CHAPTER 7

PROSPECTS AND ISSUES

7.1 Introduction

It is interesting to know what do the Japanese expatriates think about Kedah. Do they consider Kedah a suitable production base or are they disappointed? In this chapter, we shall discuss the prospects of the Japanese firms in Kedah, as well as the Japanese expatriates' opinions about and estimations of Kedah.

7.2 Prospects

7.2.1 Production

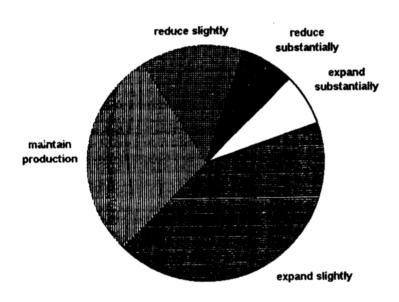
This research was carried out in 1992 when the Malaysian economy was growing steadily. The prospects for the future of the Japanese companies are divided into the five categories: 1) expand production substantially; 2) expand production slightly; 3) maintain the same level of production; 4) reduce production slightly; 5) reduce production substantially.

We have data from the 14 Japanese firms in Kedah. Only 1 firm among them belongs to the category "Five". This firm decided to stop operation in Malaysia and to shift the factory to another place with a cheaper labour force and abundant labor markets, such as Indonesia and Mainland China. However, this is an exceptional case. Two Japanese companies decided to reduce production slightly. This decision was prompted by the economic recession that began in Japan in 1991. The economic recession in Japan has badly affected many small and medium size firms, while the big MNs were hit less. Four Japanese firms in Kedah belong to the category "Three"; they intend to keep the same level of production. Nearly half or majority of all the Japanese companies in Kedah belongs to the category "Two". This means that about two-thirds of the Japanese firms in Kedah belong to the categories "Two" and

"Three". One firm, which has recently started operation in Malaysia, belongs to the category "One".

So, we can conclude that the majority of the Japanese companies in Kedah are confident in their future operations in that state. Only few Japanese companies planned to decrease their production.

CHART 7.1
PROSPECTS FOR PRODUCTION
OF 14 JAPANESE FIRMS IN KEDAH



Source: Survey questionnaire

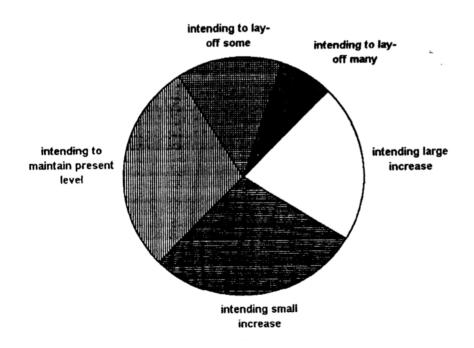
7.2.2 Workforce

If a company intends to expand its production, it usually employs an extra staff. On the contrary, if a company intends to decrease its production, it will

lay-off or dismiss its workers. So, we can predict the company's plans if we examine its recruitment.

Here we shall evaluate the recruitment situation at the Japanese firms in Kedah and divide the firms into the five categories: 1) intending to employ a large number of new workers; 2) intending to employ a small number of new workers; 3) no new employment and no lay-off of workers; 4) intending to lay-off a small number of workers; 5) intending to lay-off a large number of workers. According to the received information, 3 Japanese firms intend to recruit a large number of workers (category "One"). Four Japanese firms plan to employ a small amount of new workers (category "Two"). This means that half of the Japanese firms in Kedah intended to increase their employment.

CHART 7.2
PROSPECTS FOR EMPLOYMENT OF 14
JAPANESE FIRMS IN KEDAH



Source: Survey questionnaire

Four Japanese firms belong to the category "Three". There are 2 firms in the category "Four" and 1 firm in the category "Five". This means that only one-fifth of the Japanese firms intend to decrease the number of their workers. From these findings, we can conclude that a majority of the Japanese firms in Kedah were still performing well and intend to employ more workers.

