

Chapter 4

Research Methodology

4.1 Introduction

As stated in Chapter 1, the primary purpose of this study is to determine the critical factors which influence multinational enterprises to locate their overseas production facilities in Malaysia, regardless of their time-frame, country of origin or type of industry. In the field study conducted, the mailed questionnaire was complemented by interviews with the managing directors or their representatives as the secondary data available were inadequate to achieve the objectives of this study.

The survey for this study endeavoured to identify the relative importance of six different investment motives:

- (i) access to factors of production;
- (ii) access to markets;
- (iii) economic status;
- (iv) political stability;
- (v) policy imperatives; and
- (vi) socio-cultural factors

Altogether, the questionnaire (see Appendix 1) included 49 specific motives in these six categories which the respondents were requested to rate on a scale of 1 (indicating the least important factor in the investment decision) to 10 (showing the

most important factor in encouraging investment). In addition to the section on investment motives, the questionnaire sought information regarding the firm's activities.

A preliminary questionnaire was mailed to 130 multinational enterprises at Petaling Jaya, Sungai Way Free Trade Zone and Shah Alam industrial estates. Interviews were then arranged with the managing director or their representative of these firms. In this chapter, the methodology used and the characteristics of the firms and their revelations are described.

4.2 The Population and Sample

The population can be defined as all foreign direct investors in manufacturing operations in Selangor state regardless of their time of establishment. The term "manufacturing", has the same meaning as the definition of the United Nations International Standard Industrial Classification of all Economic Activities (ISIC), 1958, i.e., the mechanical or chemical transformation of inorganic or organic substances into new products or the assembly of components parts of manufactured products (Saham, 1980: 2).

The State of Selangor was chosen as the population for the study because Selangor always received the highest percentage of the total approved investment in Malaysia. During 1988 to 1993, Selangor received more than 26 per cent of the total approved projects. The State of Johore is a distant second to Selangor in receiving a substantial amount either in terms of approved projects or number of proposed capital investments (see Table

4.1).

Table 4.1: Location of Approved Projects by State, 1992 and 1993

Location	Number		Total Proposed Capital Investment (RM million)	
	1992	1993	1992	1993
Wilayah Persekutuan:				
Kuala Lumpur	25	15	89.8	48.5
Labuan	1	-	0*	-
Selangor	235	196	5075.1	4345.7
Penang	119	87	1096.0	516.8
Perak	50	44	4393.8	989.4
Johore	236	143	2299.8	1056.0
Negeri Sembilan	39	37	1680.3	909.9
Malacca	34	25	172.5	376.0
Kedah	42	45	226.2	1069.9
Pahang	12	14	811.9	1541.3
Kelantan	4	5	10.2	201.2
Terengganu	13	7	3026.7	1371.5
Perlis	5	7	21.1	539.9
Sabah	33	37	711.2	293.3
Sarawak	25	25	8160.5	493.3
Total	874	686	22775.1	13752.7

Source: MITI (1994), Malaysia International Trade and Industry Report 1994: 219, Table 6.39.

Note: * Expansion of capacities or manufacture of additional products not involving additional capital.

To identify the population, a list of foreign direct investment

firms in manufacturing in Selangor was obtained from the Malaysian Industrial Development Authority (MIDA). From the general description of operations listed for each firm in the reference as at 31 Dec. 1992, a preliminary list of 296 foreign firms was drawn up. It was decided to include only firms that had foreign ownership of more than 30% because only these firms have foreign top executives. Using this criteria, the number of firms in the list shrank to 182 firms in Shah Alam and Petaling Jaya (which includes the Sungai Way Free Trade Zone). However, in our survey only 130 samples were chosen due mainly attributed to time and budget constraints.

The reasons the two industrial sites were chosen include:

- (i) their relative success in attracting various types of industries compared to other industrial estates in Selangor; and
- (ii) they capture 62% of the total foreign enterprises in the Selangor industrial estates.

Table 4.2 shows the allocation of industry in Selangor state according to their 2-digit International Standard Investment Code (ISIC). The table shows that foreign enterprises are involved mainly in codes 38, 35 and 31 regardless of the areas of the industrial estates. Also, Petaling Jaya industrial estate ranks top of the list (36.5%) as the most favourable location for foreign direct investment, followed by Shah Alam (27%) and Klang industrial estate (which includes the Banting area) (22%). Most of the firms consulted for this study are majority foreign-

owned. Nevertheless, many are managed by locally recruited executives, who no doubt exercise some measure of managerial planning and control. However, the strategic planning and control still remain with the parent company in their country.

