

Chapter 5

Research Findings: Analysis of FDI Interest in the Host Country

5.1 Introduction

In chapter 4, the methodology employed to conduct a survey at Petaling Jaya and Shah Alam Industrial Estates was described. This chapter and chapter 6 present the analysis and the findings from the survey. All descriptions in these two chapters are confined to those on the surveyed sample only. Section 5.2 begins with a discussion of the sample characteristics. In section 5.3 the determinants of FDI decision-making at the above stated industrial estates are examined. The simple t-test is applied to determine the importance of factors cited in FDI decision-making. To further support findings from the survey, a time-series analysis is discussed in section 5.4. Finally in section 5.5, issues on incentives and disincentives offered by the Malaysian government to attract FDI in Malaysia are highlighted.

5.2 Characteristics of Firms Surveyed

5.2.1 Origin of Firms

A summary profile of 59 foreign affiliates surveyed is shown in Table 5.1. The country of origin was not the basis of selection

and the selected foreign manufacturing firms represent a broad geographical spread. These comprised 26 firms from Japan, 12 from Newly Industrialising Countries (NICs), 11 from the European Community (EC), and 10 from other countries.

Table 5.1: Distribution of Home Country in Survey Studies

	No.	%
Japan	26	44.1
Singapore	11	
Taiwan	1	
Total for NICs	12	20.3
United Kingdom	9	
Netherland	1	
Germany	1	
Total for EC	11	18.6
United States	2	
Canada	1	
Australia	3	
Thailand	1	
India	1	
Switzerland	1	
Sweden	1	
Total for others	10	16.9
Total	59	100

5.2.2 Types of Industry

Table 5.2 shows the industrial composition of the sample. Electronics and chemical products account for the bulk of the sample (39%), followed by fabricated metal products, food manufacturing, and transport equipment, a pattern which is fairly

similar to the sectoral allocation described in Chapter 3. Some of these firms have more than one plant¹ or subsidiary operating in Malaysia and producing more than one product.

Table 5.2: Sectoral Allocation of the Sample

	All Sample	Japan	NIC	EC	Others
Food Manufacturing	6	0	2	1	3
Textile & Textile Products	1	0	0	1	0
Wood & Wood Products	1	0	0	0	1
Paper, Printing & Publishing	1	1	0	0	0
Chemical & Chemical Products	9	4	3	2	0
Rubber Products	2	1	0	0	1
Plastic Products	1	1	0	0	0
Non-metallic Mineral Prod.	3	1	1	1	0
Basic Metal Products	3	2	0	0	1
Fabricated Metal Products	7	2	4	1	0
Machinery	4	2	0	2	0
Electrical & Electronic Prod.	14	8	1	3	2
Transport Equipment	6	3	1	0	2
Scientific & Measuring Equipment	1	1	0	0	0
Total	59	26	12	11	10

Most of these industries are labour intensive but utilise higher-end technology (26 cases). On the other hand, capital-intensive industries comprise only 25 per cent or 18 of the total sample. The rest of the sample (15 cases) are labour-intensive but low-tech in application².

Japanese firms are concentrated more in high-tech industries. For instance, electronics and chemical industry comprise 46.1 per cent of the total number of firm surveyed. On the other hand, the sampled NICs' investments are more equally distributed, with higher weightage in fabricated and chemical industries. This pattern also applies to EC and other countries' investments.

5.2.3 Ownership

A large proportion of the firms (23 firms or 39%) surveyed are wholly owned by the parent company. Of the remaining firms, 61 per cent are owned by both parent company and host country (Malaysia) company. Of these, 20 firms have majority foreign ownership, and the balance have minority foreign participation. Ownership is mostly shared with a private firm in the host country, but occasionally with the local government (5%) or both parties (12%). The advantage of joint ventures with local parties was stated by a study undertaken by Bradley (Eiteman, Stonehill and Lessard, 1982: 295) as such:

"historically, the rate of expropriation has been ten times greater for a joint venture with the host government than for a 100% US owned subsidiary. Similarly, the probabilities are increased eightfold for joint venture with foreign multinational corporation. If with local partners, the risks of expropriation can be reduced".

The investors have local partners in the view of maintaining a good relationship with the host government (15 cases) and to accelerate penetration into the Malaysian market (23 cases). Five firms reported that local capital is needed to minimize the risks of investing in a new environment. However, most of the investors said that they accept local partners solely to comply with local government regulations (24 cases). Some of them even commented that:

"local capital is not needed at all. We have local partners solely to fulfil government regulations in order to enjoy fiscal incentives".

However, one of the respondents appreciated their local Bumiputra partner very much. According to the senior manager, with the Bumiputra participation, they manage to penetrate the Malay market much more easily.

Foreign affiliates generally viewed the Industrial Coordination Act 1975 as a deterrent to them and unnecessary interference in the working of the free market. This view can be confirmed by the fact that the inflow of foreign direct investment in the manufacturing sector increased markedly after the promulgation of Promotion of Investments Act in 1986. This phenomenon suggests that the inflow of foreign investment is greatly influenced by the equity structure. Statistical difference regarding period of establishment and equity structure before and after 1986 was also tested.

Table 5.3 shows that before the promulgation of the Promotion Investment Act, there were only 10 firms with 100 per cent foreign ownership, and 16 firms with a share ranging from 50 to 99 per cent foreign ownership. It is learnt that for the 20 firms established after 1986, 65 per cent were wholly foreign owned, and 15 per cent had minority foreign share. As expected, such difference does in fact exist at 3 per cent significance level.

More than 57 per cent of investments from Japan are wholly-owned subsidiaries. By contrast, 100 per cent independent investment was rare, particularly from NICs and the EC, where minority ownership joint ventures are not uncommon (see Table 5.4). Previous studies (Reuber, 1973: 222; and Beal, 1984: 3) have shown that Japanese are more willing to enter into joint ventures and even minority share holding than other investors. However, in our survey studies, the reverse is held true, as can be seen from Table 5.4.