Generally, employment at the large-size firms is more stable than in the SMIs. This is because Multinationals are less affected by the economic recession due to the diversity of their production or management. Conversely, SMIs are more vulnerable to recession, as they depend on the single type of production.

All three companies that intended to decrease the amount of their workers were the Japanese SMIs. The second wave of the JDI in Malaysia consisted mainly of the SMIs, hence there is a possibility that at the present time the employment at the Japanese firms is more affected by the economic situation in Japan than was the case before.

7.2.3 Japanese Workers

The changes in the number of the Japanese staff in a Japanese firm are generally connected with the economic situation of this firm. However, some firms with a successful local managerial staff try to decrease a number of the Japanese expatriates, because salaries of the Japanese employees are high. Some of the Japanese firms in Kedah decided to expand their production and to increase the number of the Japanese staff. This means that each firm has its own reason to change the number of the Japanese working there.

The newly-coming Japanese firms (those established in 1985 or after 1985) have a special incentive for employment and are automatically allowed to have five posts for the foreign staff provided they invested more than RM 2 million. These firms may tend to keep the number of their Japanese staff constant.

Let us divide the Japanese firms in Kedah into the five categories according to the change in the amount of their Japanese employees: 1) large increase of the Japanese staff; 2) small increase; 3) no changes in the amount of the Japanese employees; 4) small decrease of the Japanese staff; 5) large decrease of the Japanese staff.

We have data from 14 Japanese firms in Kedah. Among them 1 firm belongs to the category "One". Three firms belong to the category "Two". This means that 30 percent of the Japanese firms increase the number of the Japanese employees. All these firms were established recently, in 1990 and 1991.

Five Japanese firms in Kedah belong to the category "Three", they neither increase nor decrease the number of the Japanese employees. It is interesting to notice that four of the five Japanese firms in the category "Three" employed five Japanese expatriates each, that is the maximum amount of foreign staff allowed by the Malaysian Government.

Three Japanese firms in Kedah belong to the category "Four". Two firms are in the category "Five". This means that 35 percent of the Japanese firms intended to decrease the number of their Japanese employees. Each company has own reasons for doing so. Some firms faced some difficulties and decided to decrease their production, so they reduced their Japanese staff as well. Conversely, some firms may decrease the number of the Japanese employees because they have a good local managerial staff, so they send their Japanese staff back to Japan in order to reduce the production cost.

7.2.4 Local Content

After the appreciation of the Japanese Yen, many of the Japanese subsidiaries were forced to reduce their imports from Japan in order to save the production cost.

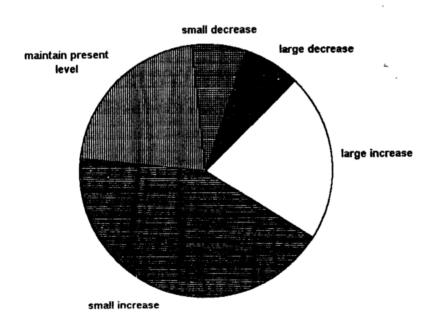
Some firms found suitable local suppliers of inputs and some of them failed to do so. Instead, they decided to produce materials and parts by themselves or to set up new subsidiaries for producing parts and materials. At the same time, some Japanese small and medium firms decided to shift their production base from Japan to Malaysia in order to reduce production cost.

We shall divide the Japanese companies in Kedah into the five following categories: 1) large increase in local content; 2) small increase in local content; 3) no change in local content; 4) small decrease in local content; 5) large decrease in local content.

CHART 7.3

PROSPECTS FOR LOCAL CONTENT

OF 14 JAPANESE FIRMS IN KEDAH



Source: Survey questionnaire

Among the 14 Japanese firms that answered survey questionnaire, 3 firms belong to the category "One", 6 firms belong to the category "Two". This means that more than 70 percent of the Japanese firms in Kedah intend to increase their local content. Thus, there is a large potential for developing production network.

Three Japanese firms belong to the category "Three", they plan neither an increase nor a decrease in their local content. There is 1 firm in the each category "Four" and "Five". These firms decided to shift their production base from Malaysia to other countries.

