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The Development Strategy for SMEs in Malaysia

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Contents

Introduction	1
1. Why Malaysia Needs to Develop a Supporting Industry	3
1.1 What Is a Supporting Industry?	3
1.2 Background of the Need to Develop SMIs	4
1.3 How to Develop SMIs	6
2. The Present Status of SMIs.....	8
2.1 Development Process of SMIs.....	8
2.2 Local Procurement by Assembly Firms	10
2.3 Present Status of the Machine Engineering Industry.....	12
2.4 Present Status of SMIs	14
3. Policy to Develop Local SMEs	17
3.1 SME Development Policy.....	17
3.2 Vendor Development Program.....	18
3.3 Evaluation of the VDP	20
4. New Challenges	23
4.1 New SME Development Scheme.....	23
4.2 Strengthening the Economic Linkage within ASEAN.....	25
Concluding Remarks	28
References	29

List of Tables and Figures

Table 1. Market of Japanese Affiliated SMEs in ASEAN 4	9
Table 2. Electronics Parts Production in Malaysia	11
Table 3. Total Amount of the Machine Engineering Products	12
Table 4. Present Status of SMIs	15
Table 5. Anchor Companies and the Number of Vendors under the VDP	19
Table 6. Industrial Development Program	24
Figure 1. Range of Supporting Industries	3
Figure 2. GDP Growth Rate and FDI Inflow in Malaysia	5
Figure 3. Japanese SMEs' FDI into ASEAN Countries	9
Figure 4. Japanese Affiliated SMEs in Malaysia by Type of Shareholder	9
Figure 5. Local Vendors' Evaluation of Doing Business with Japanese Companies ..	20

The Development Strategy for SMEs in Malaysia

Introduction

The nurturing of small and medium-sized enterprises (SMEs) has been given a high priority on the Asia Pacific Economic Cooperation (APEC) agenda. The APEC Economic Leaders Meeting in Manila in 1996 advanced the work on economic and technical cooperation (ECOTECH) extensively. APEC ministers identified six priority issues for economic and technical cooperation; encouraging the growth of small and medium enterprises was one of them.² SMEs are critical for all APEC members' economies as countries attempt to achieve the goals of increasing investment, creating employment opportunities and managing sustainable development. SMEs play a key role not only in the economic development of individual APEC economies, but they are also instrumental in promoting trade and investment activities among different economies, including the facilitation of a more open environment for investment in the APEC region. Enhancing the vitality of SMEs, therefore, is of pivotal importance in maintaining Asia-Pacific dynamism into the 21st century.

The role of SMEs in economic development and intraregional trade and investment is attracting the attention of policy makers throughout the region. In particular, governments in the Association of South East Asian Nations (ASEAN) are eager to raise the performance of their SMEs. As a result of successful efforts to lure Foreign Direct Investment (FDI) and promote export-oriented industrialization, many ASEAN countries have enjoyed an impressive period of economic growth since the latter half of the 1980s. However, the rapid progress of industrialization has exposed a fundamental weakness in many economies—an acute lack of supporting industries to provide parts and components for assembly and processing-type industries, such as the automobile and electrical/electronics industries. It is now necessary for ASEAN countries not only to lure assembly manufacturing industries, but also to nurture

¹ The interpretations and opinions expressed in this paper are my own and do not reflect the official position of the institutions with which I am associated, namely the Institute of Developing Economies and the Fuji Research Institute Corporation.

² The other issues are: (1) developing human resources; (2) fostering safe and efficient capital markets; (3) strengthening economic infrastructures; (4) harnessing technologies of the future; and (5) promoting

supporting industries in order to further strengthen the competitiveness of their manufacturing industries. Since supporting industries are composed mainly of SMEs, the development of strong and competitive SMEs is an essential prerequisite for continued development and increased competitiveness of the manufacturing industries in ASEAN.³

This paper examines the supporting industries in Malaysia, which is a pioneer in the ASEAN countries in accepting FDI and promoting export-oriented industrialization. As a result, among the ASEAN countries Malaysia is the one which needs to promote SME development and foster a supporting industry the most urgently. The case of Malaysia provides some valuable clues as to what is necessary to develop supporting industries in the other ASEAN countries in the future.

The first section will outline the reasons why Malaysia needs to develop supporting industries. Next, the present performance of supporting industries in Malaysia will be outlined. Section 3 will examine how Malaysia is attempting to develop and foster its supporting industries. Finally, section 4 will consider the implications of Malaysia's case for other governments and the challenges they face in fostering supporting industries.

environmentally sustainable growth.

³ "In every ASEAN country, SMEs account for the majority of local business establishments. However, many SMEs in ASEAN are in the traditional SMEs that have no relationship with large, modern industrial factories. At present, SMEs are not able to effectively perform their important role in the industrial structure." Ministry of Trade and Industry (Japan), *Prospects and Challenges for the Upgrading of Industries in the ASEAN Region*, p. 110.

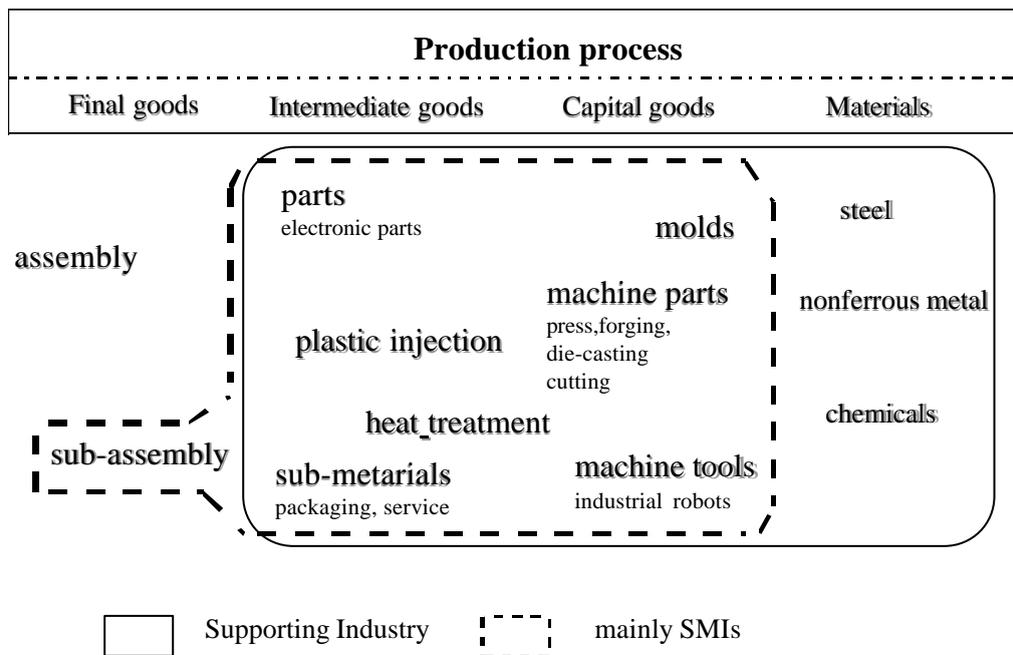
Section 1. Why Malaysia Needs to Develop a Supporting Industry

1.1 What Is a Supporting Industry?

Before turning to the examination of supporting industries in Malaysia, it is necessary to define “supporting industry,” which is a vague term considering that it applies to a wide range of activities. One definition implies a parts and components industry. Another defines it broadly as the industry group related to all sorts of production activities in an assembly industry, not only production but also R&D, logistics and services. In this paper, “supporting industry” is defined as group of companies which provide all sorts of parts, components and services to assembly or processing industries.

