production base within ASEAN. The basic parts production base supplies the finished goods production base of Japan, China, and ASEAN based on factors such as location, price and quality, and supply policy. Moreover, the finished goods activity and the basic parts activity are managed as separate subsidiaries in many cases. Yoshimoto also analyzed the production situation in detail for every product, which for him was necessary to effectively analyze the procurement activity of Japanese companies.

Yamachika (2004) wrote about the global SCM and procurement. He gave the following suggestions:

- (a) Being compatible with global optimal production and procurement processes is inevitable. Global SCM, which makes operations seamless, has developed into a new management model that is now being implemented in many countries.
- (b) Procurement is getting to the stage where it cannot be performed without information technology (IT). Companies should learn how to use IT in procurement.
- (c) The move by Japanese companies to outsource activities came later compared with the European and American companies.
- (d) In Japan, there is no technical book on procurement despite the big number of researchers in Japanese universities. It is important that researches on procurement be carried out, especially in Japan.

### **5.3. Automobile, Electronics and Other Industries**

Yoneda (2001) studied the procurement and international standards of Japanese companies in the manufacturing industry (automobile and electronics). He said: "In the

auto industry, old *keiretsu* intra-group dealings were reorganized by ‘modularization’ and, as a result, ‘organization reform’ and ‘corporate merger’ were promoted in the auto industry. In the electronics industry, since construction of optimal production/procurement by Japanese companies is hurried in Asian countries, such as ASEAN, ‘training’ and ‘improvement in technical capabilities’ in the local supporting industry which contribute to Japanese companies are indispensable.” Based on these, Yoneda gave six proposals for local companies: “the positiveness to reform,” “heighten the added value,” “cost reduction,” “promise strict observance on price payment,” “improvement in customer satisfaction (strengthening of technical capabilities),” and “international standards acquisition of ISO.”

Baba (2005) pointed out some implications of the procurement structure and the development stage of the supporting industry of Asia. In his book titled “A Study on Supporting Industries in Asia,” which is based on his doctoral dissertation at the University of Tokyo, he analyzed the international input-output table for ASEAN countries and wrote case studies on the automobile companies in Indonesia and Japan and the Die&Mold companies and organization in Japan. His findings are as follows:

- (a) The car and motorcycle industry thinks that procurement from Japan is important. In contrast, the electronics industry is structurally dependent on overseas companies for procurement. Factors causing this are the “difference in the part’s characteristics,” “difference in the demand quality by the assembler,” and “difference in policy.”
- (b) The introduction of digital technology affects the transfer of a supporting industry. In addition, it is important to consider the elements of “existence of the market beyond a fixed scale” and “training of talented people.”

Baba also studied the procurement structure academically. Aside from pointing out the importance of technology transfer to a supporting industry, he also stressed the importance of the “existence of a market” and “personnel training.”

Miyajima(2006) studied the broad-based trade liberalization in Asia and the procurement/production activity of a Japanese manufacturer through literature review and interview with Komatsu, Daikin, Denso, and Honda. This author clarified two important points:

- (a) Procurement policies differ according to industry. In the construction equipment and airconditioning apparatus industry, the procurement and production functions of parts where technical core competence is needed are concentrated in Japan. This is to prevent disclosure of technical information. However, in the automobile industry, Japanese companies tend to procure more from China and ASEAN.
- (b) ASEAN continues to build its strength as a core procurement point that is widely connected to South Korea, China, India, and Japan. Japanese companies carry out intensive procurement and production activities in ASEAN, in addition to China. Miyajima found that every type of industry (or business condition) has a different production activity and a different procurement policy. In particular, in the construction machinery and air-conditioning apparatus industry, Miyajima said that “priority is given to technical disclosure prevention particularly for the parts that require technical core competence.”

Yukimoto and Lee (2007) studied six companies (two sewing machine companies, one automobile company, two electronics companies, one apparel company) in China, and did an exploratory research about the full-set-type localization of Japanese companies in China in terms of procurement/sales channel strategy. They found two points:

- (a) In the China market, when building a consistent supply chain, continuity exists in “localization of materials procurement” and “many functions which consists of product planning and product development.”
- (b) In organizing “materials procurement,” “mass-production preparation of a new product”, and “sales organization” in China, a wide perception gap exists between the “person-in-charge,” “goods designer,” and “quality control person-in-charge” in the Japanese head office and in the Japanese representative in China. This fact is one element that bars smooth organization construction. Yukimoto and Lee also showed that a Japanese companies advanced to the industrial accumulation in China; therefore Japanese companies aggressively procure the goods in there. Furthermore, in order to expand the supplier base, the authors said that Japanese companies are giving their best effort to deal with Chinese companies.

