

## Chapter 2

### Literature Review

#### 2.1 Introduction

This chapter will discuss both the theories and empirical analysis of FDI. Three major theories of FDI inflows are first discussed, namely, industrial organisation theory of FDI, eclectic theory, and comparative advantage theory of FDI, followed by a discussion of empirical studies on determinants of FDI inflows in host countries encompassing those outside Malaysia as well as those within Malaysia.

#### 2.2 Theories of FDI Flows

Carl Iverson's International Capital Movements (1936), was perhaps the first comprehensive and authoritative work on capital movement. He assumed international capital movements as functions of difference in rates on return, which reflected differences in marginal efficiency of capital. However, the behaviour of multinational firms cannot be explained satisfactorily in the traditional framework such as the Heckscher-Ohlin theory where comparative advantage is explained by the differences in factor endowments.

Hufbauer (1975: 259-263) provides three good reasons for these observations. Firstly, reported profit statistics do not include

certain important factors which influence the earnings, such as tax rates, tax credits, subsidies, and transfer prices. Secondly, profit-rate differentials partly corresponding to risk differentials might reflect a different equilibrium solution. Thirdly, in oligopolistic industries, earnings on new projects can differ substantially from return on existing plants, which the published data do not take into account.

Consequently, Iverson found contradictory evidence in his study to support his hypothesis. Instead, he found "other" factors which may affect the tendency of capital to respond to interest rate differentials. These are economic and non-economic factors, among which are the following: the desire of the capitalist to spread his capital over a great number of countries so as to reduce his risk; the desire to secure access to raw materials; the desire to conquer new markets; the necessity of escaping tariff walls, and the desire to reinvest earnings in the same place. Political considerations, landscape, climate, language and culture are categorised under the latter (Rock, 1973: 19).

Nineteen years after Iverson's publication, Barlow and Wender conducted an extensive survey of firms involved in foreign investment. Empirical results showed that the major factors influencing FDI were: the possibility of profits, the size of the market, the stability of the host country, currency convertibility, the host government's attitude, tariffs and taxes (Rock, 1973: 20).

A general belief that the gap of factor endowments between



different countries is big enough to allow capital-rich countries to invest in capital-poor countries, hardly provides a good explanation for several peculiar observed phenomena.

Firstly, it was found that large firms in capital-rich countries with similar factor proportions tend to invest in countries which are in similar situations and opportunities. In other words, such firms will seek to invest in the same industries in host countries that offer the same investment opportunities as the home country.

Secondly, it has been recognised recently that an increasing number of capital-poor countries invest in other countries in the same group, or even in capital-rich countries<sup>1</sup>. The emergence of FDI from less developed countries took place during the last twenty years. Enterprises from less developed countries, for example Hong Kong, Singapore, South Korea, India, Brazil, and Argentina are not large compared to multinational companies from the developed industrial economies, but they are nevertheless becoming increasingly significant in the manufacturing (and to a lesser extent, services) sectors of a number of less developed countries. By 1980, the total stock of FDI by less developed countries abroad was estimated to be over US\$5 billion (Lall, R., 1980: 1).

Thirdly, if the difference in rates of return in two countries is really the important motivation, it will cause a flow of portfolio capital rather than direct investment which entails a much higher cost of establishment and risk.

Fourthly, there is an argument that foreign investors, even from capital-rich countries, financed a large percentage of their capital expenditure of foreign subsidiaries from local sources. Also, when established foreign subsidiaries reinvest their retained earnings, it increases the firm's ownership of capital abroad, but the transaction does not enter the balance of payments and there is no movement of funds through the foreign exchange market. On this account, the views of foreign direct investment as capital movement proved to be inadequate in explaining foreign investment by developed countries. Instead, the clue to FDI lies in capital formation and not in capital movement (Kindleberger, 1969: 3; Rock, 1973: 17).

Fifthly, MNCs also transfer other productive factors, especially technology, and management and marketing expertise. Consequently, capital may be simply a conduit for the transfer of these productive factors rather than a reason for the existence of FDI (Dunning, 1992: 76).

Sixthly, a perfect competitive market assumption in the traditional theory may not be valid in the case of FDI because most of the firms with foreign operations are large corporations possessing considerable monopolistic power.

The studies of Iverson, Barlow and Wender, would suggest that the analysis of FDI must include the investment theory, industrial organisational theory, and the theory of comparative advantage (Rock, 1973: 20). Nevertheless, since the original work of Stephen Hymer, it has been recognised that the theories of firm,

industrial organisation and international trade in combination provide a better framework for understanding FDI than the old investment theory related to differences in long-term interest rates (Sekiguchi and Lawrence, 1980: 422). Consequently, the investment theory which concerns itself with differentials in long-term interest rates is not discussed here. For Kindleberger (1969: 11), FDI theory falls more under the theory of industrial organisation than the theory of international capital movement.