For each assembly industry, the essential goods and services needed vary considerably. They can, however, be classified generally into four main groups: (1) materials, (2) capital goods, (3) parts and intermediate goods, and (4) sub-materials and services.⁴ The materials industry includes steel, nonferrous metals and chemicals. These materials are produced mainly by large firms. Capital goods are composed of industrial

Figure 1. Range of Supporting Industries



⁴ Kawabe, 1995, pp.3 ~ 4.

machines, molds and so on. Although industrial robots—which require high-technology—are produced by large firms, many industrial machines are produced mainly by SMEs, which are able to produce made-to-order specialty articles. Moreover, almost parts and intermediate goods are also produced by SMEs. Finally, heat treatment and surface treatment are services provided mainly by SMEs, because they are labor intensive.

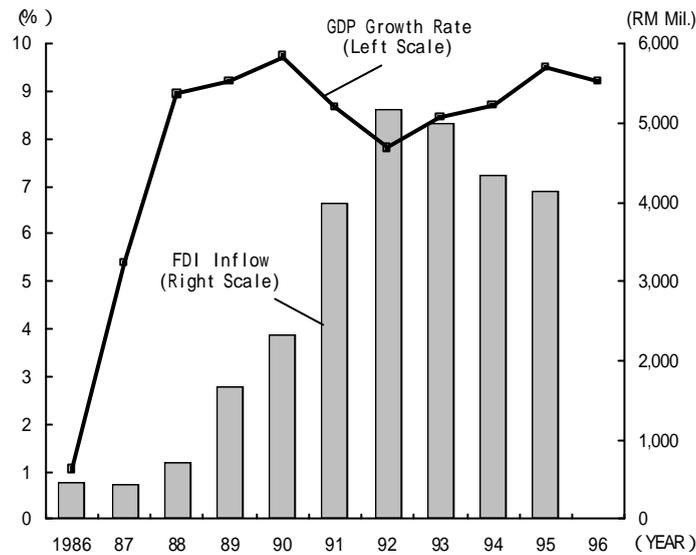
In sum, most supporting industries are composed of SMEs, although materials and high-tech key parts such as semiconductors are generally produced by large firms with large-scale equipment and high-technology (Figure 1). Because the development of supporting industries is often discussed in relation to the development of SMEs, in this paper the term “Small and Medium Industries” (SMIs) will be used to refer to the supporting industries made up mainly of SMEs.⁵

1.2 Background of the Need to Develop SMIs

For a long time, primary industries were the leading sector in the Malaysian economy. However, the growth of manufacturing has coincided with a declining role of the primary sector. In 1987, for example, the importance of the manufacturing sector surpassed that of the primary sector, excluding the petroleum sector, for the first time in history. From 1985 to 1996, the importance of manufacturing as a proportion of GDP rose from 19.7 percent to 34.5 percent, while manufactured products as a share of total exports jumped from 19.7 percent to 76.8 percent. The main reason for this increase was the Malaysian government’s policy, adopted in 1986, of aggressively luring FDI from firms in the developed countries. Although many developing countries generally do not permit the establishment of firms that are wholly owned by foreigners because of the threat to domestic industries, Malaysia relaxed guidelines governing foreign equity participation and provided attractive tax incentives for direct investment into the manufacturing sector. As a result of this favorable economic policy, FDI flows into Malaysia increased dramatically in the latter half of the 1980s (Figure 2). Japanese firms in particular made inroads into Malaysia in the wake of the sharp appreciation of the yen

⁵ MITI(Malaysia) defines an SME to be a firm with shareholders’ funds of below RM 2.5 million, or an

Figure 2. GDP Growth Rate and FDI Inflow in Malaysia



Source: IMF, *International Financial Statistics*.

after the Plaza Accord in 1985. The structure of the Malaysian economy was considerably affected by the surge of FDI inflows, with FDI's share of gross fixed capital formation increasing significantly.⁶

The increase of manufacturing's share of GDP and the jump in Malaysia's exports, however, have been accomplished under the following conditions. Most of the export-oriented firms, mainly Japanese firms that use Malaysia as an export platform to the developed countries, set up operations in Malaysia's Free Trade Zones (FTZs) to take advantage of a variety of incentives. Many of the firms built assembly plants where most of the production process was labor-intensive and most of the employees were unskilled or semi-skilled.

Investment by foreign firms increased not only production and exports in Malaysia, but also job opportunities. However, there was limited opportunity for local firms to engage in subcontracting activities with these assembly firms operating in Malaysia because Japanese assembly firms purchased most of the required parts and capital goods not from local Malaysian firms, but from their affiliated Japanese firms in Malaysia or Japan, or other firms

employment size of less than 75 full-time workers.

⁶ The share in 1992 was 26 percent. In reality, foreign firms, especially Japanese, have been indispensable to the Malaysian economy. For instance, the production output of the Matsushita group, the Japanese electrical/electronics firm, was nearly five percent of Malaysian GDP in 1993.

based overseas.⁷ The linkages between these foreign firms and the local ones were therefore weak. According to a Ministry of International Trade and Industry (MITI)⁸ 1994 survey, Malaysian SMIs produced less than 10 percent of total output in the electrical/electronics industry, which accounts for more than 30 percent of all manufacturing output in Malaysia. As a consequence, the technology transfer from these foreign firms to local ones was also poor. The only major favorable effects for the Malaysian economy, therefore, have been the job opportunities created by the inflow of FDI.

While Malaysia has been able to attract FDI, boost exports and create a great many unskilled and semi-skilled jobs, other countries in Asia have become more competitive in terms of labor costs and government incentives to lure FDI. Malaysia now needs to reinforce its international competitiveness in order to move up the next step of economic development. One of the strategies emphasized in the Seventh Malaysia Plan (1996-2000) is the diversification, modernization and strengthening of the industrial base by focusing on the development of SMIs. Owing to the lack of development of SMIs in Malaysia, assembly and processing industries have also been unable to develop. If Malaysia could establish and nurture competitive SMIs, the shorter delivery span and greater cooperation between assembly firms and local suppliers realized and it would be expected to improve Malaysia's manufacturing industries, which in turn would have favorable effects for the domestic economy and boost the country's international competitiveness. It is urgently necessary, therefore, for Malaysia to develop SMIs.