## **6. RESEARCH OBJECTIVE AND METHODOLOGY**

For the corporate strategic planning of SMEs in Asia, it would be useful to check the procurement policy in Asia of Japanese companies that affects the “multiplied effect” of SMEs or the spread of influence or growth of one SME to other SMEs.

However, the available data are mostly on production figures from each country and the economic organization. What are needed are useful indicators of the strategic planning of SMEs and the future improvement in technical capabilities to acquire from Japanese companies about the procurement policy in Asia. Therefore, to gather the needed data, interviews are conducted with the person in charge of procurement in the Japanese company’s head office. The results for each company are discussed in the next section.

## **7. PERSPECTIVES ON PROCUREMENT ACTIVITIES IN ASIA OF JAPANESE COMPANIES**

### **7.1. Case: “X” Company**

#### *7.1.1. Overview:*

“X” is a one of the largest electronics companies in Japan that has a very broad product line. Its first overseas office was founded as a sales office in Asia in the early 1900s. Gaining positive result from this initial move, “X” established other overseas offices. Taiwan “X” was founded in the 1960s. In the same year, it established a joint venture company in the Philippines for local. “X” has employees numbering to hundreds of thousands. “X” hopes to capitalize on the continued growth of Asian countries, especially ASEAN, and thinks that China, India, and Vietnam will experience the most growth.

#### *7.1.2. Future prospect of global optimal procurement:*

While overseas sales continue to increase, the local content will be required for the localization of production. “X” thinks that the optimal supply from a global viewpoint is further needed in connection with SCM.

#### *7.1.3. Future prospect of procurement in Asia:*

As a future short-term new supply market, “X” is seriously considering India and Vietnam. Except for the existing reclaimed market, “X” thinks that other countries are still difficult for procurement activities. “X” recognizes that some countries have a problem concerning their distribution system. Procurement may be influenced by the economic scale and the policy of each country. Fundamentally, maintenance of infrastructure is indispensable. Moreover, “X” recognizes that this is a problem at the level of the supporting industry.

#### *7.1.4. Expectation for growth of local supplier:*

The expansion of the sales market in a country is as follows. Export is started first. Next, KD production is performed there according to market size. Japanese companies train a local supplier in production, and promote the growth of the procurement market in this process. Although “X” knows that it should endorse the local procurement of Japanese companies, it recognizes the fact that for local procurement to become possible, the local industry itself must become strong. Moreover, an industry needs the support of other industries. Therefore, “X” believes that the supporting industries should grow as well in order for the local industry to grow.

#### *7.1.5. Local supplier training policy:*

“X” does not have a training that is limited to a specific field. When “X” starts dealing with a new supplier, the authorization to work is processed. However, while the authorization has not been issued yet, “X” may teach the supplier regarding the production. For example, the product is a heavy electric-related product which is an "integrated-type" product, and therefore, “X” needs to measure the ability of each supplier. Hence, even if the market has already opened, if training is required for the

selected supplier, “X” will dispatch an instructor to train that supplier. “X” performs cost judgment including the dispatch of such an instructor when “X” take the estimate of the purchase. In addition, for a standard of the supplier adoption, “X” regards the business results with the other Japanese makers as important.

*7.1.6. Advice for local supplier and the local government from a procurement viewpoint:*

The “construction of a stable legal system” and “the satisfactory application of the law” are necessary. Each country should also have a good educational system. Those at the worker level should have completed basic compulsory education. Those at the submanager level, meanwhile, should have a high education. It is also important that they can adapt to and understand the diverse work environment where they operate. Hence, to prepare them, the Japanese government should require the teaching of programs that will enrich Japanese people’s knowledge of Asian countries.

**7.2. Case: “Y” Company**

*7.2.1. Overview:*

“Y” is a Japanese global company with over 200 related companies and over 100,000 employees worldwide. It established a branch in the United States in the 1950s and a production base in Taiwan in the 1970s. “Y” is an assembly type of industry and is mainly concerned with electrical machineries. “Y” thinks that the Asian region will continue to grow steadily, with China and Vietnam as key growth areas. “Y” thinks that China can firmly tackle production challenges given its high level of productive capacity. It also has a high regard for Vietnam for two reasons: its strong labor force, which “Y” believes is a source of Vietnam’s competitiveness, and the industrious trait of the workers.