### 2.2.1 Industrial Organisation Theory of Foreign Direct Investment

Stephen Hymer was the first to propound industrial organisation theory for FDI. This approach argues that the essence of foreign direct investment lies in the twin desires of multinational firms to grow and to maintain control of their markets, especially their monopoly profits. With respect to growth, Kindleberger (1969: 7) says, "in growing, the firms may well go abroad; in going abroad, they grow abroad". Behrman, in a similar vein, says "in sum, the primary stimulus that causes business to expand abroad is the desire for growth" (Stevens, 1974: 60).

Indeed, the desire for growth is not sufficient to explain why firms find it necessary to service markets with local production rather than with exports (Stevens, 1974: 62; Jeeras, 1985: 12). In addition to growth, the firm needs control. The need to control productive activities outside its national boundaries is because of the existence of a firm's specific know-how. In order to obtain the full returns on firm's specific know-how (which is

not possessed by local and foreign competitors), Hymer demonstrates that direct control is necessary (Phongpaichit, 1990: 7).

The main proponent of industrial organisation theory on foreign direct investment rests on market imperfections (either in goods or factor markets) and firm-specific advantages. These explain why foreign firms can still compete with indigenous firms in the host country despite indigenous firms receiving continuous support from the host government. Two types of market imperfections are of particular importance, viz, (i) structural imperfections, which help the multinational firm to increase its market power, arising from economies of scale, advantage of knowledge, distribution networks, product diversification, credit advantages, imperfect capital market, and research and development. Of all these, Hymer concluded that knowledge advantage over the local firms was the most important (Lizondo, 1991: 70); and (ii) transaction costs make it profitable for the multinational firm to substitute an internal "market" for external transactions.

Firm-specific advantages, on the other hand, are needed in addition to market imperfections. The industrial organisation approach argues that when a foreign firm establishes a subsidiary in a new environment, it faces a number of disadvantages when competing with domestic firms. These include the difficulties of managing operations spread out in distant places, and dealing with different languages, cultures, legal systems, technical

standards, and customer preferences. In spite of these disadvantages, a foreign firm which wants to engage in foreign direct investment must have some firm-specific advantages over domestic firms. These advantages are brand name, patent-protected superior technology, marketing and managerial skills, cheaper source of financing, preferential access to markets, and economies of scale (Lizondo, 1991: 71).

Hymer has strongly avowed that FDI will only ensue when a foreign firm has comparative advantage over its competitors<sup>2</sup> abroad. He argues that due to the above-mentioned advantages, the foreign firm's marginal efficiency of capital schedule lies above the domestic one. This is why the international firm's rate of return is always higher than the domestic firm in the same industries (Rock, 1973: 41). This ability to earn a higher rate of return implies that the international firm is unwilling to participate in a joint venture with local firms or to sell a license to a local producer since, in both cases, the firm will be relinquishing part of its monopoly profits. To maintain its pre-eminence in a market and to protect its monopoly profits, the multinational firm, when faced with the threat of the loss of a foreign market, will usually respond with foreign direct investment.

However, industrial organisation theories aptly identify the firms and industries that possess the inherent advantages of international operation rather than why and how the production unit was established at a certain location in the first place.

### 2.2.2 Comparative Advantage Theories of Foreign Direct Investment

Related to Hymer's industrial organisation approach is the work of Vernon. He has incorporated dynamic elements into explaining the motive for FDI. He speculated the "product cycle" model based on the theory of innovation, theory of growth and the specific-factor theory. Also, he argues that the determinants of location vary according to the stage of the life cycle of the product (1966).

This model is utilised to explain the expansion of US multinational firms in those industries where significant technological innovation was initially developed and commercialised in the US after World War II. Vernon argues that, historically, American enterprises have developed and produced new products that were labour-saving or designed to satisfy high-income wants.

In Vernon's model, the nature of the US market is such that US firms have a comparative advantage, i.e., in the process of product innovation when producing "new goods". He assumes that:

- (i) entrepreneurs in any developed country do not differ in their access to knowledge,
- (ii) equal access to knowledge does not mean equal probability of application of this knowledge in the production of new goods.

Hence, he argues that "... before the new knowledge is applied, the entrepreneur must intervene and be willing to accept the risk

to bridge the gap between knowledge and application ...". However this application will only exist if the entrepreneur is conscious of the opportunity to exploit this knowledge. This situation indirectly shows that, in any market, producers are more aware of opportunities in that market than other producers. Thus "the new product ... produced locally both because (it is) ... designed to satisfy local demand ... (and to) facilitate the efficient coordination between research, development, and production units" (Lizondo, 1991: 72). In this conjuncture, the firm can enjoy a monopolistic advantage in technology and an expanding market in the home country when a firm successfully develops a new product.