1.3 How to Develop SMIs

There are two ways to develop and strengthen SMIs, namely (1) to attract foreign SMEs, and (2) to foster the development of local SMEs. Inviting foreign SMEs contributes directly to the establishment of linkages between assembly firms and supporting industries. On the other hand, many people feel it is essential to foster local SMEs in order to develop Malaysia's home-grown industrial base. Compared with large firms, SMEs have

⁷ We shall discuss these subjects in the next section.

⁸ This is not to be confused with MITI in Japan. Unless otherwise stated, the abbreviation MITI will be used to refer to the Ministry of International Trade and Industry in Malaysia.

disadvantages in terms of human resources, access to markets and raising capital. Therefore, they often need more finely-tuned government support to develop.

Also, among the SMIs, there are sectors in which the encouragement of the growth of local companies in the near future has potential and other sectors that have little chance of development, given the country's market environment and resource endowments. For instance, in the case of sectors for which economies of scale are highly relevant, it would be better to encourage their development after assembly firms have reached a substantial size.⁹ Encouraging sectors with little potential in the near future may lead to wasted resources and to the neglect of more important areas.

⁹ MITI (Japan), *ibid.*, pp. 129 ~ 130.

Section 2. The Present Status of SMIs

2.1 Development Process of SMIs

The underdevelopment of SMIs exposes a dilemma that many developing countries face. Due to the smallness of the market for SMIs, they cannot develop, but at the same time undeveloped SMIs hinder the growth of assembly industries and in turn the market is unable to expand. However, in Malaysia's case, the market for SMIs has grown up large enough and, therefore, the potential for their development does exist at present.

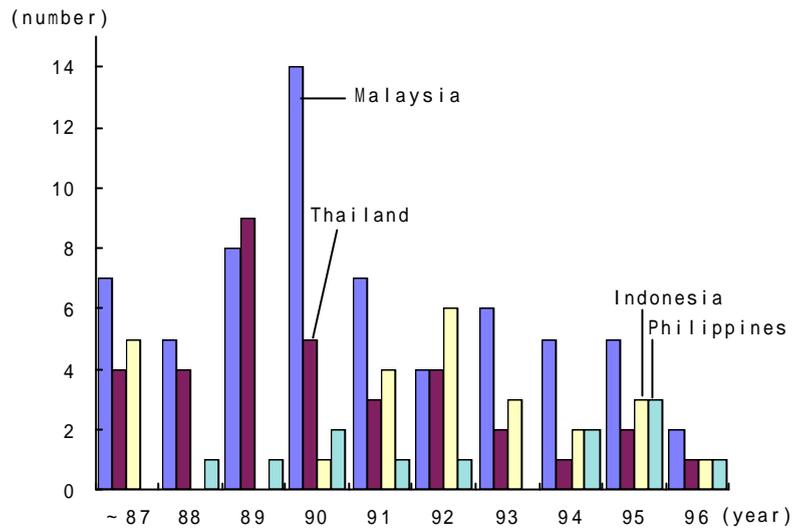
As discussed in the preceding section, many foreign export-oriented firms, especially Japanese ones, set up assembly plants mainly in the electrical/electronics industry. Japanese firms manufactured products such as video tape recorders (VTRs) and air conditioners, which had not been previously manufactured in Malaysia, and they planned to start production as soon as possible.¹⁰ As there were no preexisting supporting industries yet for these assembly firms in Malaysia, at first they had to use parts or capital goods that were partly manufactured by their subsidiaries and affiliates in Malaysia, or, in most instances, imported from subcontractors in Japan.

After operations were well on their way, some firms attempted to increase procurements from local suppliers to reduce costs by replacing imported goods and by saving delivery time. While there were some local firms that were able to manufacture the necessary parts and capital goods, they were not considered to be optimum suppliers in terms of the quality of their products. Therefore, in order to deal with expanding operations, most Japanese assembly firms encouraged their subcontractors in Japan to set up operations in Malaysia. Such Japanese subcontractors aggressively established subsidiaries in Malaysia, leading to a boom in FDI by Japanese SMEs.

Japanese SMEs' FDI into Malaysia increased noticeably after the end of the 1980s. According to a Japan Finance Corporation for Small Business (JFS) survey, their FDI was particularly concentrated in the period from 1988 to 1991 (Figure 2) and 62 percent

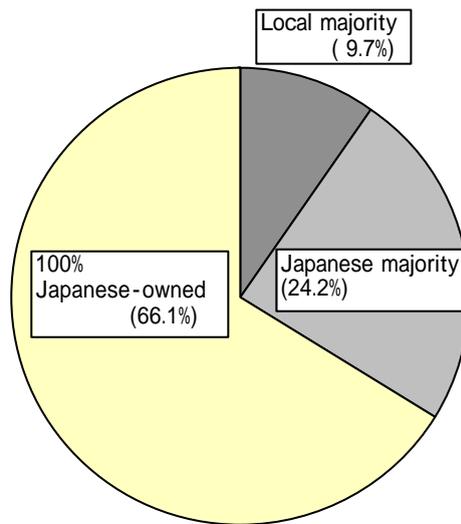
¹⁰ When Japanese electrical/electronics firms started producing a new line of manufactures in Malaysia, a lot of them established new affiliated firms rather than new business departments in their existing firms because there were able to receive various benefits, such as an exemption of corporate tax for five years and easy visa procedures for Japanese staff who were essential for setting a new operation. Thus, a lot of

Figure 3. Japanese SMEs FDI into ASEAN Countries



Source: JFS, *Survey of Japanese Affiliated Companies' Activities in ASEAN (1996)*.

Figure 4. Japanese Affiliated SMEs in Malaysia by Type of Shareholder



Source: Same as Figure 2.

Table 1. Market of Japanese Affiliated SMEs in ASEAN4

Country (No. of firms)	Malaysia (63)	Thailand (35)	Indonesia (25)	Philippines (12)
Local	16.0	10.8	44.0	18.6
Indirect exports	51.9	41.9	16.8	0.0

Japanese affiliated firms in Malaysia manufacture a small number of products on a massive scale.

Exports to Japan	14.3	19.5	18.9	61.5
Exports to third countries	17.8	27.8	20.3	19.9

Source: JFS, *Survey of Japanese Affiliated Companies' Activities in ASEAN (1996)*.

of the FDI was in the electronics industry.¹¹ 66.1 percent of these SMEs were 100 percent Japanese-owned companies, while majority ownership by local companies was only 9.7 percent of the total (Figure 3). This is due to the fact that the Japanese SMEs' main sales market was indirect exports—sales to export-oriented firms—and exports (Table 1).¹² This also reflects the fact that they made inroads into Malaysia to comply with the request by their principal firms.