From these findings, we can conclude that the Japanese firms in Kedah are looking for the suppliers of inputs for their production. If local companies produce suitable materials or parts for the Japanese firms, this will bring benefits for both sides.

7.3 Issues of Production

7.3.1 Management

In 1992, the Malaysian economy was growing fast, there were no serious problems and the economic situation was bright. The Japanese firms operating in Kedah were satisfied with both production and management. However, problems are inevitable.

Here an attempt is made to evaluate the problems of management faced by the Japanese firms in Kedah. We prepared a list of ten possible problems that the Japanese firms may face and asked them to identify some. Among the problems which may rise were: 1) job-hopping; 2) shortage of workers; 3) increase of the salaries of the factory workers; 4) limited infrastructure (industrial estates, public utilities); 5) problems with quality control; 6) transfer of technology; 7) exchange rate; 8) visa and work permit; 9) tax and customs; 10) national economic policy.

Of the 14 Japanese firms that provided us with information on this subject, 10 companies named job-hopping as their number one problem. This is the biggest problem for the Japanese firms in Kedah, more than 70 percent of the companies mentioned it. Some of these firms said that 20 percent of workers had quit their jobs in 1991 and found new employment in their rival companies. Some firms said that it was bad for them to spend large sums of money for the training of workers, because when these workers became well-trained they changed their jobs for a better paid ones in other companies.

Eight Japanese firms said that the shortage of workers was a big problem of management. This is the second biggest problem for the Japanese companies in Kedah, as 57 percent of firms mentioned it. An executive of a Japanese firm said that until 1991 it was not difficult to recruit new workers, but after 1992 the labour market became very limited. Before 1992, a lot of people came for an interview once a firm put an announcement of vacancies in newspapers. After 1992, the situation changed and the firm started to suffer labour shortage.

Seven firms considered the increase of the factory workers' salaries their big concern. This is the third biggest problem for the Japanese firms in Kedah, and half of the companies mentioned it. Increase of salaries may be connected with the tight labour market. Several firms' executives said that their firms were forced to increase salaries up to the workers' expectations in order to stop them from quitting their jobs.

Seven Japanese firms considered the limited infrastructure as their main problem. This is the third most often mentioned problem, half of the firms encountered it. Especially, the transportation was difficult. A Japanese expatriate told us that sometimes it took more than two hours to reach the factory in Sungai Petani from his house in Penang, because of the traffic jams on the Penang Bridge.

Many Japanese firms are concerned about the unstable supply of water and electricity. With the booming FDI and a lot of newly-coming factories, supply

of water and electricity does not meet demand. One executive said: "The constant supply of electricity is critical for our operation".

Five Japanese firms considered quality control their biggest problem, for many Malaysian workers do not know about the concept of the quality control and do not take measures to ensure the quality of production. The quality control in Japan is very strict and if not performed well in Malaysia, the firms' customers in Japan would insist on a second tier of quality control. A manager said: "We take big care of the quality of production because we do not want to lose customers".

Five Japanese companies in Kedah said that technology transfer was their biggest problem of management. This is closely connected with job-hopping. Many workers do not continue working at a factory for a long time, even if a firm gives them a chance to get a good training; they change jobs after completing their training program. One director said: "If we send staff to Japan, they will learn more. However, some of them will quit. So we see no point in training them in Japan".

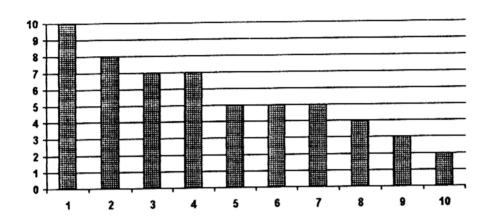
Five Japanese firms considered the exchange rate as a serious management problem. After the appreciation of the Japanese Yen, the amount of export to Japan has increased. At the same time, the amount of import from Japan has also increased. One executive said: "In 1992, the value of the Malaysian Ringgit against the US dollar increased, it caused the increase of the production's price and made it difficult to export it to the USA".