**Table 5.3: Distribution of Ownership by
Period of Establishment
(Number)**

Foreign Ownership	Before 1986	After 1986
30 - 49%	13 (33.3%)	3 (15.0%)
50 - 70%	8 (20.5%)	1 (5.0%)
71 - 99%	8 (20.5%)	3 (15.0%)
100%	10 (25.6%)	13 (65.0%)
Total	39	20

Chi-square value= 9.193

**Table 5.4: Distribution of Foreign Ownership
by Home Country (percentage)**

Ownership	Home Country			
	Japan	NICs	EC	Others
30 - 49%	19.2	41.7	36.4	20.0
50 - 70%	7.7	8.3	9.1	50.0
71 - 99%	15.4	33.3	27.3	0
100%	57.7	16.7	27.3	30.0

In terms of the type of industry, key areas of manufacturing, especially electrical and electronic, fabrication, and machinery industries are majority foreign owned (see Table 5.5).

Most such firms were still controlled by foreign subsidiaries despite the dominance of local equity capital for foreign minority ownership. Sixteen respondents from the foreign minority category indicated that the decision-making was in the hands of both local and foreign partners. Yet, respondents agreed that the foreign partners still have the final say in decision making. In firms which hold majority or 100 per cent ownership but do not have foreign expatriates, local senior managers are responsible for the decision making. However, ultimate decisions are decided by the parent companies.

5.2.4 Year of Establishment of Firms

The foreign investment entities in this survey have long

histories. Thirty-five of the firms have been established in Malaysia since the 1970s. Twenty-two per cent of the firms were established during the period 1980-88 while several of them were established recently (18.6%) (see Table 5.6).

**Table 5.5 : Distribution of Foreign Ownership
by Type of Industry (no. of respondents)**

	Ownership		
	30 - 49%	50 - 99%	100%
Food Manufacturing	1	2	2
Chemical & Chemical Products	3	0	2
Rubber Products	1	2	0
Plastic Products	1	0	1
Fabricated Metal Products	2	2	2
Machinery	1	1	2
Electrical & Electronic Prod.	1	2	7
Transport Equipment	1	2	1
Scientific Measuring Equipment	0	0	1
Others ¹	5	9	5
Total	16	20	23

Note: ¹includes Textiles, Wood, Paper, Printing and Publishing, Basic Metal, and Non-metallic Mineral Products.

In the 1960s the government began actively promoting foreign investments to soak up the large pool of unemployed workers. In our sample thirteen labour-intensive, low-technology firms were established. Those that came in later are also labour-intensive but utilise higher-end technology. Most of the firms in

the sample established in 1980s and early 1990s are concentrated in machinery, electronics and chemical products.

Table 5.6: Year of Establishment of Sample

Year	Number
1940s	1
1950s	5
1960s	13
1970s	16
1980 - 1986	5
1987 - 1989	16
1990	3
Total	59

5.2.5 Sampled Firms FDI's Experience

The decision to invest in Malaysia is affected by a company's attitude to foreign versus domestic investment and its previous overseas investment experience. Companies already established in a foreign market, would appear to have made a basic decision that foreign expansion is preferable to domestic expansion. For the new players this must be the first part of the decision process.

Our survey data indicated that 35 companies (59.5%) were producing in other foreign markets at the time the Malaysian investment was made. Nevertheless, one of the Japanese respondents reported that they had closed down their only

operation in Taiwan after deciding to invest in Malaysia due to high labour costs, political instability and inadequate infrastructure system. Subsequently, 41 companies branched out to other countries after establishing operations in Malaysia. These included 7 companies who made their first overseas investment. This phenomenon suggests that respondents are keen on diversifying their plants, instead of putting all their eggs in the Malaysian market.

After investing in Malaysia, ASEAN (excluding Malaysia and Singapore) is the most favoured location for new plants, with Indonesia topping the list, followed by Thailand and the Philippines. China, Malaysia stiff competitor, has 11 plants and 3 were established in Vietnam. NICs as a whole only attracted 13 plants, Europe 7, US 3, and others 8. Twelve firms set up their operation all over the world (see Table 5.7).

Interestingly, we discovered that about 24 per cent of the firms invested solely in Malaysia. Of these, 9 firms were Japanese, NICs 3, and the remaining 4 from other countries.

We further asked the respondents about the products they produce outside Malaysia as well as what special features or characteristics attract them to invest in the above-mentioned countries.

Of the total 42 companies, 34 (77.3%) reported that similar products are being produced³, while complementary and unrelated products comprise 11 per cent each.

Table 5.7: Distribution of Foreign Plants in Other Countries After Investing in Malaysia

Country	Number
Thailand	10
Indonesia	12
Philippines	8
-----	-----
ASEAN	30
-----	-----
Singapore	6
Taiwan	5
Hong Kong	1
Korea	1
-----	-----
NICs	13
-----	-----
China	11
Vietnam	3
Europe	7
US	3
Others	8
All over the world	12

Although the objectives of the firms in diversifying the location of their plants are often complex and inter-related, the majority of the firms, regardless of the country of origin or 2-digit industry subsectors, placed their emphasis on attractive growth prospects outside the country. The quest for increased profits was not cited as often as might have been expected. Only investors from EC, NICs and industry 38 regarded higher returns on investment as important. The "desire to secure sources of supply for other subsidiaries in the present and future" is the second most frequently cited objective by the Japanese. Maintaining the market position was found to be of some importance for all the investors (see Table 5.8).