Table 4.2: Foreign Direct Investment by Industry* and Region in Approved Projects as at 31st. December, 1992 (number)

	PJ	SA	Klang	Bandar Baru Bangi	Batu Caves	Others
31	17	7	6	1	0	1
32	3	1	5	1	0	1
33	1	0	9	0	0	1
34	5	2	0	0	1	0
35	28	19	14	3	1	7
36	6	0	3	0	0	4
37	3	4	3	2	0	0
38	39	47	20	16	2	8
39	0	0	4	0	0	1
Total	102	80	64	23	4	23

Note: *31= food manufacturing and beverages and tobacco
 32= textiles and leather products
 33= wood and furniture and fixtures products
 34= paper, printing and publishing
 35= chemicals, petroleum and coal, rubber, and plastic products
 36= non-metallic mineral products
 37= basic metal products
 38= fabricated, machinery manufacturing, electrical and electronic, transport equipment, and scientific and measuring equipment
 39= other manufacturing industries

4.3 Selection of Sample

In determining the sample for the survey, the probability method was used. Employing the random sampling method, two stages of the probability method were used to select the sample, based on two criteria, ownership and industry sub-sector. The stratified sample i.e. a probability sampling procedure in which subsamples are drawn from samples within different strata that are more or less equal on some characteristics (Zikmund, 1991: 733), was used for the following reasons:

- (i) to have a more efficient sample because random sampling error can be reduced, as the groups are internally homogeneous but comparatively different between groups; and
- (ii) the assurance that the sample will accurately reflect the population on the basis of the criterion or criteria used for stratification (Zikmund, 1991: 346).

To select 130 samples from the first strata, first was the sample categorised the sample according to ownership i.e. 100 per cent foreign owned; more than 50 per cent but less than 100 per cent foreign ownership; more than 30 per cent but less than 50 per cent foreign ownership. To select samples from each stratum, proportional stratified sample method was applied i.e. $n_i/N * 100\% = x_i$, where i = stratum 1, 2 and 3 with respective 100%, 50% to 99% and 30% to 49% foreign ownership.

In the second stage, the existing strata were subdivided according to their 2-digit ISIC. To select the samples from each selected sampling unit x_i , proportional stratified sample again was applied i.e. $y_{ij}/x_i * 100\% = z_j$, where j is the total number of firms according to their ISIC. This outcome determined how many industries were selected according to their ownership and the ISIC at each stratum. Table 4.3 illustrates the distribution of selected firms across industry and ownership.

Table 4.3: Sample Selected by Ownership and Industry*

	31	35	38	others ¹
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100% foreign-ownership	4	7	26	4
50% < foreign-ownership < 100%	14	16	16	7
30% < foreign-ownership < 50%	3	10	19	4

Note: * similar as Table 1

¹ includes categories of 32, 33, 36, and 37.

4.4 Interview Procedure

Questionnaire and letters (see Appendix 1) were addressed to the managing director of the 130 firms in the selected sample. One week after mailing, a follow-up was made to ensure that each firm had received the questionnaire. Later, appointments were arranged for interviews, which were conducted to:

- (i) Confirm the reliability of answers we received in the questionnaire, and

- (ii) Gather background information for the interpretation of the results.

Of the 130 firms, 61 responded to the inquiry. Though the questionnaire was posted earlier, the duration of each interview generally ranged from one hour to one and a half hours. In certain cases the interview lasted as long as two hours. Sometimes more than one executive of a firm was involved. This was particularly so among the investors from Japan. Though the questionnaires were mailed to their managing directors, the ultimate interviewee was, more often than not, the top local executive. However, some interviewees were their managing directors. Six questionnaires were returned undelivered because the firms had moved without leaving a forwarding address. Forty-one firms replied that they could not participate for one of the following reasons:

- (i) it was not the policy of the company to release such information to private individuals;
- (ii) the staff of the company did not have the time or the inclination to deal with the request;
- (iii) the company no longer had the foreign share as they had sold their share to the local partners; and
- (iv) the company had only very minimal foreign ownership.

Table 4.4 gives a breakdown of the responses.

Table 4.4: Analysis of Responses

No. Item	Responses
1. No. of questionnaires mailed	130
2. Firms found to be outside scope of study	14
3. No response ¹	6
4. Probable sample	110
5. Negative response ²	41
6. Positive response but missing ³	2
7. Positive response	59
8. Positive response rate (6+7/4)	55.5

Note: ¹ Firm which had moved without leaving a forwarding address; the letters were returned undelivered.

² Firms which replied that they could not participate in the study and most parts of the questionnaire had not been completed.

³ Companies returned the questionnaire by mail, but it was not received.

4.5 Quality of Response

The quality of responses depended vitally on the insights and opinions of the interviewees. As mentioned earlier, most of the executives who were responsible for the original investment decisions were not available in Malaysia. Under such circumstances, the person interviewed could only rely on second-hand information or available company records. Thus, their

responses might not always be accurate.

Even the decision-makers themselves, could not always easily recall all the factors that had influenced their decision, especially the relative importance of the influence of each of the factors.

There was also the problem of different rating behaviours among the interviewees. Some of them seemed to have a central tendency, rating most of the factors within the middle range in the importance scale. Other were less moderate in their approach. However, it is hoped that such individual lapses and bias would cancel out each other, leaving the final results largely unaffected.