Once the first production unit is established in the home market, any demand that may develop in a foreign market would be satisfied by exports. In the second stage, the product matures. Technology tends to become more standardised, competitors might appear and costs of production become more crucial. At this juncture, to serve overseas markets (particularly those of Western Europe in the original formulation of the model) better, the firm is motivated to license a local producer or set up a production unit in foreign countries. This decision depends on the differences in production costs between the two countries, economies of scale and transportation costs. If the conditions are considered favourable<sup>3</sup>, the innovator would engage in foreign direct investment. Also, it may possibly go abroad to protect its status quo.

The third stage arrives when the product becomes "standardised" and the market is more competitive. While technological advantage is diluted, cost and marketing considerations become important in this stage. Thus, FDI is essentially a defensive investment designed to preserve profit margins in both the export and home markets. In order to protect its status quo and profits, the innovating firm then invests abroad in cheaper locations and closer to foreign markets, and puts more effort into marketing. The cheapest location may be chosen as an exporting base to nearby markets. In this case, the less developed countries (LDCs) can be foreign-production locations for the firm which produces products involving a high proportion of labour costs or raw materials. As a result, foreign products, either produced by the innovating firm or other firms, become more competitive in third markets, further reducing the innovating country's exports.

In the final stage, the foreign-production locations, particularly those in the LDCs, gain cost advantages over the innovating country, and then they may be used as bases to re-export to the innovating country. For instance, the US developed such new electronics products as single-band radios, black-and-white TVs, and integrated circuits, while their major production bases were shifted from the US through Japan to the Republic of Korea, based on the required level of technology used in each product (Akira, 1989: 200). In this process, the U.S. changed its status from a major exporter of colour TVs into a major importer, while Japan emerged as a major exporter to the US which was previously an importer; all this happened as a result of the



transfer of technology. It also explains the relationship between Japan and Asian NICs such as Korea and Taiwan. Korea is now replacing Japan as a major exporter of TVs and other electronic products to the American market. At the international level this move is called by Japanese scholars a "catching-up product cycle" (Kojima, 1978: 64). Thus, the life-cycle of a particular product, the life-cycle of major products within a specific industry, and the cycle of major production exporting countries, form the dynamism of international economic relations in the worldwide system of capitalism. This dynamism is mainly promoted by the internationalised activities of the multinational enterprises.

Vernon, however, recognised the specific characteristics and limitations of his model. It is pertinent to note that the product life - cycle model is more applicable to firms that are expanding overseas for the first time. It is less relevant to those firms with already established global networks (Vernon, 1971: Chapter 3; 1979) where new products and processes could increasingly originate in any part of that global network.

Pertinent to technology transfer, Clark (1975) argues that multinational enterprises often transfer technology and other resources at a much earlier stage in the "life" of products than would be predicted by the model. Furthermore, the increasing practice of locating relatively labour-intensive assembly or process activities in LDCs is not consistent with the product cycle theory. He concluded that "the product cycle model is a rather unsatisfactory description of modern international techno-economic relations" (Clark, 1975: 7).

### 2.2.3 The Bandwagon-effect Theory of FDI

Knickerbocker's bandwagon effect hypothesis noted that there exists a tendency among rival firms to follow each other abroad. The "follow the leader" behaviour, aroused either by the compulsion to defend its relative market share and maintain its status quo vis-a-vis its rival, or prompted by the success of its competitors' overseas ventures.

Knickerbocker, who studied foreign investments of American firms in association with oligopolistic competition revealed that there were some common characteristics in what motivated giant industrial firms in their overseas investments. His fact-finding study may be summarised in the following way.

In any industry whose market structure is oligopolistic, it is assumed that one of the leading firms (firm A) decides to produce abroad for some reason. This behaviour naturally affects its rival because there is a definite possibility that firm A's investment will destroy the existing market share of the rival's product. Rival firms therefore attempt to adopt counter-measures against firm A in order to protect their established market shares. One of the most effective and simplest of these measures is to invest in the same foreign country as firm A. In fact, Knickerbocker's empirical study found that overseas investment of giant industrial firms in the same type of industry was conducted during the same period. In this context, he termed such counter-behaviour of American firms "defensive investment", which was later called the "bandwagon effect". Such a pattern of overseas

investment in the American MNCs is widely observed in other countries. In addition, such defensive reaction by oligopolistic firms is found not only among the MNCs in the same country but also between different industrialised countries.

#### 2.2.4 The Offshore-type Investment Theory of FDI

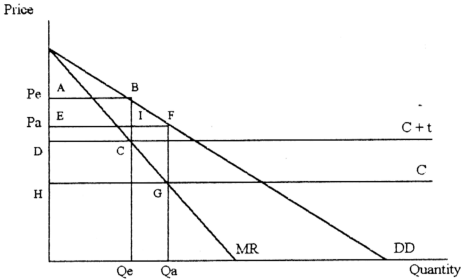
This theory is presented mainly to explain the increasing flow of manufactured exports from the developing countries to the industrialised countries in recent times. It is also helpful in explaining increasing intra-firm trade within the corporate activity of the MNCs between their overseas branches and their head offices in the home country. According to one estimation, around one-third of the international trade carried on by the US consisted of this type of intra-firm trade.