Four Japanese companies said that they had problems with getting visas and work permits. However, there was a big improvement after the implementation of the Investment Promotion Act (1986). Before 1986, it was much more difficult for the firms to get or renew visas and work permits for their Japanese staff. Now only small firms that invested less than RM 2.5 million and employ less than 250 workers encounter this problem.

CHART 7.4

PROBLEMS OF MANAGEMENT

OF 14 JAPANESE FIRMS IN KEDAH



Note: 1 - Job-hopping

- 2 Shortage of workers
- 3 Increase of salaries
- 4 Limited infrastructure
- 5 Quality control
- 6 Technology transfer
- 7 Exchange rate
- 8 Visa and working permit
- 9 Tax and customs
- 10- National economic policy

Source: Survey questionnaire

Three Japanese firms named custom duties and taxes as their problem. However, many firms disagree with this opinion. One director said that custom duties and taxes in Malaysia were lower than in many other countries and quite rational. The majority of the firms said that their taxes were exempted by

special incentives. It appears that the firms that are concerned about customs and taxes are the SMIs.

Two Japanese firms in Kedah consider the national economic policy their main problem. One director said: "Basically we understand the Government's policy. However, it is not easy for us to follow it." Very few firms consider the national economic policy a problem.

7.3.2 Concerns for Future

Each Japanese firm that invested in Kedah has its own reasons for doing so. Nevertheless, they share common concerns for the future operation in Malaysia. In order to evaluate the biggest concerns of the Japanese firms in Malaysia, we suggested them to pick some from the following list: 1) political and economic stability; 2) infrastructure; 3) labour cost; 4) quality of labour force; 5) government economic policy.

Of the 14 firms that sent their answers, 3 firms, or 20 percent, said that political and economic stability was their main concern for the future. One director said: "I personally believe that stability in Malaysia will not last".

More than 70 percent of the Japanese firms considered infrastructure their main concern for the future operation. This means that the well-established industrial estates and various facilities may be limited in Kedah. One manager said: "We are concerned about the electricity supply. Each time there is a breakdown in electricity supply we lose huge money."

Seven Japanese firms said that they were alarmed at the rising wage rates in Malaysia. But though the Malaysian labour force is relatively costly, it is still one-fourth or one-fifth of the Japanese labour force's cost. New problem which Japanese firms face in Malaysia is a shortage of workforce. One human resources manager said: "Last time, when we wanted to recruit new workers we just put a notice outside the factory and many people came for the interview. Now, we place advertisements in newspapers and still suffer the

shortage of workers. With a lot of new factories being set up here, I'm worried what will happen in the future".

Four Japanese firms considered the availability of quality labour force, especially skilled workers, as their main concern for the future. Due to the tight labour market, the Japanese firms faced a serious shortage of quality workers. One director said: "Last time, we employed only the graduates from Science or Engineering faculties. Now we employ anybody who has graduated from a university and I think this situation may continue".

Six firms named the government economic policy as their main concern for the future. This is the third most often voiced concern. One executive said: "Special incentives are not being given any longer. We are concerned about the (Malaysian) Government's further steps".

7.3.3 Subcontracting

It is obvious that the Japanese firms' intention to establish a subcontracting network in Malaysia is dictated by their desire to reduce production costs. There is an opinion that the Japanese firms prefer to import materials and parts from Japan rather than establish subcontracting relations with local firms. It is interesting to know what do the Japanese firms think about their subcontracting relations with the local partners, and whether they are satisfied with their local suppliers.

Here we divided the 14 respondent Japanese firms into the four categories according to the level of their satisfaction with the local subcontracting network: 1) very satisfied; 2) rather satisfied; 3) rather unsatisfied; 4) very unsatisfied.

A Japanese firm in the category "One" was very satisfied with its Malaysian suppliers and praised the high quality and competitive prices of materials and parts. However, this is a very rare case.

Four Japanese firms in the category "Two" were rather satisfied with their local partners, however they felt the need for a better quality control. An executive of a firm said: "The production of our subcontracting firms is usually satisfactory. However, we expect them to better maintain the quality of production".