*7.2.2 Future prospect of global optimal procurement:*

In addition to the parameters of QCD (quality, cost, delivery), “Y” believes that being environment oriented is very important for optimizing procurement. Thus, adding a fourth element, “E”, to represent the environment, the parameter thus becomes

“EQCD”, which is also a required qualification at “Y” in the selection of supplier. The said parameter, in fact, is a global procurement standard. The supplier is also selected with fairness, justice, and transparency. “Y” also expects that the importance of green procurement is already understood by the supplier in each country.

#### *7.2.3. Expectation for the growth of local suppliers:*

“Y” also considers expanding the number of production items of a local supplier. However, there are cases (e.g., in Vietnam) when it could not find a supplier for a certain product. Y” recognizes that the productive capacity of a local supplier may not be adequate. Thus, when carrying out production expansion, “Y” considers many suppliers and not just a single supplier.

#### *7.2.4. Local supplier training policy:*

While advancing cooperation with a local supplier, “Y” performs the *kaizen* (a Japanese word which means “change for the better”) and tries to eliminate waste. The *kaizen* is a quality strategy in the workplace and is often associated with the Toyota Production System. “Y” promotes voluntary production innovation by “factory diagnosis to a local supplier.” For example, if “Y” receives a request from a supplier, “Y” will help the supplier. Actually, this production innovation has evolved long after “Y” invested in Thailand. The *kaizen* has not reached some countries, however, but “Y” is now trying to teach its local suppliers about *kaizen*.

#### *7.2.5. Expectation from local government for the growth of local suppliers:*

“Y” hopes for the promotion of engineering in schools to improve the manufacturing capability of Asian countries. In this regard, “Y” stresses the need for a good educational system for the engineering profession so as to increase the number of engineers. Support from the Japanese government for the improvement of technical capabilities in Asian countries is desirable (e.g., in spreading knowledge about “production innovation,” etc.).

*7.2.6. Advice for local supplier and the local government from a procurement viewpoint:*

For “Y”, it is important that the local supplier satisfies the “EQCD” requirement. The supplier should also be able to tackle production innovation and eliminate waste. Waste elimination may be achieved by requesting for training. The supplier should also practice the 5S [Seiri (tidiness), Seiton (orderliness), Seiso (cleanliness), Seiketsu (standards), and Shitsuke (sustaining discipline)]. 5S should be carried out not only in the factory but also in the office. It should tackle the *kaizen* activity thoroughly.

### **7.3. Case: “Z” Company**

*7.3.1. Overview:*

“Z” is an automaker in Japan. Its overseas production started with a KD type of factory in Asia in the 1950s. Now, it has a broad production base in Asia. The sales of “Z” have been favorable in the past several years. Employees total more than 30,000 to date. “Z” believes that Asia will continue to be an important growth center, especially India, China, and Thailand. “Z” is planning an expansion of production in India. It expects that India will grow more as a supply base not only for Japan but for many other foreign countries as well. In the automobile industry, the trade scheme is already fixed to some extent in Asia. Therefore, “Z” thinks that the planned ASEAN free trade area may have some benefit to add to the conventional scheme.

*7.3.2. Future prospect of global optimal procurement:*

“Z” carries out procurement through a connection of production bases that are distributed worldwide. As for overseas deployment of “Z”, it was early that “Z” started production with KD factory form in Asia in the 1950s etc,. However, depending on the type of car, the parts needed, the quality, the regulation system in each country, and the physical distribution cost, the flow of supply may therefore differ from the main flows. Some auto parts may be produced only in a country with high manufacturing technique. Depending on the production type of a car or parts, “Z” determines the optimal procurement by carefully comparing cost, manufacturing technique, and quality of the

supplier in each country. In addition, in Asia, the local content is produced at a quite high level. Raising the supply of basic parts further is being planned.

#### *7.3.3. Expectation for growth of local suppliers*

“Z” concentrates eagerly in its production base in India, which is considered a high growth market. In this case, whether the supplier possesses the capability to produce within the agreed standard is important for “Z”. There are still many suppliers that do not have the capability that “Z” expects. In order to raise the supply level, “Z” and the supplier should cooperate in advancing efforts for improvement. “Z” deals with a supplier who can follow its conditions of quality and timeliness but is also willing to cooperate and help if the supplier cannot meet these conditions. In terms of cost reduction, “Z” is tackling the *kaizen* with the supplier. “Z” has also set up schemes for supporting suppliers. Because the capability level of suppliers in Asia is improving, “Z” would like to trade with various suppliers regardless of whether they have Japanese ties or not.