**Table 5.8: Reason to Diversify Location Abroad After Malaysia
(number)**

	Return on Investment High	Attractive Growth	Major Competitors are there	Guaranteed Source of Supply	Others
All Countries	13	37	10	9	16
Japan	3	13	2	5	5
NIC	4	8	2	0	4
EC	4	11	3	3	3
Others	2	5	3	1	4
Industry 31	2	5	2	1	5
Industry 35	2	8	3	2	1
Industry 38	7	20	4	3	9
Others	2	4	1	2	1

Note: Industry 31= food manufacturing and beverages and tobacco.

Industry 35= chemical, petroleum and coal, rubber, and plastic products.

Industry 38= fabricated, machinery manufacturing, electrical and electronic, transport equipment, and scientific and measuring equipment.

Others = exclude industries 31, 35 and 38.

Since most of the respondents have invested in other countries after investing in Malaysia, the respondents were asked to weigh the strengths and weaknesses of Malaysia against other ASEAN countries as well as non-ASEAN countries. However, answers were only provided for ASEAN as a group.

The strengths and weaknesses are categorised according to factor, viz., political, economic, social as well as costs. In terms of strengths, political stability was most frequently rated by respondents (19 cases). Similarly, 19 respondents praised Malaysia good infrastructure facilities, 5 rated the growing economy of Malaysia as attractive. Recently, an US-based World Economic report noted that Malaysia has the lowest literacy rate among ASEAN countries at 78.4 per cent, compared to Singapore (100%), Thailand (93%), the Philippines (87.8%) and Indonesia (81.6%) (New Straits Times, 21 June, 1994). Contrary to what had been reported, our respondents viewed that education standards are relatively high compared to other ASEAN members except Singapore. Also, they found that English is relatively widely spoken here. An empirical study by Irving B. Kravis and Robert E. Lipsey (UNCTD, 1993: 8; New Straits Times, 6 June, 1994) also found that "the use of English as the major language in host country" explained US overseas FDI in Malaysia." In terms of social life, they felt comfortable and secure staying in Malaysia.

Under the category of incentives perks, six respondents said that Malaysia's incentives are competitive and attractive. Two respondents were fascinated by our "Look East Policy". Generally, six of the firms felt that the cost of production is still low here, since inputs (raw materials, skilled and unskilled labour in this case) are available domestically.

Nevertheless, as the economy grows with an influx of foreign

direct investment, Malaysia experienced a shortage of labour at all levels recently. This resulted in a sharp rise in labour costs, without an increase in productivity. Respondents were also of the opinion that shortages of skilled labour retard their plans to develop high-tech and up-stream industries.

Despite the growing Malaysian economy, some respondents found that the local market is already saturated, as the population is small.

Three respondents said that red tape, government restrictions on equity and employment structure in their activities are a deterrent to attracting future investments into Malaysia. One of the local human resource managers commented that in their operation, on average, bumiputra productivity is relatively lower than that of non-bumiputras. He feared that the government requirement of employing a certain percentage of bumiputras in a company might adversely affect the company's performance if it is enforced too rigorously.

5.3 Motives of FDI in Malaysia

Many theories have been advanced to account for the pull and push factors that make firms invest abroad. When firms have almost fully utilised their advantages at home and have to face increasing competition, they are motivated to go overseas. It has been argued that the possession of some advantages (country-specific, industry-specific, and firm-specific) is only a necessary condition for investing abroad. The sufficient

condition is that the firms can internalise their advantages by investing abroad (as suggested by the eclectic model) and the creation of an internal market such that the benefits of FDI outweigh the costs. To explain the motivation of a firm to invest in a particular host country, the pull factors of the host country are indeed needed.

With regard to Malaysia, the motivations for foreign firms to invest here can be discussed in relation to six factors, i.e., access to factors of production, access to markets, economic status, political stability, fiscal incentives and disincentives, and socio-cultural factors.

To analyse the motives identified by several groups of firms distinguished by home country, sub-sector, and characteristics of a firm, the following statistical analysis of significance was used. For each group of firms, a low mean score (less than 5.5) means an unimportant motive, while a high mean score (more than 5.5) means an important motive. Motives are more rigorously classified according to degrees of strength by using t-test on mean scores to identify, (i) insignificant motives i.e., motives with a mean score not significantly different from 5.5; and (ii) significant motives i.e., motives with a mean score significantly greater than 5.5⁴. It is important to note that this procedure assumes that mean scores are normally distributed.

It should be emphasised that when the samples were subdivided according to their characteristics, more often than not, there was a small sample size for each category. This situation would

hamper the determination of statistical significance. Therefore, instead of using a single cutoff point, i.e., 0.05 significance level, two cutoffs, namely 0.05 and 0.10 level, are employed. It is difficult to regard anything not significant at 0.05 level as highly meaningful, but it is difficult to ignore anything significant at 0.10 level given the small size of several samples used. On the other hand, it is reasonable to assert the relatively unimportant motives that are not significant at the 0.10 level.

5.3.1 Investment Motives by Country of Origin

5.3.1.1 Access to Factors of Production

Based on the total 59 samples, 3 of the 6 motives in accessibility to factors of production, namely access to quality of labour, low-cost skilled and unskilled labour, were significant at 5 per cent and 10 per cent level for the first two factors and last factor, respectively. It should be noted, however, within home countries, these 3 factors were only significantly important for NICs, and none was found to be significant for EC investors. Japanese investors were more concerned with access to quality of labour (mean score 6.81) than with low-cost skilled labour (6.31). On the other hand, the home countries classified under "other" emphasised access to low-cost skilled labour (see Table 5.9).

5.3.1.2 Access to Markets

It is interesting to note that production for the Malaysian market was the only significant factor at 5 per cent level cited by all respondents. This phenomenon also applies to NICs and EC investors within their own country. However, this factor was not important to the Japanese in their FDI decision-making in Malaysia. On the contrary, production for third countries played a critical role at 5 per cent level. This result is expected since the majority of the Japanese production in Malaysia is for export purposes (see Table 6.5 in Chapter 6).