Four Japanese firms (category "Three") considered that the level of their Malaysian suppliers was not sufficient to produce high quality parts, and they were rather unsatisfied with their local subcontractors. Some of these firms named quality control as their biggest problem and said that their Malaysian partners did not fully understand the importance of quality control.

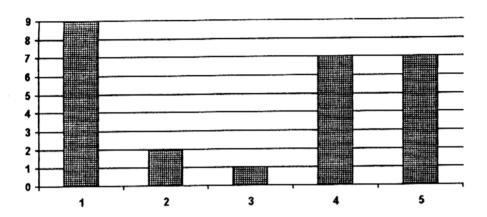
Five Japanese firms (category "Four") were totally dissatisfied with their local partners and said that their suppliers' technological level was not high enough to produce the necessary parts. In short, more than 60 percent of the Japanese firms had a favourable opinion of their local suppliers.

Clearly, in order to reduce production costs all Japanese firms have made attempts to find suitable local partners. Some firms succeeded in establishing connections with local companies and found suitable suppliers, while other companies failed to do so. Next, we shall try to evaluate the reasons why some of the Japanese firms are reluctant to establish subcontracting relations with local firms. What do they consider an obstacle?

We asked the Japanese companies to choose some from the list of five possible obstacles that prevent them from establishing relations with local partners. The possible obstacles suggested were: 1) technological insufficiency; 2) production deadline; 3) price; 4) partner is not available; 5) production is not up to agreed specifications.

Nine Japanese firms, or more than 70 percent, considered technological insufficiency of the local firms the main obstacle in establishing a subcontracting network. This means that the majority of the Japanese firms are not satisfied with the technological level of their suppliers.

CHART 7.5
PROBLEMS WITH SUBCONTRACTING PARTNERS
OF 14 JAPANESE FIRMS IN KEDAH



Note: 1 - Technological insufficiency

- 2 Production deadline
- 3 Price of production
- 4- Suitable partner is not available
- 5 Production is not up to agreed specifications

Source: Survey questionnaire

Only 2 firms identified the obstacle "Two" and another the firm obstacle "Three" as the main one. This means that, generally, the local suppliers keep the production deadline and that their prices are competitive.

Seven Japanese firms selected the obstacle "Four", which is the second biggest problem of subcontracting. This means that many Japanese firms were still looking for suitable local partners. Thus, Malaysian firms have good prospects to establish a subcontracting network with the Japanese companies.

Seven Japanese firms picked the obstacle "Five", which is also the second most often mentioned problem of subcontracting. Some of the local firms were able to produce the necessary parts. However, as the technical accuracy of the parts was not satisfactory, these parts were rejected by the Japanese firms. The

Japanese firms prefer a stable production level with a low ratio of the rejected production and require their subcontracting firm to follow strict standards of production.

We can conclude that, generally, the Japanese firms in Kedah are satisfied with the level of local inputs and are willing to establish and keep subcontracting networks with local companies, but they expect their local partners to upgrade the technological level.

CHAPTER 8 CONCLUSION

The purpose of this research is to investigate the character of the JDI in Kedah state. In this chapter, we shall summarize the findings on the JDI from the previous chapters. Then we shall review the hypothesis tests conducted in Chapter VI. Finally, we put forward some recommendations concerning the national development policy.

Generally, the Japanese firms in Kedah are successful in their management and operation. This is a good example of the Japanese management's success abroad. However, the JDI is not spared from some criticism towards it. In this study, we tried to determine whether this criticism was fair or not? We also made an attempt to investigate the weak points of the Japanese firms and to find some solutions for the problems faced by the Japanese companies in Malaysia.