#### *7.3.4. Expectation from local government for the growth of local suppliers*

In the past, a local government-led program that raises the management capability of was carried out in the United States. It will be useful to take up a similar measure in ASEAN. This will also serve as a useful avenue to improve the skills and management capability of suppliers. The local government can implement various means to achieve this. For example, a special lecture may be taught in universities which may help lead excellent and talented people to the auto industry. “Z” is considering the implementation of a program that gives training to college graduates in Asia in the form of internship in Japanese companies.

#### *7.3.5. Advice to local supplier and the local government from a procurement viewpoint:*

Suppliers should take note that observance of cost, quality, and timely delivery, improvement in management capability, and the practice of the *kaizen* are important in dealing with “Z”. However, “Z” is ready to assist in improving the capability of a supplier but the supplier should also do his part. The supplier must fully understand the elements required for dealing with “Z”. If the supplier possesses the relevant

characteristics such as “QCD”, then “Z” is willing to cooperate. As an example, there was this local company that was not engaged in autoparts production but due to its self reliance, “Z” came and started to deal with that company. “Z” then contracted that company to be a production base. Given this example, “Z” expects that Asian suppliers should be self-reliant and should not wait for “Z” to come to them but instead, try hard to sell to “Z”.

## **8. CONCLUSION**

The overseas development of Japanese companies has increased considerably. In particular, the activities in Asia will become more important in the future. This paper has shown the changes in activities and the future prospects of Japanese companies in Asian countries.

Quality and quantity are important qualities that Japanese companies expect from suppliers. Japanese companies consider Asian companies as a precious partner because they consider them indispensable for the development of their business activities. However, Asian companies should also be aware of new business processes and solutions aimed at quality improvement. For example, Japanese companies consider global SCM and green procurement as big elements that should be taken seriously. In addition, Japanese companies’ demand for quality, cost, and timely delivery has become even stronger. They are willing to deal with Asian companies that are willing to uphold these characteristics and are even ready for a long-term business relation. Therefore, Asian companies seeking to deal with Japanese companies should work hard to meet their high standards.

For both Asian and Japanese companies, they should continue to aspire for continued development, amid increasing international competition. Sony and Honda, which are known global companies today, started small about 60 years ago when management resources were very limited. But through their serious efforts to produce products of the highest quality, they were able to overcome competition. Thus, they are the global leaders at present. The stories show that enterprises in ASEAN also have chance to become MNC.

## REFERENCES

- Amano, T. 2000a. Zaijagenchihoujinno seisankatsudouga kigyounaibouekini ataerueikyou Nikkeidenkikikaimekano jissoubunseki. [The influence that the production activity of Japanese companies in Asia gives intra-trade in company - Positive analysis of Japanese electronics companies] *Nihonkeizaikenkyu* 40:66-87.
- Amano, T. 2000b. Kokuhaibungyoto tenkankodo -Nikkeidenkimekano zaijagenchiseisankatsudoga kokunaiseisankatsudoto koyoniataerueikyo. [International division of labor and corporate restructuring: The impact of Asian production activities of Japanese subsidiaries on domestic productions and employment in electric machinery industry] *Organization Science* 33(3):76-96.
- Amano, T. 2004. Higashiajiano kokuhaibungyoto kigyouseichouenojoseitsu-Ricchitobungyoga motarasukeizaikoukanotankyu [Internationalization into East Asia and the growth of Japanese firms: Understanding the economic effects of global allocation and division] MMRC Discussion Paper No. 8. University of Tokyo.
- Asaka, T. 2006. Kironitasu Matsushitadenkino Global Keiei. [Global management of Matsushita Electrics at a crossroads] *Japan Academy of International Business Studies* 12:1-13.
- Baba, T. 2005. *Ajiano susonosangyo – Chotatsukozoto hattendankainoteiryoka oyobi gijutsuitenno kantenyori. [A study on supporting industries in Asia]* Hakuto Shobo.
- Bartlett, G. and H. Yoshihara. 1988. New challenges for Japanese multinationals: Is organization adaptation their Achilles heel?. *Human Resource Management* 27(1):19-43.
- Belderbos, C. and K. Fukao. 2002. Local procurement by Japanese manufacturing affiliates abroad. In R.E.Lipsey and J.L.Mucchielli (eds.) *Multinational firms and impacts on employment, trade and technology*. Routledge: NY.