5.3.1.3 Economic Status

On the issue of economic status, the overall sample response emphasised size and growth of the Malaysian market, extensive infrastructure facilities, and the availability of cheap land in Malaysia. The size of the Malaysian market was statistically significant at 10 per cent level, whilst the remaining factors were significant at 5 per cent level. These patterns were quite similar to the results observed in Japanese and NICs affiliates. Surprisingly, none of the factors on economic status were considered important by EC respondents. Though the growth of the Malaysian market was fairly important, it was not significant to EC investors at 5 per cent or 10 per cent levels. This factor, however, was the only significant motive found in home countries classified as "others".

5.3.1.4 Political Stability

It is interesting to note that all variables of political stability, namely frequency of change in government, political ideology, sabotage, leadership crises, and the relationship between civil servants and political leaders played an important role in determining Japanese FDI inflows to Malaysia. These factors were statistically significant at 5 per cent level, except for the last motive, which was significant at 10 per cent level. For the remaining investors of the home countries concerned, these factors were neither important nor significant in explaining their FDI decision-making in Malaysia, with the exception of the frequency of change in government and political ideology for NICs affiliates.

5.3.1.5 Fiscal Incentives and Disincentives

The importance of incentives and disincentives was seldom cited in explaining FDI inflows to Malaysia, except for the equity problem. This motive, however, was highly prominent among the Japanese and "others" home countries' investors. To some extent, other incentives was rated as an important factor by the sampled Japanese firms.

5.3.1.6 Socio-cultural Factors

Out of the 10 factors in this category, 60 per cent of the variables were statistically significant at 5 per cent and 10 per cent level. The significant factors at 5 per cent level were

literacy rate in Malaysia, diligence of local workers, Malaysian (either in terms of people or government) attitude toward private foreign capital, and strength of labour movements in Malaysia. The quality of life in Malaysia was statistically significant at 10 per cent level. These patterns are fairly similar to the motives cited by Japanese and NICs affiliates. The EC and "others" home countries' investors, on the other hand, were only concerned with the government's attitude toward foreign investors. This factor was statistically significant at 10 per cent level. The importance of diligence of local labourers was also accorded significance by the latter.

Labour movements were also found to be significant in Northern Ireland. Despite violence in the country, US and other foreign affiliates were continuing to initiate fresh ventures and expand existing plants. The major motivation for investing was the prevailing peaceful labour relations (Janssen, 1973).

As shown in Table 5.9, some conclusions can be drawn from the above discussion. Firstly, all home countries agreed that the attitude of the government toward FDI is an important and significant determinant for their investments. Access to quality labour and diligence of labour were also identified as significant motives, except for EC investments.

Secondly, for Japanese firms, production for third countries, exchange rates, cheap land, sabotages, leadership crisis, tax exemption, tariff exemptions, other incentives, equity requirements, attitude of the people, political ties to capital-

exporting countries were significant at 0.05 level. The relationship between civil servants and political leaders, and quality of life in Malaysia were statistically significant at 0.10 level. The special importance of these factors is highlighted in Japanese firms, but it is somewhat surprising that no other countries identified these factors as important. The result is also consistent with previous surveys conducted by Toyo Keizai in 1983, 1986 and 1989. Over these periods, among the chief variables cited by Japanese FDI in Malaysia were: to increase sales in local and third markets, to benefit from protective policies offered by the Malaysian government, and to reduce costs by employing local labourers. From Keizai survey report, it was observed that the importance of the first factor had increased, while the other two factors had decreased during the survey periods.

Thirdly, in NIC firms, low-cost skilled labour, size, growth, and stability of domestic prices were significant at 0.10 level. According to a source at Citibank in Taiwan, the Taiwanese started to relocate manufacturing activities to Malaysia in the past two years because they were mainly attracted by its cheap labour, cheap land, and cheap living costs (New Straits Times, 17 July, 1994).

Fourthly, production for the Malaysian market and the host government's attitude toward FDI were the only significant motives cited by EC investments.

Japanese firms expressed concern with variables closely related to overall Malaysian political stability, incentive-related variables and social factors. On the other hand, non-Japanese respondents were influenced by the overall Malaysian economic performance, access to factors, and socio-cultural factors. In terms of access to markets, Japanese companies are more concerned with production for third countries, while non-Japanese firms emphasised the local market.

5.3.2 Investment Motives by Subsector

Mean scores of investment motives are now analysed according to industry by subsectors -- 2-digit ISIC level (see Table 4.2 in Chapter 4 for the industry classification). The results, shown in Table 5.10, are rather dissimilar from those discussed in Table 5.9.

5.3.2.1 Access to Factors of Production

In food and beverages industry (industry 31), the only statistically important motive was access to quality labour. As in electrical and electronic industry⁵ (industry 38), respondents from this sub-sector were also concerned with cost of skilled as well as unskilled labour. These factors were significant at 5 per cent level. However, none of the factors was regarded important in chemical industry⁶ (industry 35).

5.3.2.2 Access to Markets

From the survey, we found that to produce goods locally to match those of rival investments was the only statistically important result at 5 per cent level to food and bevarages. The importance of matching rival investment in food and beverages industry is clear since the government was rigorously promoting import-substitution industry in the early stages of industrialisation. In order not to lose out to other competitors, foreign food manufactures slowly moved into Malaysia to produce goods locally.

However, the importance of producing goods for sale in the Malaysian market was almost consistent in all industries. In electrical and electronic industry, though respondents viewed producing goods for third countries as of some importance, it was not statistically significant as shown by the t-statistic value.