Following the introduction chapter, we discussed the general features of JDI in Malaysia. For this we used secondary data from the various government agencies. We discovered that there were two waves of the JDI. One wave lasted only for two years, from 1973 to 1974, after the FTZs were set up in Malaysia. The second wave of JDI began in 1986, when the special incentives for FDI were implemented, and it continues up to the present time. To analyse the trends in the JDI, we compared the JDI with other sources of FDI and discovered that the JDI was not small in terms of investment and employment. Then, we compared the JDI in Malaysia with that in other countries. We found out that the JDI in Malaysia was mainly concentrated in the electronics/electrical industry. As a next step we reviewed the general features of the JDI in Malaysia using the data from the various organizations, such as JETRO, JACTIM, etc. We found out that the Japanese firms employ relatively small number of workers, usually less than 100 workers or between 101 to 200 employees each. The investment of the majority of the Japanese firms was big.

Eighty-nine of 129 Japanese firms in Malaysia had invested more than RM 2.5 million each. In terms of ownership structure, approximately half of the Japanese companies are wholly Japanese owned firms. One-third of the Japanese firms mentioned that they invested in Malaysia, because they aimed at the local market. We discovered that the Japanese firms in Malaysia were concentrated in electronics/electrical industry, and the majority of them was located in such industrial areas, as Selangor, Penang and Johore. Finally, we found out that the sales of the Japanese firms in Malaysia increased rapidly in the end of 1990s.

In Chapter III, we discussed the theories of FDI by Western and Japanese economists. Western economists tend to consider the FDI as oligopolistic condition. The Japanese researches stress the comparative advantage as the main determinant of FDI and consider the historical and political content of FDI. Then, we reviewed the literature of FDI in Malaysia. Generally, many economists mention the positive role of FDI in the economic development of Malaysia. Especially, Ariff (1992) emphasizes the importance of FDI for Malaysia and said that FDI contributed to the national output, employment, skill development, regional development, etc.¹

Chapter IV deals with the general features of the JDI in Kedah. For this we used secondary data which were obtained from the government agencies, such as the Kedah State Development Corporation and Consulate-General of Japan at Penang. We think that the development of the JDI in Kedah is slow compared with other areas, especially with the nearby state of Penang. We also found out that approximately half of the Japanese firms in Kedah were established in the 1980s, and they were concentrated in two industrial estates, i.e., Bakar Arang and Kulim. In terms of industrial distribution, 14 percent of these Japanese firms were engaged in electronics/electrical industry.

In terms of employment, 10 Japanese firms in Kedah employed between 100 to 300 workers each. Seven firms employed less than 100 workers each.

¹ Ariff, M. (1992), op.cit.

Then, it is interesting to notice that the employment creation by the Japanese electronics/electrical firms is higher than employment by the non-electrical/electronics firms. The Japanese firms in Kedah employed an average 2.5 Japanese expatriates per a firm, and the average number of Malaysian workers per a Japanese expatriate was 130 persons. The electronics/electrical firms employed an average 5 Japanese expatriates per a firm, which is double of the average amount of the Japanese expatriates in other industries.

In terms of ownership structure, 13 Japanese companies are wholly Japanese owned firms, and 16 firms are joint-ventures. Among the electronics/electrical firms, there are 5 wholly Japanese owned firms. There are 8 wholly Japanese owned non-electronics/electrical firms. Finally, in Chapter IV we found out that the JDI was mainly concentrated in such industrial states, as Selangor or Penang, while the amount of the JDI is Kedah was rather small. The majority of the Japanese firms in Kedah were concentrated in electronics/electrical industry.

In Chapter V, we discussed the data obtained through the survey, which was carried out from 1992 to 1993. This included the determinants, investment, employment, sales, purchase, subcontractors, adoption of the Japanese style of management and worker's salaries at the Japanese companies in Kedah.

Among the "pull" factors which attracted the Japanese investment to Malaysia, the political stability is the most important, followed by the availability of cheap and quality labour force and incentives. The appreciation of the Japanese Yen is the most important "push" factor, followed by the shortage of labour force in Japan. Aiming at the local market is the third most important "push" factor.

Nine of the fourteen Japanese firms which answered our survey questionnaire are very large firms according to their total investment. Each of these nine firms invested more than RM 10 million. There are three large firms among those that answered the survey questionnaire. These firms

invested between RM 5.0 million to RM 9.9 million each. There is one small and one very small firm in Kedah according to the total investment.