The Malaysian government has considered that a speedy and efficient way to strengthen SMIs is to invite foreign SMEs with high technologies to invest in Malaysia in hopes that they transfer their technologies to local SMEs. Therefore, the Malaysian government has aggressively attracted foreign SMEs by offering a variety of incentives. Under these circumstances, SMIs in Malaysia have been built up and strengthened directly by foreign SMEs.

2.2 Local Procurement by Assembly Firms

Assembly firms can procure parts and materials in three ways: (1) by importing, (2) from foreign suppliers located in Malaysia, and (3) from local suppliers. The example of how Japanese firms procure will be considered here.

When Japanese assembly firms first made inroads into Malaysia, they relied mainly on imports for their procurements. At present, however, they have reduced their reliance on imports because many have been able to procure locally. According to a field survey conducted by the author, the local content share of the total value of procurements of the Japanese firms interviewed was from 60 to 80 percent.¹³ In addition, these firms have lowered their dependence on imports from Japan, while increasing imports from other

¹¹ In August 1996, the Japan Finance Corporation for Small Business (JFS) conducted a questionnaire of Japanese affiliated SMEs in ASEAN.

¹² In Malaysia, indirect exports were counted as exports, not domestic sales until July 1993.

¹³ In October 1997, the author carried out a field survey of SMIs in Malaysia and visited 7 Japanese firms producing such items as consumer appliances and electronics goods, semiconductors, precision electronics parts and automobiles.

ASEAN countries, mainly Singapore. However, some sophisticated key parts and skills-based products, such as molds and stamping machines, are still imported mostly from Japan.

It is clear that Japanese assembly firms have increased their local procurement. In the electrical/electronics industries, which account for a great many of the assembly plants set up, the parts industry has developed to the point that it can sufficiently provide the needed goods and services.¹⁴ The accumulation of these SMEs has boosted the international competitiveness of these industries. However, a closer look reveals that the procurements were chiefly from foreign SMEs, especially Japanese ones. Japanese electronics firms in Malaysia hold unchallenged positions as suppliers of electronics parts in the country (Table 2). However, Japanese assembly firms import most of their machine engineering products, such as molds, dies and forges, because there are not enough local suppliers to provide them.

Table 2. Electronics Parts Production in Malaysia

¹⁴ The availability of parts and components in terms of suitable quality, cost and delivery is essential for ensuring the competitiveness of the assembly firms.

Item	Production (RM million)	Share of Production (%)			Main Manufacturers
		Japanese	European	Local	
Speakers	266	28	13	59	Onkyo, Daiichi, Philips
Variable resistors	280	100			Alps, Matsushita, Koa
Constant resistors	321	93	1	6	Matsushita, Rome, Koa, Kamiya,
Ceramic condensers	350	90		10	Murata, Matsushita, TDK, Taiyo, Aoba
Transformers	350	80		20	Tamura, TDK, Bando, Mitsuoka
Coils	235	99		1	Toko, Mitsumi, Sagami, Sumida
Connectors	160	90	8	2	Hoshiden, Hirose, JALCO, Fujitsu, SMK
Switches	150	92			Alps, Matsushita, TKR, SMK
Small motors	1150	100			Mabuchi, Sankyo, Matsushita, Mitsumi
Magnetic heads	250	100			Alps, TDK, Sanlyo, Canon, Mitsumi
Switch power supply	840	100		8	Mitsumi, NEMIC, Mitsuoka, TDK
Crystal oscillators	405	100			NDK, Epson, Meidensha

Source: EIAJ, *The Trend of Electronics Industry in South East Asia (1997)*

On the other hand, there are quite a few procurements from local firms and Japanese firms intend to increase local procurements. As long as subcontractors can supply the required parts and components without delay, it does not matter whether they are Japanese or local suppliers. However, it is difficult for local firms to provide the same quality of parts and components as supplied by Japanese firms. At present, the Japanese assembly firms' procurements from local suppliers are mainly low value-added goods, such as packaging materials, plastic injection products and so on. According to a director of one Japanese electrical maker, many products from local suppliers are low-priced, but they are inferior to foreign SMEs in terms of quality, delivery time and the attitudes of management.¹⁵ In reality, many local SMEs cannot pass the sample tests needed to become subcontractors.

As seen in the procurement patterns of Japanese assembly firms, the scale of the parts

¹⁵ Author's field survey in Malaysia (1997).

and components industry in Malaysia is large enough to supply assembly firms. However, as discussed below the machine engineering industry, especially molds, dies and forges (the so-called skills-based sector) has still not developed enough to adequately supply assembly firms.¹⁶

2.3 Present Status of the Machine Engineering Industry

The machine engineering industry comprises a wide variety of areas including plastic injection, molding, forging, casting and pressing. As Table 3 shows, the total amount of machine engineering products produced in Malaysia has grown steadily. However, the detailed data of every sector—such as the number of firms and output— has not been officially published. The following survey of the present status of plastic

Table 3. Total Amount of the Machine Engineering Products

(MR million)				
1991	1992	1993	1994	1995
498	557	767	1071	1382

Source: Department of Statistics (Malaysia)

injection, molds, forges, die-casts and presses, therefore, is based on data from a variety industry associations.¹⁷

• *Plastic Injection*

In Malaysia, the plastic injection industry has achieved rapid growth. The total number of companies involved in this sector is estimated to be around 1200.¹⁸ Local firms can manufacture medium-range products, such as plastic casing in consumer electronics products, though only a few firms can make electronics precision parts. However, the plastic injection industry is large enough to meet the demand of assembly firms, because many foreign SMEs have already advanced into Malaysia since the end of 1980s.

¹⁶According to a Japanese Chamber of Trade and Industry in Malaysia (JACTIM) survey in 1997, Japanese assembly firms expect the following sectors to develop and grow: molding, precision machine engineering, precision plastic injection, forging and die-casting. JACTIM, "Report of JACTIM Trade and Investment Committee: Activities of Japanese Enterprises in Malaysia and Related Issues," 1997.

¹⁷ The following explanation is derived mainly from JETRO, 1997, pp. 4 ~ 9.

¹⁸ Ibid., p. 9.

- ***Molds***

The mold processing sector is a key sector of the machine engineering industry. The Malaysian government recognizes the importance of the mold processing sector and wants to attract FDI in this sector from developed countries' SMEs, especially Japanese ones. Although foreign ownership of firms who produce for the domestic market is usually limited to within 30 percent, the government permits up to 60 percent foreign ownership in the mold processing sector as incentive to attract FDI in this important area.

At present, although it is difficult to grasp the status of the mold processing sector in Malaysia precisely, it appears that there are only a few firms and their output volume is limited. One estimate reports that nearly 80 percent of the total value of sales is imported.¹⁹ While local suppliers, mainly Chinese firms, can provide molds for small articles, they cannot almost provide precision molds yet.