The major points in this "offshore-type investment theory" are: (i) it deals mainly with intermediate goods rather than finished goods; and (ii) the primary objective of overseas investment is not to manufacture products for the local market, but to manufacture them for re-export to markets in third-party countries or for re-import to the home market.

The location of the production base under the considered theory is determined by labour cost comparisons, transportation facilities, the development stage of the industry concerned, and tariff barriers in the developing countries. A typical case of this type of investment can be seen in the activity of the

American and Japanese MNCs in the electronics industry.

To illustrate the importance of transportation costs and tariff barriers, let us consider the figure shown by Crum and Davies (Loke, 1992: 7).



As can be seen from this figure, a downward sloping demand curve DD is shown, with the assumption that the firm has a monopoly power in the overseas market or the firm has a differentiated product. It faces two types of costs, viz, fixed cost and variable cost. The average fixed costs will decline as production increases, while the marginal cost is assumed to be constant irrespective of the volume of the product, represented by c.

If the firm chooses to export, it has to face an additional marginal cost, t, which represents transport costs and tariffs

imposed by foreign government (it is assumed that production costs in home country is similar to the costs in overseas production). Hence, the relevant marginal cost curve is  $c+t$ . To maximise profits ( $MC=MR$ ), the firm will export  $Q_e$  and sell at the price of  $P_e$ . The profit is shown by the area ABCD. On the other hand, if the firm chooses to produce abroad, the relevant marginal cost curve would be  $c$  since there is no tariff incurred. To maximise profit, the firm will produce  $Q_a$  at the price of  $P_a$ . The new profit is represented by area EFGH. Compared to the first situation, the output produced is larger with lower price charged. This is a gain to the host country both in terms of consumer gain and the balance of trade improvement (due to reduced imports).

However, whether a firm will choose to export or invest in overseas production depends on whether the additional profit from overseas production ( $DHGFIC - ABIE$ ) is larger or smaller than the additional fixed costs incurred to set up a new plant in the foreign country. If the extra profit is larger, then overseas production is more profitable, or vice versa.

### 2.2.5. The Monopolistic Advantage Theory of FDI

This hypothesis presupposes that the firm in question has already controlled a large part of the world market in its selected products because of its superiority in technology, marketing system, and its capacity to mobilise huge amounts of capital. This hypothesis can be explained for the case of the resource-based industries, such as petroleum and mineral products, including copper and aluminium.

The monopolistic advantage theory suggests a theoretical base for the economic dominance of the MNCs engaged in consumer products. These include pharmaceutical products, cosmetics, soap, toiletries, soft drinks, and women's underwear. Several of these products do not always require either advanced technology or a huge amount of capital, compared with petroleum and mineral products. Nevertheless, in reality, a few MNCs have controlled the world market in these products for a long time as seen in Unilever (soap, toothpaste), Scott Paper (toiletries), and Coca Cola Bottlers (soft drinks). This situation exists because the monopolistic structure in the market for these products can be attributed mainly to their sophisticated technology, international advertising system, and the internationally known brand names attached to their products.

### 2.2.6 Eclectic Theory of FDI

It should be noted that while the existence of some monopolistic or firm-specific advantage is a necessary condition for FDI, it

is certainly not a sufficient condition (Lall and Streeten, 1977: 19). It leaves many important questions unanswered. For instance, why do some firms characterised by such advantages invest abroad, while others with similar advantages, do not? Why do such firms internalise the use of their advantages rather than externalise by selling or licensing these advantages to independent local producers to exploit? Why do firms choose to use their internalised advantages in foreign production rather than in domestic production and serve foreign market by exports?

The most comprehensive answers to these questions are given by the "eclectic theory" of foreign direct investment. Dunning (1977, 1979, 1988), who studied empirically the overseas investment of American firms, developed an eclectic approach by integrating three strands of the literature on foreign direct investment, i.e., industrial organisation theory, the internalisation theory, and the locational theory. Each of these three sets of determinants of foreign direct investment, relates to an advantage of direct investment over alternative modes of servicing the firm's customers at home and abroad. If a firm is decided on operating overseas, then he argued that three prerequisites must be satisfied.