In terms of the ownership structure, more than half of the firms had the over-majority (from 76 to 100 percent of JER) Japanese ownership, especially among those 11 firms that were established in Kedah after 1985. Nine among them were the wholly Japanese owned companies, 1 firm was of a Japanese majority (from 51 to 75 percent of JER) and 1 firm was of a Japanese over-majority ownership.

The size of the Japanese firms in Kedah according to their employment is quite big. About half of the 14 Japanese firms that answered our survey questionnaire employed more than 300 workers each. However, we must mention that not all firms create huge employment. The average number of the Japanese expatriates per a firm in Kedah is 5 persons. The number of Malaysian workers per a Japanese expatriate is 113. This number is not small. The ratio between Malay and non-Malay workers in Kedah is 2:1. We discovered that non-Malay workers preferred to work in electronics/electrical industry, where the ratio between Malay and non-Malay workers was 5:3. The ratio of Malay to non-Malay workers differs by location. Thus, the share of Malay workers at the Japanese firms in Tikam Batu is the highest, and the ratio of Malay to non-Malay workers there is 13:1. The share of Malay workers in Bakar Arang is the lowest in Kedah. The ratio of Malay to non-Malay workers in Bakar Arang is 4:5.

In terms of sales, 6 of the 14 firms have sales between RM 50 million and RM 100 million. The average amount of sales per a firm is RM 105 million. The average sales of the Japanese firms in Kedah differ by industries and location. The average sales of the electronics/electrical firms are RM 146 million. The average sales by the non-electronics/electrical firms are RM 65 million. The average sales of the 4 Japanese firms in Kulim are RM 45 million, the 5 firms' in Bakar Arang average sales are RM 139 million. We also examined the export-sales ratio (ESR) and found out that the average ESR of

the Japanese firms in Kedah is 68 percent. This is a rather high figure that shows that the Japanese firms in Kedah contributed well to exports. We discovered that many export-oriented firms were established in 1985 or after 1985. We also found out that the average ESR of the Japanese firms in Kulim is higher than the average ESR in Bakar Arang. The average total value of export by the Japanese firms to Japan was just 30 percent, the other 70 percent of production was exported all over the world.

In terms of purchase, there are 3 firms where purchases exceed RM 100 million each and 6 firm with purchases between RM 50 million to RM 100 million each. The average amount of purchase of the 14 respondent Japanese firm in Kedah is RM 43 million. Amounts of purchases differ by industry and location. The average purchase of the electronics/electrical firms is RM 69 million, while the average purchase of the non-electronics/electrical firms is RM 43 million. The average purchase of the Japanese firms in Kulim is RM 16 million, of those in Bakar Arang - RM 65 million.

We calculated local content ratio (LCR). The average LCR of the 14 respondent Japanese firms in Kedah is 48 percent, and this is not a small figure. The average LCR of the electronics/electrical Japanese firms in Kedah is 57 percent, while the average LCR of the non-electronics/electrical firms is 45 percent. The average LCR of the firms in Kulim is higher than the average LCR of the firms in Bakar Arang. We discovered that 68 percent of the total value of purchase from abroad comes from Japan, the rest 32 percent are from other countries.

In terms of subcontracting, the average number of subcontractors per a Japanese firm in Kedah is 12.7 firms. The average number of subcontracting firms in Bakar Arang is higher than that in Kulim. The ratio between the local subcontractors and the Japanese subcontractors of the Japanese firms is 8:10. However, the ratio between Malay and non-Malay subcontractors is 1:5. The share of Malay subcontractors is rather small.

In terms of the adoption of the Japanese-type management, 5 Japanese firms in Kedah practiced seniority system and 3 firms adopted lifetime employment. Four firms practiced job rotation and 7 firms exercised collective decision making. Nine Japanese firms adopted equal status system, which is the most widely spread type of the Japanese management among the Japanese firms in Kedah.