5.3.2.3 Economic Status

The pattern of FDI decision-making in Malaysia is quite similar within food and berages industries and chemical industry regarding factors of economic status. Affiliates from both these industry sub-sectors were concerned with the size and growth of the Malaysian market, and the availability of good infrastructure in the host country. These motives were significant at the 5 per cent level. In addition to this, stability of domestic prices and corporate tax rate in the host country were cited as important and significant at the 5 per cent and 10 per cent levels

respectively, in food and beverages industry.

In electrical and electronic industry, apart from the common factors cited in chemical and food and beverages, namely, growth in domestic market and infrastructure facilities in the Malaysian economy, decision-making was also influenced by the factor of "availability of cheap land". The growth factor and land availability were, to a certain extent, also important in "other" industries' decision-making, but they did not appear to be statistically significant.

5.3.2.4 Political Stability

As compared to the analysis by home country, none of the respondents from the industry sub-sector regarded all factors in this category as important and statistically significant. The two most important and significant variables, viz., frequency of change in government and political ideology, were found in food and beverages industry and electrical and electronic industry. The importance of the latter motive was also demonstrated in chemical industry.

5.3.2.5 Fiscal Incentives and Disincentives

The importance of incentives and disincentives was hardly mentioned by respondents. Affiliates, were only concerned with disincentives, i.e. equity restrictions imposed by the host country. This is in line with the phenomenon found in home-

country consideration.

5.3.2.6 Socio-cultural Factors

The importance of literacy rate, diligence of labour, and the attitude of the Malaysian government toward foreign investors was reflected in food and beverages; electrical and electronic; and chemical industries in their FDI decisions in Malaysia. These factors were either significant at 5 per cent or 10 per cent levels. Firms from both chemical and electrical and electronic industries were also influenced by the attitude of the Malaysian people toward co-operation with private foreign capital and labour movements. Nevertheless, the latter factor was only found significant in electrical and electronic industry at 5 per cent level, whilst the former motive was significant at 10 per cent in electrical and electronic industry and 5 per cent level in food and beverages industry.

In short, as shown in Table 5.10, all industry sub-sectors were more concerned with production for Malaysia, overall economic performance, and socio-cultural factors. Fiscal incentives and disincentives variables and political stability were not the main concern in this analysis as compared to analysis by home country. Surprisingly, variables such as mineral inputs, agricultural inputs, and manufacturing inputs did not significantly influence foreign investment decisions.

5.3.3 Investment Motives by Firm Characteristics

Having examined the determinants in different home countries and industry subsectors, attention is now paid to motives by respondents' characteristics, namely, degree of market orientation, and whether the respondent has experience before investing in Malaysia.

5.3.3.1 Experienced vis-a-vis First-time Overseas Respondents

The experience of foreign investors is an important criterion as an investor's diversification is often a goal of Malaysian policy. Thus, it is important for policy-makers to be aware of how experienced foreign investors differ from those of first-time overseas investors.

The importance of inputs (quality, low-cost skilled and diligent labour), infrastructure facilities, and the attitude of the Malaysian government towards FDI were the common factors significant at 0.05 level for both the non-experienced and experienced investors. Nevertheless, political ideology was significant at 0.10 and 0.05 levels respectively for both first-time overseas investors and experienced investors (see Table 5.11).

Apart from these factors, low-cost unskilled labour and political ties with capital-exporting countries were significant at 0.05 level and 0.10 level respectively for inexperienced investors. The variable of exporting goods to third countries was important

to some extent in the decisions of first-time overseas investors (mean score = 6.29), but it was insignificant by the t-test.

On the other hand, production for the Malaysian market, size, growth, cheap land, frequent change in government, equity requirements, literacy rate, attitude of the people toward FDI, and labour movement were statistically significant at 0.05 level for experienced investors, whilst quality of life in Malaysia was significant at 0.10 level.

In summary, from the perspective of these characteristic, it was established that fiscal incentives and disincentives variables were not significant factors for first-time overseas investors or for experienced investors. The only exception within these factors was equity requirements. This pattern was also observed in market factors. The importance of production for the local market is well understood by experienced investors since the main reason for diversifying production after investing in Malaysia was the growing domestic market. Also, there were 35 firms which had other overseas investments before investing in Malaysia (see section 5.2.5, "Sampled Firms FDI's Experience"). Thus, their production network concentrated solely on the local market. In short, experienced investors put more emphasis on overall economic performance and socio-cultural factors, while the first-time overseas investors were more concerned with access to factors.

5.3.3.2 Export-oriented vis-a-vis Local Market Firms

In Malaysia, the foreign manufacturing exporters are restricted to a few specific activities. As seen in Table 1.3 (Chapter 1), two industries, namely electronics and textile products were dominated by export-oriented firms. Nonetheless, export growth has been remarkable in chemicals, petroleum, transport equipment, and wood products subsectors. The significance of structural change in exports in recent years is partly the result of Malaysian policies which strongly encourage export-oriented investments. According to MIDA (Malaysia Industrial Digest, Jan-Mac 1994), manufacturing exports grew from 15.8 per cent in 1992 to 20.0 per cent in 1993. Meanwhile, the growth of manufactured exports during the 1986-1992 review period of the achievements of the Industrial Master Plan (IMP) has far out performed the IMP target, i.e., 29.9 per cent per annum vis-a-vis 9.4 per cent per annum. In terms of industry sub-sectors, with the exception of palm oil and iron and steel, all other sub-sectors recorded annual export growth rates which exceeded IMP targets. In particular, the growth was driven by generous incentives offered by the government to attract export-oriented investments into Malaysia.