The first necessary condition is that foreign firms have some ownership advantages over their rivals or potential rivals in the host country. These advantages are largely derived from the possession of firm-specific intangible assets, i.e., a monopoly over a product or brand name, a patent on a production process or

technology, or a superior knowledge of the market and of marketing techniques. All of these have the features of a public good (of course, public within the firm) in that the firm transferring and utilising them in a foreign market can do so at zero or low opportunity cost (Nixson, 1984: 90). The ownership advantage is necessary to outweigh the disadvantage of being foreign. Interestingly enough, he found that the ownership advantage played a crucial role in decision making of American overseas investors. Furthermore, this advantage is associated with research and development expenditure. Nevertheless, this is only one potential source of ownership advantage and it may not be applicable for smaller firms or less developed countries which invest in foreign countries. According to Lall and Streeten (1977: 28) the most emphasised and decisive factors inducing firms to produce abroad are superior technology and marketing. This helps to explain why some firms go abroad, while others do not. This statement was also supported by Caves and Horst. The marketing advantages of oligopolistic firms with differentiated products offset disadvantages inherent in investing and operating overseas; this explained why these firms invested overseas (Phongpaichit, 1990: 10).

Assuming that the first condition is satisfied, it must be more beneficial for the firm to use these advantages through an extension of its own production rather than to sell or lease them to other foreign firms. Dunning (1981: 34), in arguing for an eclectic model, remarks that:



The eclectic approach would argue that it is not the possession of technology per se which gives an enterprise selling goods embodying that technology to foreign markets (irrespective of where they are produced) an edge over its competitors, but the advantage of internalising that technology, rather than selling it to a foreign producer for the production of those goods. It is not the orthodox type of monopoly advantages which give the enterprise an edge over its rival - actual or potential - but the advantage which accrue through internalisation. For example, transfer price manipulation, security of suppliers and markets, and control over use of intermediate goods. It is not suppliers entrepreneurial resources per se which lead to FDI, but the ability of enterprises to combine these resources with others to take advantage of the economies of production of joint products.

Besides, the above mentioned intangible assets are not all marketable or they can only be transferred to unaffiliated enterprises at high transaction costs. It is the fact that certain transactions or activities can be organised and carried out at a lower cost within the firm (the internalisation of those activities) than through the market that confers on the multinational enterprise its unique advantages. This problem explains why multinational enterprises do not, or only partially, license these assets to indigeneous firms in the host countries. Instead they prefer to penetrate into foreign markets through the establishment of foreign subsidiaries, or through exporting to these countries. Without the incentive to internalise, the firm may well prefer to sell its knowledge or license its technology, or merely export the final product. Where the rent-yielding advantage of the parent firms lies in a "one-shot" innovation of technique or products (for instance, a new method for making plate glass or the secret ingredient of a successful soft drink -- Caves, 1971), licensing the technology may well be the option

chosen. Time and again the choice between these three alternatives (foreign investment, exporting and licensing) is determined by a whole set of location factors that interact with the nature of the intangible assets possessed by these international enterprises.

Finally, when the firms possess ownership advantages and internalisation advantages, then it must be more profitable to use these advantages in combination with at least some factor inputs located abroad in terms of serving the host country's market or as an export base. The locational advantage may arise from a fundamental comparative advantage, such as an abundance of high-quality, low-wage labour, from relatively low transportation costs, or from policy-determined costs arising from trade restrictions, labour legislation, pollution controls and direct incentives to, or restrictions on, direct investment in both the home and host countries. Clearly, the relative importance of such factors will vary according to the nature and objective of each individual act on FDI. In the absence of locational advantages, the foreign market would be served exclusively by exports as a way to exploit its ownership advantages in foreign markets.

The eclectic theory suggests that all foreign direct investment can be explained by reference to the above conditions. However, it does not manage to render on a priori prediction about which countries, industries or enterprises are most likely to engage in foreign direct investment. Also, the above-mentioned advantages are not likely to be uniformly spread across countries, industries and enterprises, but are likely to change over time.

In other words, the flow of foreign direct investment to a particular country at a particular point of time depends on the ownership and internalisation advantages of the country's firm, and on the locational advantage of a country, at that point of time (Dunning, 1979: 276).

From the above explanation of why firms go multinational, we can further extend the approach to capture the offshore-type investment theory. This theory mainly deals with overseas production for export or re-import.

### **2.3 Empirical Studies on Determinants of Foreign Direct Investment**

Multinational corporations (MNCs) do not just pop up hapazardly in foreign nations. As pointed out by Dunning (1977, 1979, 1992), two conditions must be realised for the MNCs to operate, namely locating facilities abroad must be desirable and a firm must find it profitable to own the foreign facilities. Both economic theory and empirical studies support the notion that FDI is conducted in terms of anticipated future profits. It is generally assumed that investment flows from regions of low anticipated profit to high anticipated profit, after allowing for risks. Even though expected profits may ultimately explain the process of FDI, decision-makers may emphasise a variety of other factors when asked about their investment motives.

Theoretical studies of FDI long ago identified many of the important factors a firm considers when making investments in

foreign countries. As pointed out by Lall (1977), factor influencing FDI can generally be divided into three categories, namely, economic, social and political variables. Ahmed (1975) adds another factor, i.e. policy variable. All of these factors have a bearing on cost and revenue conditions and subsequently on the level of profit.