The following is a rough outline of the relationship among Japanese firms and local suppliers for mold processing. Molding firms in Japan design the molds, which are manufactured to specification by Japanese affiliated firms in Malaysia. The local subcontractors then perform the plastic injection processing or press processing by using the molds produced by Japanese affiliates.²⁰

- ***Casting /Forging***

According to the Malaysian Industrial Development Authority (MIDA), there are presently about 200 casting processing firms in Malaysia, mostly small in scale.²¹ Although there are few firms with high-technical skills that can supply assembly firms, the number of die-casting processing firms is increasing. For example, in the automobile industry where casting processing is important, the Malaysian car producer PROTON has its own casting firm which has been producing cylinder blocks, bearing caps and brake drums since 1994.

The forge processing industry has only a few local firms, mainly because forging firms need to have large facilities and advanced molds. There are quite a few foreign firms, but the forging industry needs to be developed further.

¹⁹ Ibid., p. 5.

²⁰ For instance, in the manufacturing of VTRs, Japanese firms import the molds for the front panels and rear covers, whose quality are considerably influenced by molds.

• **Pressing**

The press industry is the sector where local SMEs can enter comparatively easily, since press firms can do pressing work if they have only a press machine and a mold. As in the case of the plastic injection industry, there are many companies in the press industry. However, the quality of a pressed good depends on the mold and many local press firms have only molds of low-quality and in bad repair. Accordingly, many local press firms which receive orders from foreign assembly firms are given or leased the molds by the assembly firms. Thus, only a few firms can make precision parts to fulfill the demands of the assembly firms.

2.4 The Present Status of SMIs

Based on the above discussion, the present status of SMIs in Malaysia can be roughly ranked as in Table 4, which shows the situation of procurement by assembly firms and the technological capabilities of local firms. The technological capabilities of local firms are graded in four levels:

Level A — able to supply the same quality as foreign SMEs

Level B — able to supply some complicated products for assembly firms

Level C — able to supply only simple products for assembly firms

Level D — unable to provide even simple products

Table 4. The Present Status of SMIs

		situation of procurements	technological capability
parts, components	general parts	mostly localized (mainly foreign SMEs)	Level B
	high-technology key parts	mixture of localized and imported	Level D
	unit assembly	mostly localized (mainly local SMEs)	Level B
machine engineering	forging	mixture of localized and imported	Level C
	die-casting	mostly imported	Level D
	pressing	mostly localized (mainly foreign SMEs)	Level B
	plastic injection	mostly localized (mainly local SMEs)	Level B

²¹ Ibid., p. 8.

molds	pressing	mixture of localized and imported	Level C
	plastic injection	mixture of localized and imported	Level C
sub materials	packaging	mostly localized (mainly local SMEs)	Level A

Note: Author's evaluation, based on his field survey and various sources.

Most parts and components are procured locally in Malaysia except high-technology key parts. The parts and components produced in Malaysia are provided mainly by foreign SMEs and unit assembly work is done mainly by local SMEs. The machine engineering industry has also developed steadily. Many foreign SMEs have already set up plants, while the number of local suppliers, such as plastic injection and pressing firms, has also grown. However, the molding, die casting and forging sector, part of the so-called skills-based industries, have still not developed enough to supply assembly firms. Therefore, such products still depend heavily on imports.

Foreign SMEs, especially Japanese, have made inroads into Malaysia and they have directly contributed to strengthen SMIs in Malaysia. On the other hand, local SMEs have not contributed to the development of SMIs to any great extent. Although there are a sizable number of local firms in SMIs, the value and volume of procurements from them are not that great. This is mainly due to the fact that the technological capability of them is still low. At present, they are mainly engaged in activities where their level of technology is such that they can supply only simple products (Level C). In other words, assembly firms can at best procure from them only products like plastic injection goods, which do not directly influence the quality of the assembly firms' final products. Therefore, the linkage between foreign and domestic firms is still weak. In order to enhance the scale of SMIs, it will be necessary to increase not only foreign SMEs, but also the local SMEs which can meet the standards required by assembly firms. The next section will examine how Malaysia has attempted to foster local suppliers.

Section 3. Policies to Develop Local SMEs

3.1 SME Development Policy

Malaysia has recognized the importance of SME development since early in the 1960s. At first, the main purpose of SME development policies was to establish new companies, especially Bumiputra ones and foster them aggressively. Past SME policies were related to the “Bumiputra policy” to increase Bumiputra employment in the professional occupations and to strengthen corporate management.²² That is to say, previous SME development policies put emphasis on fostering new firms, which were consequently small in scale, and did not consider the potential of pre-existing small or medium-sized firms.

It was not until the latter half of the 1980s that the focus of SME development policy shifted to the development of SMEs in the supporting industries, mainly pre-established medium-sized ones. As discussed above, the linkage between foreign assembly firms and local SMEs has been quite limited because of the low technology levels of local SMEs. Entering the 1990s, Malaysia started full-fledged attempts to further strengthen the supporting industry by fostering local SMEs.

It is often pointed out that the Japanese production system, which is based on a well-developed supporting industry in the manufacturing sector, is very efficient. Due to the efficient specialization among assembly firms and SMEs as their subcontractors, assembly firms can adapt well to market changes. Therefore, assembly industries in Japan, such as the automobile and electrical/electronics industries, have maintained a high level of international competitiveness. At the same time, SMEs have also developed extremely well. The assembly firms (principal companies) adopted SMEs as subcontractors and provided a variety of support for them, both technical and financial. The SMEs were able to keep operating steadily, due to their long-term activities as suppliers. In addition, because parent companies and their subcontractors were bound together by a common perspective of the future, they could work together in terms of R&D as well as production. In this way, Japanese SMEs raised their production capabilities greatly and some even developed very advanced technologies and

²² Companies owned by ethnic Chinese have historically had a much greater proportional weight in the

know-how in a variety of fields.

Malaysia, however, did not have the production basis of a supporting industry for assembly or processing industry. In order to remedy this situation, Malaysia began attempts to recreate the Japanese production system of relationships among assembly firms and subcontractors. The vendor development program (VDP) was one of the development programs introduced in an effort to upgrade the production capabilities of local SMEs.

3.2 Vendor Development Program

The VDP was introduced in 1988. The plan was to establish “anchor” companies, or large enterprises appointed by the government that would nurture “vendor” companies, or SMEs that needed some special support to develop. PROTON was the first anchor company appointed by the government. As an anchor company, PROTON needed to procure parts and components supplied by vendors. On the other hand, the vendor was given technical support and management assistance from the anchor company and financial support from the government.²³

In 1992, the Electrical and Electronics Component Scheme (EECS) was introduced. Sapura Holding, the Malaysian telecommunications company, and Sharp, the Japanese electrical company, were appointed as anchor companies. In this scheme, the vendors could obtain a five-year interest free loan within the limit of MR 1 million from the government through the anchor company. The vendor would be then under surveillance for five years by the MITI(Malaysia).