In terms of salaries, the average salary of an ordinary worker at the Japanese firms in Kedah is RM 359 per month, the average salary of a technician is RM 877; and an engineer's average wage is RM 2,396. The average salary of a manager is RM 2,443 per month and that of a director is RM 3,411. The average salaries of ordinary workers and engineers in Kulim are higher than those in other places in Kedah. The increase of salaries in Tikam Batu is highest in Kedah. Usually, the salaries of workers at the electronics/electrical firms in Kedah are higher than those in other industries.

In Chapter VI we tested 12 hypotheses, five of them were not rejected, and 7 were rejected. Our findings are as follows:

- 1) The export-sales ratio and Japanese equity ratio are correlated.
- 2) There is a periodical bias for the export-sales ratio of the Japanese firms.
- 3) There is an industrial bias for the local content ratio of the Japanese firms.
- 4) The mean salary of technicians differs significantly between the two regional groups.
- 5) The mean salary of ordinary workers differs significantly between the two industrial groups.

In Chapter VII, we examined the prospects and issues of the Japanese firms in Kedah. We found out that half of the companies intended to expand the production and one-quarter of firms intended to keep it on the same level. Half of the Japanese firms were planning to increase the number of workers, and five companies intended to maintain the same level of employment.

In terms of local content, more than 70 percent of the Japanese firms intended to increase local purchase. This means that there is a big potential

market in Kedah for materials or parts. Among the problems of management, job-hopping concerned the Japanese companies most. The second biggest problem was the shortage of workers. Rising wages and limited infrastructure were also cited as problems.

Among the main concerns for the future of the 14 respondent Japanese firms in Kedah was the infrastructure, followed by the labour cost. The third biggest concern was the Government economic policy.

In terms of subcontracting relations, nine of the 14 Japanese firms were unsatisfied with their subcontracting network. The main obstacle to establishing relationship with local firms was technological insufficiencies of the latter.

The most important findings of this research can be summarised as follows:

- 1) the JDI in Kedah still consists of some SMIs. However, the majority of the Japanese firms in Kedah are not small. The JDI contributed well to the employment creation and eased the shortage of capital investment in Kedah.
- 2) The Japanese firms in Kedah are not of the import-substitution type, majority of them are export-oriented firms. JDI in Kedah significantly contributes to exports, targeted not at Japan only, but also at countries all over the world.
- 3) The Local content of the Japanese firms in Kedah is not small and has a potential for the increase. There was an established subcontracting network with local firms, however it mainly consisted of non-Malay subcontractors. Technology transfer in Kedah is carried out mainly through the subcontracting network.

From our findings we could suggest some policy recommendations:

- 1) Many of the Japanese firms in Kedah were concerned with the infrastructure, especially with an unstable electricity supply. It is absolutely necessary to improve this situation.
- 2) There is a big potential for the subcontracting between the Japanese and local firms. However, the majority of the potential local subcontractors are SMIs, which often lack capital and/or management skills. The Government

should give some incentives to promote and strengthen these SMIs, especially those owned by Malays who lag behind other Malaysians.

Before we conclude this study, we would like to contemplate on the future of the Malaysian economy. The deterioration of balance of payment, especially with Japan, may become one of the most serious challenging points for the Malaysian economy. This is mainly caused by the rapid increase of imports of inputs or intermediate products. If Malaysia is able to produce a complete production for export, but fails to decrease import, then the country may face a big deficit in balance of payment. To decrease imports the development of local SMIs is crucial. Giving special incentives to the local SMIs, especially to those owned by Malays, can be the first step in this direction. SMIs owned by Malays are less developed, therefore they need special attention so as to strengthen the political will in favour of greater industrialization. This will help to upgrade the level of the local firms' production, and to develop their production network with foreign companies. It will bring benefits not only to the local firms, but also to foreign firms as well, including Japanese companies, that are looking for the local suppliers of inputs. If the Government succeeds in developing the local SMIs, the imports will decrease, the local firms will get access to the new technologies through the subcontracting network.

It is remarkable that Kedah, a relatively underdeveloped state in Malaysia, could succeed in attracting foreign investors, including the Japanese firms. To sustain and expedite the present pace of industrialization in Kedah, SMIs will have to be promoted and supported by the Government so that the big firms can network with them.