- Dore, R.P., (1973) *British Factory-Japanese Factory The Origins of National Diversity in Industrial Relations*. University of California Press.
- Fukao, K. and T. Amano. 1998. Taigaichokusetsutoshito seizogyono kudoka. [Foreign direct investment, and "Hollowing out" of the manufacturing industry] *The Economic Review* 49(3):259-276.
- Fukao, I., L. Kabe and F. Takeuchi. 2006. Are Japanese firms failing to catch up in localization? An empirical analysis based on affiliate level data of Japanese firms and a case study of the automobile industry in China. JCER Discussion Paper No. 99. Japan Center for Economic Research.
- Guiheux, G. and Y. Lecler. 2000. Japanese car manufacturers and component makers in the ASEAN region: A case of expatriation under duress - or a strategy of regionally integrated production?." In J. Humphrey, Y. Lecler and M.S. Salerno (eds.) *Global strategies and local realities the auto industry in emerging markets*. Macmillan Press Ltd.
- Horaguchi, H. 2002. Japanese multinational enterprises and AFTA : Restructuring and market segmentation. In H. Horiguchi and K. Shimokawa (eds.). *Japanese foreign direct investment and the East Asian industrial system - Case studies from the automobile and electronics industries*, pp.69-95. Springer-Verlag: Tokyo.
- Ikemoto, K., A. Ueno and K. Yasumuro. 1981. *Nihonkigyono Takokusekitenkai [Multinational development of Japanese companies]*. Yuhikaku.
- Iketani, K. and K. Sasaki. 2000. ASEANniokeru denkikikaikogyono chotatsu/hanbaikozoto susonosangyono tenbou [A Study of distribution and procurement in the electrical machinery industry of ASEAN countries, focusing on supporting industries]. *Tonanajiakenkyunenpo [Annual Report of the Southeast Asia Research]* 41/42:31-64.
- International Monetary Fund. 2007. *World Economic and Financial Surveys Regional Economic Outlook Asia and Pacific*. International Monetary Fund.
- Ishida, Y. 2002. Toyota no jidoshabuhin senryaku to gijutuitennitsuite – Indonesia jidoshasangyoseisakutono kanrende- [About the auto parts supply strategy and technology transfer of Toyota – Related with Indonesian auto-industrial policy]. *The Review of Chiba University of Commerce* 39(4):221-245.

- Ishii, M. 1992. *Nihonkigyono Kaigaijigyotenkai [Foreign-operations development of Japanese companies]*. Chuokeizaisha.
- Japan Finance Corporation for Small and Medium Enterprise. 2003. *Denki/Denshisangyouniokeru ajiakakkokukannobungyokozonohenkato nikkeichushokigyonotaiou – Nikkeidaikigyouno kokusaitekichotatsu/seisansenryakuhenotaiou – [Change of the division-of-labor structure between Asian countries in electronics industry, and adaptation of Japanese small and medium-sized enterprises - Adaptation to international procurement / production strategy of Japanese MNCs]*. Japan Finance Corporation for Small and Medium Enterprise.
- JBIC. 2005. *Survey Report on Overseas Business Operations by Japanese Manufacturing Companies - FY2005 (the 17th) Survey on Foreign Direct Investment*. Japan Bank for International Cooperation.
- JBIC. 2006. *Survey Report on Overseas Business Operations by Japanese Manufacturing Companies - FY2006 (the 18th) Survey on Foreign Direct Investment*. Japan Bank for International Cooperation.
- JETRO, 2007. *Zaiajianikkeiseizogyono keiejittai- ASEAN/India –Survey 2006- [Japanese-Affiliated Manufacturers in Asia -Survey 2006- ]*. Japan External Trade Organization.
- Kamo, K. 2003. *Nihonjidoshasangyo no ajiasenryaku – Kokusaibungyopatan no tokushitsuto 1998nen ikouno jokyohenka [The strategy for Asian countries of the Japanese auto industry - The special feature of an international-division-of-labor pattern and the change of a situation after 1998]*, In S. Ohara (ed.) *Chugokunotaitoto ajiashokokunokikaikanrensangyo –Aratanabijinesuchansuto bungyosaihenhenotaiou- [Chinese rise and machinery industry in Asia - a new business opportunity and division-of-work reorganization-]*, pp.115-149. IDE-JETRO.
- Kasuga, T., T. Oka, Y. Yamaguchi, M.Yamada and Y. Kato, 2004. *Malaysia niokeru Nikkei/oubeikeidenki/denshimekanotoushikankyohyokano chosabunseki – Oubeikeikigyono ajiasinshutsujokyotowagakunikigyonotaiou (Phase 3) [Investigation and analysis of the investment environment evaluation of Japanese,European and American origin electrical machinery and electronics*