Based on the data of this survey (see Table 5.11), incentives such as tax exemptions, trade exemptions, other incentives and disincentives, namely equity requirements and foreign exchange remittance were statistically significant for export-oriented investments at 0.05 level. The variable of political stability was also rated strongly by these firms. In terms of socio-

cultural factors, only variables of language barrier, quality of local investment partners, different religions, and the multi-racial society were identified as not significant motives for them to invest in Malaysia. It is pertinent to note that exchange rates, infrastructure facilities, cheap land, re-imports, production for third countries, and skilled as well as unskilled labour were significant determinants of export-oriented investments. Interestingly, too, the importance of skilled labour is stronger than that of unskilled labour. The export-oriented manufacturing activities in Malaysia are concentrated in labour-intensive industries. To maintain their competitive edge in the international market in the light of increasing wages, it is expected that the affiliates would seek to upgrade their Malaysian operations. As a result, skilled labour is their chief concern in demanding human resources.

In contrast, the afore-mentioned variables might not be considered important motives for local market-orientated investment. Among the respondents of local market-orientated investment, production for the local market, size, growth, infrastructure facilities, and host government's attitude toward FDI were cited as important and significant motives for their investments at 0.05 level. In addition, domestic prices and literacy rate also affected their decisions.

5.3.4 A Comparison Between Japanese and non-Japanese Respondents in Electrical and Electronic Industry

As a final item on the mean scores of investment motives, a comparison is made between Japanese and non-Japanese firms in electrical and electronic industry. The analysis is confined to this sub-sector because the majority of our respondents (32 cases) are concentrated in this particular sub-sector. Besides, the size of distribution between the two groups are equally distributed. Here, firms from NICs, EC, and firms classified under "others" were identified as non-Japanese firms.

Table 5.11 shows that factors which were statistically significant are quite similar to those of export-oriented firms. This pattern is obvious since most of the production from this sub-sector of Japanese firms is exported either to the home country or to third countries. Access to quality labour and non-trade tariff barriers were considered significant factors in addition to variables considered under export-oriented firms. In contrast, the pattern of non-Japanese firms was dissimilar to local-market orientation firms. Here, human resources variables, growth, infrastructure facilities, and government attitude toward FDI were statistically significant at 0.05 level.

5.3.5 FDI Decision-making at an Aggregated Level

The preceding discussion of significant variables for each factor was at the disaggregated level. The respondents were also asked to rate the importance of six factors according to their

priorities when decisions were made (see Appendix 1). The survey results rated the factors in descending order, that is, assigning 1 to the most important factor, and 6 to the least important factor. The intention of this analysis was to find out which factors received the highest and lowest priorities. To determine the rating priorities, the total scores of each factor were first accumulated. The factor with the lowest score, was the one respondents assigned the highest priority factor in their overseas investments.

Based on a total of 59 samples (see Table 5.12), the results show that investors accorded political stability the highest priority when making their FDI decisions in Malaysia. In descending order, this was followed by access to markets, economic status, and access to factors of production. As stated earlier, fiscal incentives and disincentives variables were rarely acknowledged as significant motives. Thus, they were identified as the fifth priority. In contrast, variables related to socio-cultural factors were well considered by the investors, but they were the lowest priority in their investment decision.

Within the geographical spread, political stability was not cited as the highest priority by the home countries. Nevertheless, social factors have always been rated the lowest priority. Japanese and NIC respondents accorded policy imperatives the highest priority. For Japanese, access to markets had higher priority than economic status. But NICs investors had different priorities. This pattern applied to access to factors of production and political stability. The Japanese were more

Table 5.12: Explaining Priority* of FDI Inflow into Malaysia

	Sample	Access to Factors of Production	Access to Markets	Status	Political Stability	Policy Imperatives	Socio- cultural Factors
All	59	4	2	3	1	5	6
Japan	26	5	3	2	4	1	6
NICs	12	4	2	3	5	1	6
EC	11	4	1	2	3	5	6
Others	10	4	1	2	2	5	6
Non-Japanese	33	5	1	2	4	3	6
Industry 31	6	4	1	3	2	5	6
Industry 35	12	4	1	2	3	5	6
Industry 38	32	5	4	2	1	3	6
Other Industries	9	3	2	4	1	5	6
Experienced before Malay	24	4	2	3	1	5	6
No experience before Mal	35	4	2	3	1	5	6
Export-oriented	25	4	5	2	1	3	6
Local-market-oriented	34	4	1	3	2	5	6
Japanese in Industry 38	16	4	5	2	1	3	6
Non-Japanese in Industry	16	4	1	2	3	5	6

Note: * 1=Highest priority 6=Lowest priority

concerned with political stability; NIC respondents, on the other hand, rated access to factors of production. EC investors considered access to markets as the highest priority; this was followed by economic status, political stability, access to factors and fiscal incentives and disincentives. "Others" home countries' respondents have the same priority ratings as EC respondents. In a comparison between Japanese and non-Japanese investors, the latter is more concerned with markets and economic status than policy imperatives.

Looking at industry sub-sectors at the 2-digit ISIC level, the priorities ranked in food and beverages and chemical industries are quite similar. On the contrary, the priorities of electrical and electronic industry were totally different from the preceding two industries. In making FDI decisions in Malaysia, electrical and electronic industry considered political stability as the highest priority to be considered, but food and beverages and chemical industries cited access to markets, which is only the fourth priority in electrical and electronic industry. Political stability was considered second and third priorities to food and beverages industry and chemical industry respectively. On the other hand, electrical and electronic industry ranked policy imperatives as third priority while food and beverages and chemical industries ranked it fifth. The priority placed on factors of production and on social factors in these three industries was similar; all were rated them low.

Judging by the investors' experiences, the priorities accorded to the six factors did not differ between the two groups

(experienced vis-a-vis inexperienced investors). Also, the priorities in this perspective were similar to the overall investors' point of view.