In order to enhance the VDP, a “Tripartite Arrangement” was introduced in 1993. This was an arrangement in which the MITI, an anchor company and a bank would sign an agreement to develop vendors. The scheme could be widely applied not only to the automobile and electrical/electronics industries, but also to machine engineering, molding and die-casting, plastic products and furniture products, etc. Non-Bumiputra local companies could also apply for support under the scheme. Similar to the EECS, an anchor company was

Malaysian economy than the Bumiputra, or ethnic Malays.

²³ Reflecting the Bumiputra policy, at first, the vendor had to be a Bumiputra company (with more than 70 percent Bumiputra ownership) and a total Bumiputra work force of no less than 55 percent.

to provide not only a market for vendors, but also technical support and management assistance. However, financial support was not provided in the form of a government grant loan, but rather a soft, low-interest loan from a bank. The government only acted as a coordinator between an anchor company, a bank and a vendor.

Table 5 shows the major anchor companies and the number of vendors which have been developed by anchor companies. At the end of 1996, 27 anchor companies assisted 94 vendors under the VDP.²⁴ Many anchor companies are assembly or processing firms which have many subcontractors. PROTON had the highest number of vendors (19 companies). 19 of the 27 anchor companies were in the electrical/electronics industry. Also, 16 Japanese assembly firms were anchor companies. Japanese anchor companies were expected to play an important role in the VDP. On the other hand, most vendors are Bumiputra companies, mainly because the status of vendor in the VDP was limited to Bumiputra companies until 1993.

Table 5. Anchor Companies and the Number of Vendors under the VDP

Anchor Companies (Groups)	Type of Industry	No. of vendors
PROTON	automobile	19
SONY Group (5 companies)	electrical/electronics	12
General Lumber Furniture	furniture	12
Perbadanan Group (2 companies)	telecommunications	11
Sapra Holdings	telecommunications	9
Sharp Group (4 companies)	electrical/electronics	9
JVC Group (2 companies)	electrical/electronics	6
Matsushita Group (2 companies)	electrical/electronics	4
Others		12
Total		94

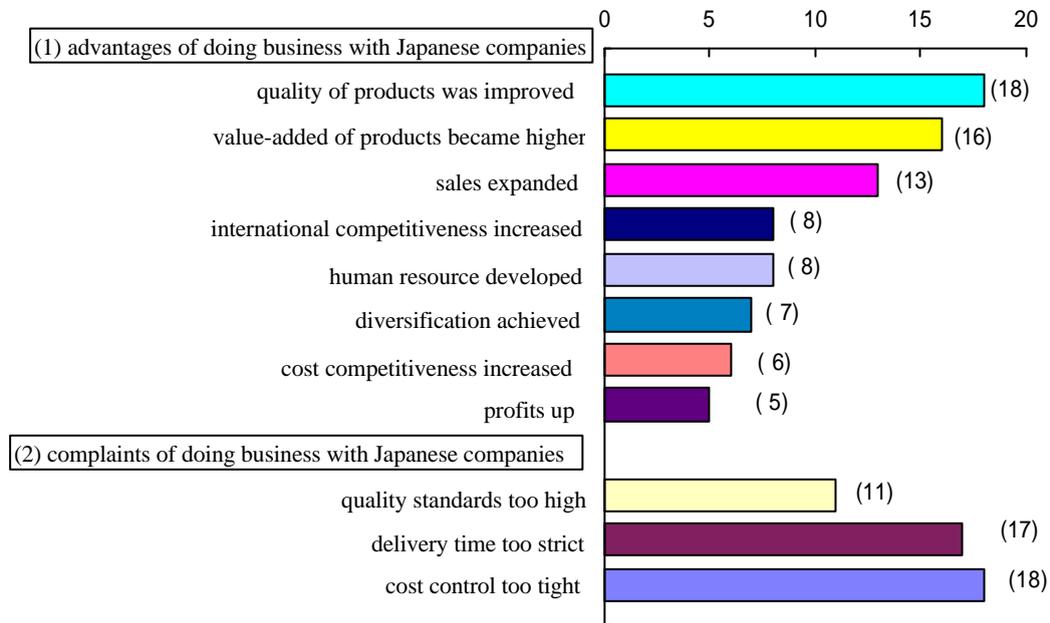
Source: MIDA (1997).

3.3 Evaluation of the VDP

• *The vendors' evaluation of the anchor companies*

While a comprehensive survey of the vendor's evaluation of the VDP has not been conducted, in 1995 the Japanese Chamber of Trade and Industry in Malaysia (JACTIM) conducted a survey of local subcontractors doing business with Japanese firms. In the questionnaires, for the most part of the subcontractors evaluated Japanese assembly firms favorably for the following reasons: (a) their quality of products improved, (b) their value-added of products rose, and (c) their sales expanded (Figure 4). Although some complaints were voiced that Japanese assembly firms had overly strict requirements for quality standards or delivery time²⁵, most of the subcontractors surveyed hoped to enhance their business with Japanese assembly firms. They expected to acquire management know-how and advanced technologies from Japanese anchor companies. In fact, the anchors' procurement volumes from the vendors have been increasing steadily. Then, the continuous dealings with anchor companies has

Figure 5. Local Vendors' Evaluation of Doing Business with Japanese Companies



Note: Survey in 1995; 20 firms (multiple answers).

²⁴ As we shall see later, the VDP was replaced the new scheme, industrial linkage program (ILP) in 1997.

²⁵ Because Japanese assembly firms mainly export their products, the parts and components supplied by subcontractors must meet quality standards high enough to be competitive in the international market.

Source: JACTIM, *Report of the Trade and Investment Committee (1995)*.
contributed to stabilize the local subcontractors' business activities.

• ***The anchor company's evaluation of the vendors***

In contrast to the relatively positive evaluation of the anchor companies by the vendors, the anchor companies' evaluation of the vendors on the whole was much more critical. Many anchor companies thought the VDP was too burdensome.²⁶ Anchor companies could procure parts and components at low prices from the vendors, but other than these price considerations there were no other incentives in the VDP.

One of the main reasons why the anchor companies participated in the VDP was the government's request for it and some anchor companies went as far as to state that they participated in the VDP only because they felt obliged to cooperate with the government's SME development policy. In 1993, six Japanese anchor companies participated in the VDP. The first stage in the process leading up to their participation was a request from the MITI to the JACTIM to encourage Japanese companies to participate. In response to this request, six members of the JACTIM agreed to participate.²⁷ The MITI then asked every anchor company to accept and foster around ten vendors each within five years.