- manufacturers in Malaysia - Investigation about the situation of a European and American companies in Asia, and adaptation of Japanese Companies(Phase 3)]. *Journal of Research Institute for Development and Finance* 18:77-107.
- Kino, R. 2000. Jidoshakigyoniokeru kobaiseiskunikansuru ichikousatsu –Nissan jidosha to Toyotajidoshatono hikaku- [One consideration about the purchasing policy in the car company - Comparison with Nissan and Toyota]. *The Ritsumeikan Business Review* 39(3):125-137.
- Kishimoto, C. 2006. Chugoku ni okeru Nikkei jidosha mekano buzaibutsuryu-kantonshoukigyono jireiwo chushin ni- [The component distribution of a Japanese automaker in China –the case study of the companies in Guangdong]. *The International Centre for the Study of East Asian Development Working Paper Series* 17:1-34
- Kobayashi, H. and T. Takeno (eds). 2005. *Higashiajia jidoshabuhinno gurobarurenkei [Global cooperation of the East Asia automotive parts industry]*, Bunshindo.
- Kuwatsuka, K. 2002. Nihondenkikigyonyoru kokusaichotatsunohaichito Singapore no buhinshotatsukyotenka [The placement of international procurement offices in Singapore by Japanese electronics firms and the consequent specialization of the purchasing function]. *Annual Report of Research Center for Regional Geography* 11:33-56.
- Lecler, Y, 2002. The cluster role of in the development of the Thai car industry. *International Journal of Urban and Regional Research* 26(4):799-814.
- METI. 2007. *Kaigaihoji Shihankichosa heisei19nen 1-3tsukiki chosa(Jisseki/DI) [Quarterly Survey of Overseas Subsidiaries – First Quarter, 2007]*. Ministry of Economy, Trade and Industry.
- Miyajima, T. 2006. Ajianiokeru koikitekibouekijiyukato nikkeiseizoukigyono chotasu/seisanjigyotenkai [Broad-based trade liberalization in Asia and Procurement/production deployment of Japanese manufacturing companies]. *Management Review* 11:111-141.
- Mori, M. 1999. New trends in ASEAN strategies of Japanese-affiliated automobile parts manufacturers – The role of exporting and priorities for the future. *RIM Pacific Business and Industries*, 1(43):12-27.

- Mori, M. 2001. The formation and development of the automobile industrial cluster in Thailand. *RIM Pacific Business and Industries* 1(50):54-67.
- Mori, M. 2004. Gurobaru shikouwo tsuyomeru wagakunijidoshamekano higashiajia senryaku [The strategy for East Asia of Japanese automaker which strengthens a global inclination], *RIM Taiheiyō Business Joho* 4(13)54-74.
- Morimoto, H. 2006. Higashiajiashokokuno sangyoseisakuto nihonkigyono senryakutekikoudounoshinka -Jidoshakigyowojireinishite- [Interfirm differences of strategic behaviors among Japanese firms under the environment of East Asia: A case study of the Automobile firms], *Japan Academy of International Business Studies* 12:291-305.
- Nakajima, J. 2000. *Nikkeitakokusekikigyō – Millennium henokiseki [Japanese MNCs - A trace to millennium]*, Chiuokeizaisha.
- Noda, H. 2002. Kaigaichokusetsutoshi Wagakuni kadensangyono kongonoASEANjigyonohoukousei [Foreign direct investment: Directivity of the future ASEAN activity of Japanese household appliance industry], *Journal of Research Institute for Development and Finance* 2:119-142.
- Nomura, T. 1997. Indonesiano jidoshamekato buhin/genzairyochotatsu [Local content of automobile and component maker in Indonesia], *The Annual Review of Economics and Business Administration. Shokei Ronso* 47:23-69 .
- Nomura, T. 2007. Toyotano IMV purojekutoniokeru indo-gurobarukato rokarukano shindankai-[Toyota's IMV project in India], *The Annual Review of Economics and Business Administration. Shokei Ronso* 57(41-70).
- Ohmori, Y. K. Matsuzaki and H. Baba, 1999. Nihonkigyonyoru ajiakarano seihinyunyusenryakunojittaito nouhau (Matsushitadenkino kesu) [The actual condition and know-how of an importation-of-manufactured-goods strategy from Asia by Japanese companies (case of Matsushita Electric)]. In S. Morogami and T. Sugita (eds.). *Ajiakarano yunyutochotatsuhensuruni honsijoutotainichibijinesusenryakuno yukue- [Import and Procurement from Asia -Whereabouts of the changing Japanese market and the business strategy with Japanese -]* , pp.184-215.