As far as market orientation is concerned, political stability again appeared as the highest priority for export-oriented investors, while local market respondents accorded it second priority. Undoubtedly, they placed more concern on access to markets. However, it was the fifth priority for export-oriented respondents. Economic status and fiscal incentives and disincentives were cited after political stability in export-oriented investments. For local market investments, economic status also appeared after political stability. Access to factors of production was relegated to fourth priority by both. Again, socio-cultural factors were cited as the lowest priority.

In short, it may be concluded that the most frequent factors rated as the highest priority, second or third priorities are market factors or political stability, followed by economic status. Access to factors of production is rated as fourth, and socio-cultural factors as the lowest priority.

In summary; the evidence from the survey suggests that a variety of economic, political, social, public policy, and cost factors play some role in determining the course of FDI inflow into Malaysia. Among the chief variables are size, growth, low-cost labour, infrastructure facilities, frequency of change in government, literacy rate, diligence of labour, and equity requirements of the government.

5.4 Time-series Analysis

To further support statistically significant variables in the survey, an econometric model is provided to capture some of the variables mentioned. In specifying the econometric model for the study, evidence suggested in the literature and survey has been utilised. The basic determinants of FDI are depending on three variables: the size of the economy, the growth of the economy and variations in the level or variance of the exchange rate of the country (UNCTD, 1993: 9). The size of the market is represented by the size of GDP. It is assumed that FDI inflows are positively correlated with the size of the economy. A large economy provides opportunities for exploiting economies of scale embedded in large markets, superior infrastructure capital to support new business activities and substantial sources of complementary capital for FDI to flourish. Also, a high degree of skilled labour and efficient organisational capital are also associated with economy of large markets.

The change in GDP serves as a cyclical factor to capture fluctuations in output of the economy. These fluctuations are generated by complex supply and demand shocks that affect an economy. A country which is experiencing a stable or accelerating growth of output is likely to be more attractive to MNCs than one experiencing wide fluctuations in GDP. Thus, it is assumed that FDI inflows are positively correlated with changes in output.

The third variable of the model is the effect of exchange rate fluctuations on FDI inflows. The response of FDI to exchange rate

movements may take numerous forms. Firms may expand or contract existing production operations, enter or exit foreign markets, change the location of their operations, reinvest or repatriate earnings. Explanation of the effect of exchange rate changes on FDI inflows by using this type of liquidity-based model depends on changes in the value of the host country's currency, and may reflect possible misalignments of currencies. Thus, there is an additional role for the exchange rate namely, exchange rate volatility. It may impede FDI inflows owing to the problem of uncertainty, which will ultimately decrease a firm's willingness to undertake long-term commitments to expand its capacity. Firms enter a foreign market only after the path of exchange rates is suitably stable, so as to assure a reasonable level of profit. Thus, volatility of exchange rates may serve to discourage FDI inflows (UNCTD, 1993: 10).

Aside from the three main variables, government expenditure on social and economic services was also incorporated in the model due to its significant in the survey findings. This variable was taken as a proxy to reflect literacy rate and infrastructure facilities provided in the country. There are other additional variables that could explain the FDI inflows. However, owing to the problems of measuring the specific variables and whether or not the variables are correlated, only some of the variables are considered in this study. If the variables are highly correlated, and the contributions of these variables are considered, a multi-equation model is needed. This analysis, however, is not attempted here.

This model is estimated using regression analysis with annual data for the period 1978-1991. The basic model takes the following form:

$$\text{Log FDI}_t = a_0 + a_1 \text{GDP}_{t-1} + a_2 \text{CGDP}_t + a_3 \text{GEXP}_t + a_4 \text{ER}_t + a_5 \text{VER}_t + u_t$$

where FDI_t = inflows of FDI to Malaysia in year t ,

GDP_{t-1} = the level of real GDP in year $t-1$,
(which signifies the size of the market)

CGDP_t = the change in real GDP between year $t-1$ and t
(which signifies the growth of the market)

GEXP_t = the government expenditure

ER_t = the exchange rate, defined as a ratio of domestic currency (RM) to the US dollar, at year t ,

VER_t = the squared deviation of the exchange rate from its mean over the period 1979-1991, and

u_t = random terms in year t .

The estimate of the determinants of FDI inflows to Malaysia is shown in Table 5.13. In estimating the model, all parameters had the expected signs and were statistically significant, except for volatility of exchange rates. The Durbin-Watson (DW=2.03) value showed no evidence of any significant serial correlation in the residual. In addition, the model explains about 90 per cent of the variation of FDI inflows to Malaysia.

As depicted in Table 5.13, inflows of FDI to Malaysia are mostly determined by exchange rates, and size and growth of the domestic market. The coefficients of these three variables are statistically significant at 1 per cent level. This suggests that exchange rates, the size of the market and its growth are forces

that influence FDI inflows to Malaysia.

Table 5.13: Parameter Estimates for Malaysia, 1979-91

Variable	Coefficient	
Constant	14.59	(8.61) ¹
GDP _{t-1}	0.00007	(4.48) ¹
CGDP _t	0.00011	(3.68) ¹
GEXP _t	0.00017	(2.36) ²
ER _t	-0.00514	(-5.32) ¹
VER _t	0.0000007	(0.18)
R ²	0.899	
D-W	2.03	

Note: value in parenthesis are t-value.

¹ significant at 1 per cent level.

² significant at 10 per cent level.

The magnitude of response of FDI inflows to Malaysia with respect to changes in their determinants (elasticities), namely previous level of real GDP, change in the level of real GDP, government expenditure, and exchange rates are shown in Table 5.14.