A case study of a Japanese electrical company that is also an anchor company reveals one example of the burden that Japanese companies faced in the VDP. This Japanese electrical company now has nine subcontractors that started out as vendors for sub-assembly, plastic injection, mold processing and metal stamping. They are all Bumiputra companies and were given a five-year low-interest loan of one million ringgit under the VDP. Most of them started with no experience in the area of business concerned. Therefore, the anchor surveyed basically had to teach the Malaysian companies how to operate and then train the vendors to improve the quality of their products and operations. When the VDP was first conceived, the vendors were expected to be independent from the anchor's direct support and to have developed enough to be able to perform subcontracting work for firms other than their anchor

²⁶ For instance, a JACTIM survey in 1996 showed the following results. When JACTIM asked Japanese firms whether they intended to take part in the VDP, 49.6 percent of the companies answered "no." When asked whether they felt some hardships with regard to foster the local vendors, 71.4 percent of the Japanese anchor companies surveyed answered "yes."

within five years. At present, almost none of the vendors has the capability to do work for other firms and most of the vendors still depend on the anchor company heavily, both technologically and managerially. The performance of the vendors depends on their sales to their anchor companies, and, therefore on the performance of only one principal company. A staff member of the anchor surveyed lamented that, “the vendors tend to think the anchor should take care of them in every aspect. They are lacking in enthusiasm about their business.”

In general, anchor companies have been eager to provide technical support to their vendors or subcontractors so that the vendors’ technical capability improved steadily, but the absolute level remained low. In addition, vendors have definitely expanded their business under the VDP. However, Japanese assembly firms continued to procure a majority of parts and components from Japanese subcontractors in Malaysia and the portion of products procured from Malaysian subcontractors remained a limited amount of the anchor’s total procurement from all subcontractors.

In sum, the VDP did not always contribute to strengthen the linkage between foreign assembly firms and local suppliers, and did little to encourage a supporting industry in Malaysia. In addition, anchor companies faced difficulties finding new vendors to be developed, especially Bumiputra ones, because anchor companies already had a lot of subcontractors. The Malaysian government often requested anchor companies to increase the number of local vendors. The anchor companies, however, felt that they should increase the volume of transactions with their existing vendors rather than increase the number of vendors with which they dealt. At the end of 1996, there were 27 companies that were appointed as anchor companies but had no vendors, while no new anchor companies were appointed in 1996. For all intents and purposes, the VDP was unable to achieve the goals as set out by the government.

²⁷ Anazawa, 1995, p.258.

Section 4. New Challenges

4.1 New SME Development Scheme Industrial Linkage Program

In light of the failure of the VDP to achieve its stated goals of nurturing SMEs, the Small and Medium Industries Developing Cooperation (SMIDEC)²⁸ introduced a new scheme, the *Industrial Linkage Program (ILP)* in 1997 (Table 4). The ILP is one of the industrial development programs under the Second Industrial Master Plan (Second IMP; 1996-2005). The objective of the ILP is to develop the efficiency and competitiveness of SMIs so that they are capable of producing high value-added and quality products, components and services for the open market, both domestically and internationally. The ILP is in essence an attempt to build an improved version of the VDP and many of the priority areas are the same.

The type of participants are similar to the VDP, although the names of participants under the ILP have been changed:

- *Linkage* - SME as first or second tier supplier (Vendor in the VDP)
- *Lead Principal Company* - MNC or local large enterprise (Anchor in the VDP)
- *Financier* - participating banks, non-bank financial institutions or venture capitalists

In addition to these members, SMIDEC acts as a projects manager and coordinator, while a *technology supplier*, which can either be the lead principal company or an independent technical research institute or company, provides technical support and advisory services for the enhancement of SMEs.

In the VDP, the vendor was limited to the subcontractors which dealt with the anchor company directly. Therefore, it was difficult to expand the range of supporting industries. In the ILP, however, not only primary subcontractors but also secondary subcontractors can be linkage suppliers.²⁹ In addition, non-Bumiputra companies can also qualify as a linkage supplier. Accordingly, we can expect local Chinese SMEs, which make up a large portion of

²⁸ SMIDEC was established in 1996 as a specialized agency to provide advisory services, guidance and assistance required to enhance the development of SMEs in Malaysia.

²⁹ The subcontractors generally manufacture products to meet their principal's specifications and deliver them by the appointed time. The subcontractors which provide parts and components to principals directly are called *primary suppliers*, while *secondary suppliers* sell products to the primary suppliers, and

the firms in Malaysian SMIs, to aggressively apply to become linkage suppliers. The lead principal companies can also be granted special treatment, such as subsidies for their R&D activities and tax concessions.

Table 6. Industrial Development Program

<p>< Objective ></p> <ul style="list-style-type: none"> • Development of local SMEs as manufacturers or suppliers of critical components/ services to large scale companies including MNCs • To develop efficient and competitive SMEs, capable of producing high value-added and quality products, components and services for the open market, both domestically and internationally
<p>< Participants ></p> <p>(a) The Linkage: - SMEs as primary or secondary suppliers - SME as the qualified linkage supplier must fulfill shareholders' fund of more than MR 250,000 (with more than 70 percent local ownership)</p> <p>(b) The Lead: principal companies, which can be MNCs or local large-scale companies</p> <p>(c) The Financier: participating banks, non-bank financial institutions or venture capitalists</p> <p>(d) The Technology Supplier: Lead companies or any independent technical/research institutes or companies</p> <p>(e) SMIDEC: project manager / coordinator</p>
<p>< Priority areas ></p> <p>(a) Electrical/Electronics Industry consumer electronics; semiconductors and electronics components; computers, peripherals and telecommunications; electrical/electronics appliances and apparatuses</p> <p>(b) Transportation Equipment Industry automotive and motorcycle, marine, and aerospace</p> <p>(c) Machinery and Engineering Industry machines and equipment, machine tools, molds and dies, materials handling and utilities</p> <p>(d) Others</p> <ul style="list-style-type: none"> • chemical and petrochemical • resource and agro-based
<p>< Incentive Package ></p> <ul style="list-style-type: none"> • Pioneer Status with full tax exemption (5 years) for SMEs producing intermediate products under the ILP • Pioneer Status with full tax exemption (10 years) for SMEs • Tax deductions on expenses incurred by large scale firms for the ILP • Projects under the ILP are exempted from the labor intensive criteria of CIPE MR 55,000 • Sales of participating companies under the ILP which are located in FTZs or are LMWs treated as exports

thus provide products to the principals indirectly.

Source: SMIDEC.

Through the ILP, SMIDEC expects local SMEs to be further developed and nurtured into becoming reliable manufacturers and suppliers of critical components and services to the large Malaysian companies or the MNCs in core manufacturing activities. At the same time, SMIDEC considers the role of foreign SMEs to be very important in the process of technology transfer. Malaysia is placing a great priority on technology transfer not only in the form of large firms' support for the vendors but also by setting up joint ventures and then technical cooperation with foreign SMEs. Therefore, SMIDEC is promoting the introduction of foreign SMEs by coordinating joint enterprises with local SMEs and foreign SMEs with high-technological skills, especially Japanese ones.³⁰

4.2 Strengthening of Economic Linkage within ASEAN

Market size is an important element in the development of the parts and components industry in any country because of the advantages of economies of scale. However, in Malaysia, the development of this industry is still limited due to the small domestic market. The limits of the Malaysian market are exemplified by the actions of Japanese subcontractors. In the production system in Japan, most subcontractors only produce for one principal company, but the demand from their principals for the goods produced by their subsidiaries in Malaysia is not enough to absorb all their production, so they supply their products to other assembly firms in Malaysia with which they have no relationship in Japan.