- Ohyagi, T. 2000. Saitekina buhinshotatsuwomezasu nikkeidenki/denshimeka – jukouderutachiikiwojireini- [Japanese electricity and electronics manufacturers who aim at the optimal sourcing - Case study in the Zhu Jiang delta area] *RIM Taiheiyō Business Joho* 4(51):20-33.
- Okamoto, Y. 1987. Takokusekikigyoto nihonkigyonotakokusekika(1) [Multinational enterprise and the multinationalization of Japanese business enterprise] *The Journal of Economics* 53(1):2-37.
- Okamoto, Y. (ed.). 1998. *Nikkeikigyo in higashiajia [Japanese companies in East Asia]* Yuhikaku.
- Okiyama, K. and K. Minato. 2007. Ajianojidoshasijoudoko [Trends in Asian automobile market] *JARI Research Journal* 29(2): 31-34.
- Onodera, N. 2006. Seakaikezainogurobarukato takokusekikigyono yakuwari-Higashiajiashokokutono sougohokantekikokusaibungyono kouchikuwo mezashite [Globalization of the world economy and a role of multinational enterprise: Toward establishment of mutual complementary international division of labor relationship with East Asian countries] *Japan Academy of International Business Studies* 12:109-125.
- Sasaki, K. 1986. *Nihongatatakokusekikigyo [Japanese model multinational enterprise]* Yuhikaku.
- Shimokawa, K. 1998. Ajiachiikiniokeru nihonjidoshasangyonochookusetsutoshito kokusaibungyonotenkai – sonogijutsuintento koyokouzounohenkawochushinni- [Direct investment and the development of international division of labor in Japanese automobile companies in Asia] *The Hosei Journal of Business* 35(3): 45-60.
- Shimokawa, K. 2002. Reevaluation of the international division of labor in Japan's automobile industry in Asia, In H. Horiguchi and K. Shimokawa (eds.) *Japanese foreign direct investment and the East Asian industrial system - Case studies from the automobile and electronics industries*. p. 225-253. Springer-Verlag: Tokyo
- Takemoto, M. 2001. Kunitokunino kakinewo hikukushiyo-Toyotano Asean Opereshon sentatosite-[ We will make a fence of the countries low- As Asean operation centre of Toyota-], *JAMAGAZINE* 35:22-27.

- Takeo, T. 2005. Jidoshabuhinchotatsusenryaku no hendou to sapuraiya shusekichi no senryaku [Change of an auto parts procurement strategy and the strategy for the accumulation area of suppliers] In H.Kobayashi and T.Takeo (eds.), *Higashiajia jidoshabuhinno gurobarurenkei [Global cooperation of the East Asia automotive parts industry]*, Bunshindo.
- Takeuchi, J. 2004. Erekutoronikususeihinno gurobaruikyuto sijoutougou-Higashiajianiokeru bouekikakudaino mekanizumu [Global supply of electronics products and Integration of markets - The mechanism of the expansion of trade in East Asia] *RIM Taiheiyō Business Joho* 4(13):29-53.
- Tomozawa, K. 2003. Ajianiokeru jidoshasangyōno shintenkai-indowochushinni- [Evolution of the automobile industry in Asian countries: Principally focusing on Southeast Asia and India]. *Annual Report of Research Center for Regional Geography* 12:9-32.
- Tomozawa, K. 2004. Indoniokeru nikkeijidoshakigyōno rittito seisansisutemuno kouchiku -toyota kirurosuka motashawo jireitoshite-[Establishment of a Japanese-owned automobile company in India and construction of its production system: Principally focusing on Toyota Kirloskar Motor], *Geographical review of Japan. Chirigaku hyoron* 77(9):628-646.
- Tsuchiya, Y., T. Ohshika and R. Inoue, 2006. *Ajiajidoushasangyōnoyukue – sekaiwo seisuru "Asia Big 4" womeguru tatakai [The ability of the Asian auto industry - A fight over "Asian big 4" to win the world]*, Daiyamondosha.
- Uchibori, H. 2004. Nihonkigyōno ajiasenryakusaikou: anketochosanimiru nihonkigyōno ajiabijinesunogenjoto kongonotenbou [Reviewing the Asian strategy of Japanese companies: An analysis of the present state and future prospects of Asian business from the survey on Japanese companies] *Japan Academy of International Business Studies* 10:169-178.
- Watanabe, H. 2003. Nikkeikadenmekaniokeru gurobarukanoshintentobungyosaihensei [Progress of the globalization in a Japanese home electronics maker and division-of-work reorganization]. In S. Ohara (ed.) *Chugokunotaitoto ajiashokokunokikaikanrensangyo –Aratanabijinesuchansuto bungyosaihenhenotaiou-* [Chinese rise and machinery industry in Asia - a new