The following sections are therefore concerned with empirical studies on determinants of FDI inflows in the host country. It is divided into two parts; empirical studies outside Malaysia are introduced first, followed by studies on Malaysia.

## 2.4 Determinants of FDI

### 2.4.1 Market Characteristics

#### 2.4.1.1 Size of Economy

It may be hypothesised that once a market attains a size that allows local production to enjoy effectively economies of scale then, ceteris paribus, the level of FDI in that market is likely to be closely related to its size.

Substantial research using time series analysis (Scaperland and Mauer 1969; Schmitz and Bieri 1973; Kobrin 1976; Lunn 1980; Scaperlanda and Balough 1983; Torrissi 1985; Brewer 1991; and Moore 1992), has demonstrated that aggregate national market size, as indicated by host country gross national product (GNP)

or GDP, is related to variations across countries in the level of FDI inflows.

Petrochilas (1984, 1989), studying FDI in Greece for the period 1955 to 1978, found that market size (GDP lagged one period) -- consistent with previous studies - is almost invariably significantly positively related to FDI.

Hultman and McGee (1988), in their study of FDI in the United States between 1970 and 1986, also found GNP<sup>4</sup> to be a statistically significant determinant of investment, both overall and in four separate industrial sectors.

Market size, as a key influence, was also highlighted in the survey studies of Newbould, Buckley and Thurwell (1978); Buckley, Berkova and Newbould (1983); and Shepherd, Silberston and Strange (1985).

Dunning (1986) showed that a major part of Japanese investment in the United Kingdom was motivated by market factors, i.e., "to supply the UK markets", "as a point of entry into the European Community" and "as a part of an integrated European or worldwide product mandate". These factors are all strongly rated.

The above scenario suggests that foreign direct investment decision-making is very strongly related to the level of GNP. However, when rate of growth is incorporated, the result has been enigmatic and inconsistent. This has proved to be the case in various studies on US FDI in the European Community.

#### 2.4.1.2 Rate of Growth of Market

Schmitz and Bieri (1972) found the European Community's share of total US FDI to be negatively (sometimes significantly) related to the European Community growth rate for 1952 to 1958, but significantly positively for 1959 to 1966. Within the same study, Lunn (1980) found the growth rate ( $Y_t - Y_{t-1}$ ) in the most recent year to be significantly positively related, but that lagged one year ( $Y_{t-1} - Y_{t-2}$ ) to be significantly negatively related. However, the latter was doubted in Petrochilas's studies (1984, 1989).

The growth rate was found positively correlated but not significant in Torrissi's study (1985). However, the real growth rates in GDP have been found to be correlated with FDI flows in developing countries in the work of Root and Ahmed (1978).

The surveys of Behrman (1962), Basi (1963), Brash (1966), Forsyth (1972), Bennett, Merchan and Metcalfe (1982), Hill and Lindsey (1987) and El-Haddad (1988), found that the growth potential of host country markets was a chief influence. Basi and El-Haddad also found the "present extent of the market" to be an important, but separate, factor in FDI decisions.

Thus, it is difficult to identify whether the enthusiasm for market size and growth incorporated in the studies reviewed above actually represents the respondents' natural desire to serve those markets, or whether it reflects a more subtle influence of

these characteristics on decisions to supply the markets explicitly through local production.

#### 2.4.1.3 Other Market Characteristics

The survey of the American, Japanese and European foreign investments in the Philippines by Hill and Lindsey (1987) found "the need for proximity to markets" to be quite widely recognised as an important influence. Similarly, Shepherd, Silberston and Strange (1985) reported this as a crucial influence on United Kingdom firms' foreign direct investment decisions. Forsyth (1972) and Newbould, Buckley and Thurwell (1978) indicated access to markets as an influence on foreign direct investment decisions. Whilst Brash (1966) found "access to adjacent markets" to be of some influence. Basi's (1963) analysis of US foreign investors found the "fear of losing a foreign market" to be predominant. By contrast, the same variable emerged as relatively less important in El-Haddad's (1988) analysis of companies with investments in Egypt. The need "to protect existing markets" reported by Bennett, Merchan and Metcalfe (1982) ranked the third (out of eight) most important motive for FDI, but it ranked first for subsidiaries set up to "distribute Australian products". The need "to maintain close contact with customers", "matching a rival's investment" (Forsyth 1972) and "preference of local customers for local production" (Brash 1966; Forsyth 1972) have little influence on decisions on overseas production.

## 2.4.2 Costs Considerations

### 2.4.2.1 Wage Rate

For all manufacturing FDI projects, especially those based on an efficiency-seeking strategy, the effect of host-country wage rates on the firm's costs is of central concern to investors.