In addition to the relative smallness of the domestic market, Malaysia has so far protected domestic industries with import-substitution policies, local contents regulations or high-tariffs.³¹ While the local content regulations and high tariffs were effective in stimulating the development of supporting industries to some extent, firms tended to produce only for the domestic market.³² The maintenance of high tariffs on parts, components and raw materials,

³⁰ In 1995, the government established *Premium Choice*, which was intended to increase joint enterprises with Japanese SMEs and Malaysian companies.

³¹ A similar pattern has been observed in the other ASEAN countries.

³² Parts for export products are required to fulfill global standards in terms of price, quality and delivery span.

therefore, has acted to hinder the development of SMIs. Accordingly, it is necessary to secure export markets to increase competitiveness by accessing markets large enough to support the development of SMIs.

As the liberalization of trade and investment has become a global trend, some MNCs look upon ASEAN as a whole and practice a division of labor by taking advantage of the differences in the stage of development and factor endowments in each country. There is a growing tendency to support such an activity institutionally, namely AFTA (ASEAN Free Trade Area) and AICO (ASEAN Industrial Cooperation).³³ ASEAN members realize that the reduction of barriers for trade and investment within the region will enable a more efficient allocation of resources to stimulate business activities of companies operating in the region.

Considering that such economic linkage within ASEAN has been growing steadily, it will be difficult for Malaysia to build the industrial structure that has advanced sectors in every type of industry. Malaysia should promote the process of specialization within ASEAN which can be realized through “a combination of each country continuously upgrading [its] own production factors and mutually capitalizing on each other’s overseas production factors.”³⁴ To a greater or less extent, such a situation is applicable not only in Malaysia but also in other ASEAN countries. In short, it may not always be beneficial to have an industrial structure with a complete set of industries in every ASEAN country and specialization should be encouraged.

It is clear, however, that all ASEAN countries must develop supporting industries because they need to shift to a higher value-added industrial structure by strengthening their industrial base. ASEAN countries accepted a surge of FDI, especially in the assembly industry, before they established their industrial bases. In short, they do not have enough skills-based industries, such as molding, forging, casting and so on. These industries require more skilled workers compared with assembly industries so cheap labor costs are not the major attraction of investors. These industries lay the foundation to develop advanced technology in the future. Also, the clustering of such industries is expected to develop the assembly industry much

³³ The AICO scheme, which came into effect in 1996, promotes joint manufacturing activities among ASEAN-based companies.

³⁴ MITI(Japan), 1993, p. 124.

further.³⁵ It is important for ASEAN countries to develop such industries in order to produce international competitive manufactures and it is SMEs that are engaged in these industries. Japanese SMEs, in particular, have been the major suppliers in the world in the assembling industries. It will be very beneficial to the development of supporting industries if Japanese SMEs set up joint ventures with local SMEs and train local managers and workers.

However, it is difficult for Japanese SMEs which do not have an adequate supply of human resources to provide sufficient technological guidance even after setting up their operations. Also, when Japanese SMEs with little overseas experience set up operations overseas, they confront difficulties in terms of access to capital and markets. Accordingly, compared with Japanese large firms, considerably fewer Japanese SMEs have invested overseas, and a JETRO survey suggests that they are not very eager to do so soon.³⁶ But, considering the severe conditions in which Japanese SMEs find themselves in Japan now after years of economic stagnation and restructuring, we think that these industries will have to move overseas if they wish to prosper in the future. If Japanese SMEs plan on securing market share and continuing to increase the quality of their goods, they had better take the plunge and position themselves in the ASEAN region.³⁷ For Japan as the source of investments, it is important to support Japanese SMEs which intend to invest overseas, in terms of both information and finance. On the other hand, for countries of ASEAN as recipients of those investments, it is important to make sufficient information about their local business environments available in Japan.³⁸

³⁵ In Japan, it is the Keihin industrial area where such industries are clustered. It is well known that accumulation of such skill-based industries has contributed to strengthen R&D capability and maintain international competitiveness in the manufacturing sector.

³⁶ JETRO and IDE, 1997, p.139. According to a JETRO survey (1996), which was a questionnaire of SMEs in the Osaka region, more than 80 percent responded that they did not have any plans to invest overseas in the future.

³⁷ It is often pointed out that, if Japanese firms diffuse their technology to Asian developing countries aggressively, Japan will suffer from de-industrialization. Therefore, it is not easy to transfer technology from Japan. However, Japanese firms located in ASEAN cannot help transferring their technology to local workers or suppliers because they cannot meet the demand for buyers unless they do so. Accordingly, the skill and technology accumulated in Japan cannot help but be transferred to Asian developing countries, whether Japan likes it or not.

³⁸ MITI (Japan), 1993, p. 133.

Concluding Remarks

As analyzed above, we may say that, in Malaysia, the impetus for cooperation to develop SMIs has come mainly from large firms in the private sector, and not from the government. So far, large assembly firms, mainly MNCs, have been providing technical assistance and managerial support to improve the technological capability of local SMEs as subcontractors and the government has played only the role of coordinator to support such activities. At present, there is a new tendency to promote the diffusion of technology from developed countries by matching local SMEs with foreign SMEs possessing high-technological skills. In fact, it is likely that such inter-company cooperation can play an extremely important role in developing SMIs, because technology is transferred as part of day-to-day business activity. Therefore, governments need to create a favorable market environment where FDI and technology transfer by foreign firms can be pursued smoothly. Such a market environment has so far been arranged mainly between firms as part of FDI. But, in order to strengthen the economic linkage within ASEAN, it is important to improve the market environment within ASEAN as a whole, and this is an area where governments have the most important role.

Moreover, in order for ASEAN countries to attract FDI from around the world and to develop as a world production base, “it is essential for ASEAN to be harmonized and integrated into the global economic system.”³⁹ That is to say, there are limits to development policies for supporting industries in one country only and there are many issues that need to be dealt with multilaterally. In this sense, APEC can play a pivotal role. In APEC, there are already several initiatives to strengthen the linkage between assembly and supporting industries. For instance, APEC has provided information on both assembly firms and suppliers in the region in order to promote a match-making between them.⁴⁰ Now, APEC is expected to provide the necessary forum to create and promote a favorable market environment by aggressively driving forward such activities.

³⁹ MITI (Japan), 1993, p. 124.

⁴⁰ Also, the “opposite show case” promoted by JETRO is one of such activities. In the “show case,” the goods which suppliers want to sell are usually on display. On the other hand, in the “opposite show case,” the goods which buyers want are also on display provide producers ideas of what business to enter.

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