- business opportunity and division-of-work reorganization-], pp.91-113. IDE-JETRO.*
- Yamachika, T. 1999. Ajiashokokukarano yunyutokokusaichotatsu [Import and global procurement from Asian nations], In S. Morogami and T. Sugita (eds.), *Ajiakarano yunyutochotatsu-henbousuruni honsijoutotainichibijinesusenryakuno yukue- [Import and Procurement from Asia -Whereabouts of the changing Japanese market and the business strategy with Japanese -]*, pp.140-181.
- Yamachika, T. 2003. Denkimeka T shano gurobaruchotatsuno jittaitokadai [The actual condition and the subject of global procurement of an electrical equipment manufacturer: The Case of “T” company], *The Japanese Journal of Labour Studies. Nihon rodo kenkyu zasshi* 45(522) Special Issue:4-14.
- Yamachika, T. 2004. GurobaruSCMto chotatsuhemukete-kotei purchase kara souzouteki purchase he- [It turns to global SCM and procurement. -From “fixed purchase” to “creative purchase] *JMA Management Review* 10(9): 9-13.
- Yamada, Y. 2006. Ajiajidoshabuhinsangyono jitsuryokuwo hakaru-ASEAN,chugoku,indono kysoryokuchosawo chushintoshite [Measuring ability of the Asian motor parts industry - Mainly on ASEAN, China, Indian competitive power investigation] *JETRO Sensor*, December 2006, 24-32.
- Yasumuro, K.(ed.). 2007. *Shingurobarukeieiron [Newly global management theory]*, Hakutoshobo.
- Yoneda, K., 2001. Nikkeikigyoseizogyo no buhinchotatsuto kokusaihyojunnitsuite [About procurement and international standards of a Japanese manufacturer] *Studies of Business Administration. Keiei kenkyujo ronsyu* 24:259-275.
- Yoshihara,H, K. Hayashi, and K.Yasumuro. 1988. *Nihonkigyonogurobarukeiei [Global management of a Japanese company]* Toyokeizaishinposha.
- Yoshihara, H. (ed). 1992. *Nihonkigyonokokusaikeiei [The international management of the Japanese company]* Dobunkan.
- Yoshimoto, T., 2004. Nikkeikigyono ASEAN ikinaikadenseisankyotenno jittai [Deployment of the Japanese electronics industry within ASEAN] *Doshisha University Worldwide Business Review* 15(2)134-150.
- Yoshino, M. 1976. *Japan’s multinational enterprises*. Harvard University Press.

- Yukimoto, S. and R. Li. 2007. Zaichugokunikkeikigyono furusettagatagenchikanikansuru tansakutekikenkyu [An exploratory study of the localization of multi business function in Japanese affiliates in China : Focused on the analysis of procurement, sales and distribution process] *The Fudai keizai ronshu: The Journal of Economic Studies, Toyama University* 52(3):545-571.
- Yun, C. 2002. Ajiakikigo zaitouajianikkeikigyono hanbai/chotatsukatsudoto kessaitsukac hosahoukoku [Report on sales, procurement, and invoice currency of Japanese companies in East Asia after the crisis] *Asian Economic Review* 61(3):279-291.