Using comparative United States and Canadian wage costs as a proxy (since the dependent variable is defined as all FDI in Canada), Owen (1982) and Gupta (1983) indicated such costs as not significant, whilst Caves (1974) found them to be of some importance.

In a cross-industry study of US FDI in the United Kingdom, Buckley and Dunning (1976) found relative wage rates (UK compared to US) to be an insignificant determinant. Later, Dunning (1980), in his study of United States FDI in 14 industries in seven countries, showed relative wages to be a generally weak influence.

Agodo (1978) found that the lower cost of African labour was negligible in stimulating 33 US companies in 20 African countries. In a similar vein, Basi (1963), Forsyth (1972), Dunning (1986), and El-Haddad (1988), showed host country's wage rates to have very little influence on foreign direct investment decisions.

Pertaining to types of investment, Schreiber (1970), studying US investment in Taiwan, found low-cost labour to be a negligible



factor in servicing the domestic markets, but it was the leading factor in the choice of Taiwan as an export-oriented site. Similar results were obtained in the study of Japanese, European and US subsidiaries in the Philippines (Hill and Lindsey, 1987).

Although many of the studies cited earlier did not find labour cost to be a significant factor in the FDI decision process, Baer (1959), in evaluating the successful development programme of Puerto Rico, observed that one main attraction of capital inflow to Puerto Rico was cheap labour. Empirical studies of foreign investment by Lamp (1967) and Schreiber (1970) also found cheap labour to be the most influential factor in attracting foreign investment to Taiwan. This factor was reported to be one of the reasons for the rapid growth of the business industry in Spain (Goh, 1973: 25). Schneider and Frey (1985) reported wage costs to be a significant influence on FDI in a cross-country study of 54 developing countries. Buckley, Berkova and Newbould (1983) found small European investors in the United Kingdom valued low labour costs more highly.

However, cheap labour per se would not be attractive if accompanied by low labour productivity. Savings from nominal wages could be more than offset by high costs of training, supervision, and fringe benefits, as was found by May (1965) in his study of foreign investment in Nigeria. Hence it is necessary to take into account other labour factors in assessing the overall cost of labour in investment decisions.

#### **2.4.2.2 Labour Productivity**

The measurement of efficiency wage was adopted by Papanastassiou and Pearce (1990) in their study of cross-country composition of United Kingdom manufacturing FDI. However, it was found to be inconsistently signed and not significant. When productivity is also included for comparison, Saunders (1982) found relative unit labour costs of Canadian and United States production workers to be a significant determinant of the industry structure of FDI in Canada.

#### **2.4.2.3 Types of Labour**

A positive relationship between US foreign investment and availability of labour in Scotland, was established by Forsyth (1972). Nonetheless, the availability of various types of labour was found to have only limited relevance in the studies of Shepherd, Silberston and Strange (1985).

#### **2.4.2.4 Raw Materials**

Another factor explaining multinational investment involves costs other than human resources, notably material input costs. The motive behind the decision to utilise the internalize technology and the other advantages in a foreign country is to secure the sources. It is likely that this factor would have a significant influence on the firm's decision, especially for multinational enterprises engaged in downstream and resource-based industries. This is particularly true in explaining why Anaconda, for

instance, set up mining operations in Bolivia and Shell produces and refines oil in Indonesia.

Wagner (1989) showed that "access to raw materials" is one of the main factors affecting European (excluding German) direct investment in ASEAN countries. Chen (1993: 154, Table 7.6), by comparing the motivation of two groups of foreign investors (developed country (DC) firms and less developed country (LDC) firms) in Hong Kong, found that this factor was more important to LDC firms than DC firms.

However, Shepherd, Silberston and Strange (1985) failed to find support for a hypothesised positive relationship between British overseas manufacturing and availability of raw materials. Similarly, in their studies, Behrman (1962), Basi (1963), Riedel (1975), Hill and Lindsey (1987), and EL-Haddad (1988) found the "availability of raw materials" to be of limited influence. These findings, however, may be because these groups of multinational enterprises are engaged in non-resource-based industries. The attractiveness of raw materials, in the eye of foreign investors, depends largely on the type of industries they are engaged in.

#### 2.4.2.5 Production Costs

The importance of the above-mentioned cost factors to the MNCs affects their decisions to increase profit levels through reduction of production costs.

It was found that production costs play a vital role in influencing German overseas investment in developing countries (Riedel, 1975). For Australian subsidiaries manufacturing for export, lower production costs in the host country were very important. These costs, ranked the third most important factor, are more important than the findings in most other survey as the influential factor on subsidiaries manufacturing for local markets (Bennett, Merchan and Metcalfe, 1982). However, the same factor has very limited influence on foreign direct investment decisions in the studies of Behrman (1962), Brash (1966), and Shepherd, Silberston and Strange (1985).