The response of FDI flows to the level of real GDP in the previous year appears to be very strong. This suggests that an increase of 1 per cent in the level of real GDP leads to an increase of almost 4 per cent inflows into Malaysia. This result is consistent with the estimates obtained by the United Nations (UNCTD, 1993: 21, Table III.2). In the United Nations regression equation, the estimation of the magnitude of the response of FDI

to the previous level of GNP for developed countries, European Community, and other developed countries were 4.35, 4.36, and 4.26 respectively. However, our result is slightly higher than United Nation's (UNCTD, 1993: 27, Table III.6) results for developing countries, where Asia showed 1.62, Latin America 3.09, and Africa 1.60 for the period 1972 to 1988.

Table 5.14: Elasticities* of FDI Inflows with Respect to Explanatory Variables

Variable	Elasticity
GDP _{t-1}	3.96
CGDP _t	0.41
GEXP _t	1.64
ER _t	-0.01

Source: Calculated from Table 5.13.

Note: * The elasticity is evaluated at the mean of each explanatory variable.

The elasticities of FDI with respect to changes in the level of real GDP, government expenditure, and exchange rates are fairly sizeable. For instance, the magnitude of the response is about 0.4 per cent for the market growth. In terms of Malaysian ringgit, it implies that a 1 per cent increase in the change in the level of real GDP could induce a potential increase of RM0.4 million in FDI inflows.

The response of FDI with respect to the depreciation of the exchange rate is negative, about 0.01, suggesting that a 1 per cent depreciation in the domestic currency against the US dollar will induce about 0.01 per cent increase in FDI inflows. An

increase of 1 per cent in the government expenditure would lead to an increase in FDI inflows by about RM1.64 million. The afore-mentioned results are quite similar to the results reported by United Nations (UNCTD, 1993: 21, 25, and 27).

5.5 Incentives and Disincentives

In our findings, the variables of incentives and disincentives were seldom cited as significant motives. Heller and Kauffman (1963), in their studies of several major incentives programmes adopted in some of the less developed countries, found that the advantages of tax incentives hardly outweigh their disadvantages, with a few exceptions. Lent's studies (1971) also discovered that tax incentives were greatly over-shadowed by other economic and political considerations in attracting FDI. In fact, the decision to invest abroad is determined by basic business factors rather than by special incentives, although such incentives might act as an important secondary factor. In this regard, Malaysia offers various incentives to induce foreign investments, namely tax holidays, investment tax allowance, accelerated depreciation allowance, reinvestment allowance, and a variety of export incentives. Policy-makers know that foreign investors cannot be forced to make investments here; they can only be persuaded. However, by offering generous packages of perks, a recipient country not only faces social costs in tax concessions and other exemptions in terms of revenue forgone, but also faces strains in the balance of payments through the repatriation of untaxed profits. Some countries give fiscal incentives because other

countries do the same.

From the perspective of factor and cost considerations, economists have called upon the government to reduce disincentives instead of increasing incentives because investors viewed incentives as a compensation for disincentives (The Star, 15 March, 1993).

If incentives are not a significant factor in inducing FDI but they constitute a loss in government's revenue, why then are they still applied with such vigour and enthusiasm by developing countries? There is neither an easy nor a simple answer to this question. Perhaps incentives offered by host countries are not so much to attract FDI but to offset the adverse effects of concessions made by them. Apart from this, in countries where the basic ingredients for making profits are absent, the attractive tax incentives offered will not be effective enough to encourage FDI inflows. However, where the countries under consideration are equally viable as potential locations for investment, incentives may shift the preference from one country to another.

On the impact of incentives and disincentives, the respondents provided the following responses. Most of the respondents seem to welcome the withdrawal of disincentives by policy-makers. Six respondents considered that the action would enable the companies to move freely and expand their activities much more easily. Also, this action would create a healthy competitive environment here. Given this scenario, it is likely that they would reinvest more in Malaysia. Two respondents said that "hiring bumiputras

have resulted in low productivity". They said that the efficiency and productivity of a company would rise if the employee quota requirement was withdrawn. Only one respondent responded optimistically to the suggestion. According to him, further expansion of a company is driven heavily by external factors instead of internal factors.

However, when the question "What happens if the government stops providing incentives to your company?" was asked, mixed answers were obtained. One respondent was neutral.

Companies which were affected by withdrawal of incentives still felt optimistic about continuing to invest in Malaysia. According to seven respondents, without incentives from the recipient country, cost of production would surely increase. This tends to affect competitiveness, either domestically or outside Malaysia. This would finally hamper the growth of the companies. Nevertheless, they said that they would seek ways and means to overcome the problems if the Malaysian government was to withdraw the disincentives imposed on their activities. On the increase in production cost, one of the seven respondents is of the opinion that consumers should also be responsible for bearing some of the costs by paying higher prices.

There were a few respondents who rejected the statement. Three respondents mentioned that it was meaningless to continue investing in Malaysia as neighbouring countries also offer generous incentives to induce investment into their countries. Meanwhile, Malaysia was affected by her tight labour force.

Without incentives, they would move out to China and Vietnam since these countries provide ample, cheap human resources, besides favourable market considerations.

Note

1. In the survey, there were two firms with more than one plant in the Petaling Jaya or Shah Alam industrial estates. As far as production lines are concerned, they are producing different products, but in terms of the 3-digit ISIC, they are similar. Consequently, the companies involved gave us the consolidated data of their activities.
2. For details regarding the classification of mode of production, refer to Note 2 in Chapter 1.
3. Under the similar 2-digit ISIC.
4. The mean score is taken as 5.5 because, as seen in the methodology section, a respondent was given 10 points from 1 (very unimportant factor) to 10 (very important factor) for his overseas investment in Malaysia. In between these two scores, the scale shows the various degrees of importance. The total score of each ranking is 55. Since a 10-points scale was applied, the mean score is 5.5.
5. Include also fabricated, machinery manufacturing, transport equipment, and scientific and measuring equipment.
6. Include also petroleum and coal, rubber, and plastic products.