#### 2.4.3 Inflation Rate

Inflation rate, as a proxy for economic stability, can be an important variable in the host country's economic environment. A pool time-series of FDI flows on inflation rate (Brewer, 1991) between 1968 to 1987 found inflation rate was insignificant. The relationship of FDI to price stability may therefore be more complex than previously thought. In addition, it involves lags over time and differences across countries that are difficult to capture without a more complex economic model.

#### 2.4.4 Exchange Rate

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 facilities, reinvest or repatriate earnings or consolidate market power through mergers and acquisition (UNCTD, 1993: 10).

Hultman and McGee (1988) found the value of the US dollar (as measured by the IMF's multinational Exchange Rate Model Index) to be positively significant to FDI in the US in all cases. The possibility of positive result was that "anticipations are important in the investment decision". Thus, an appreciating or depreciating dollar leads to anticipated gains or losses respectively, so that FDI increases or decreases accordingly (Hultman and McGee, 1988: 1061).

Nevertheless, Froot and Stein (1991) found a negative relationship between exchange rate and FDI inflows to the United States. This negative relationship is also found at the industry level. The reason is that, if domestic firms are cash constrained, a depreciation of the host-country currency will give foreign affiliates the ability to out-bid domestic firms because of the increase in the real value of a foreign firm's capital due to depreciation.

#### 2.4.5 Fund Availability

Furstenberg (1980) discovered that some domestic factors (of investing countries), such as supply of national savings and demand for investment in the US, have important repercussions on the amount of foreign investments by the United States.

Liete and Vaez-Zadeh's (1986) study of credit allocation and investment decisions in the Korean manufacturing sector concluded that limitations on credit availability tend to affect investment decisions directly rather than through interest rate movements.

#### 2.4.6 Tariff

FDI can be viewed as an attempt by profit-maximising firms to minimise their costs of production. Horst (1972) and many others, have argued that foreign exporters find it more profitable to establish production facilities inside a country's tariff wall than to write off their investments in the local market or continue to serve it from low-cost locations abroad through exports.

Using the proxy variable, many studies have been done on the relationship between direct investment and the formation of European Economic Community (EEC) and tariff discrimination. The formation of EEC, which enlarged the market size with common lower or zero internal tariff rates, has attracted foreign investments (particularly from the US).

In a cross-industry analysis of US sourcing in Canada and UK, Horst (1972) found tariffs had either nominal influence on, or the effective rate of protection had influenced, the willingness of US firms to produce in these two countries. Hollanders's (1984) testing of US sourcing across the industries and host

countries also found significant support for this hypothesis.

However, similar tests by Dunning (1980) on a similar number of host countries did not replicate this result. Orr (1975) found that this relationship disappeared when the 3-digit ISIC code rather than the 2-digit ISIC code data were used. Dunning and Buckley (1977) found this relationship to be insignificant for US "sourcing investment" in the United Kingdom.

#### 2.4.7 Political Factors

Perhaps the most basic factor for the average investor is the political and economic stability of the prospective host country. In an analysis of the role of private investments in economic development, Fuhrer (1966: 40) suggested that one of the most important prerequisites for an expanded flow of private capital was the existence of reasonably stable political and economic conditions.

An unstable political and social environment is not conducive for the inflow of foreign investments. Root was doubtful that the government of developing nations can do much to attract private foreign investments given their conditions of political instability (Green, 1972: 18). This worry of private foreign investors is understandable because unexpected modifications of the legal and fiscal frameworks may drastically change the economic outcomes of a given investment. Thus, early survey analysis of the influences on FDI supported the belief that political instability ranked very high the factors taken into

consideration by multinational enterprises in determining the location of overseas operations (Aharoni, 1966: 93; Green, 1972: 16).

Basi (1963), in his various tabulations, reported "political stability in the foreign country" ranks persistently either first or second amongst influences on US overseas investments. Similarly, El-Haddad (1988) found it to be a considerably influential factor. In addition, these two studies indicated "the host government's favourable attitude towards foreign investors" to be a consistently highly valued factor.

Behrman's (1962) study of US firms with overseas subsidiaries reported "nationalism and foreign restriction" as taking a leading position amongst influences on decisions.

Root studies of the political aspect of the UK, France, Mexico, Brazil, and India concluded that "executive attitude regarding the stability and instability of a foreign government" is highly instrumental in shaping their attitudes towards the safety and profitability of investment opportunities (Green, 1972: 18).

Bennett and Green (1972) using instability indices developed by a political scientist to test three hypotheses regarding correlation between investment and political stability in forty-six countries, found only one hypothesis supported by a significant correlation. They concluded that investment decisions were not influenced by political stability as reported by businessman, except in certain areas such as Asia. This would



seem to contradict most of the earlier findings based on data collected from interviews and surveys.

In examining the role of political risk in affecting FDI of US multinationals in manufacturing, Nigh distinguishes between industrialised and developing countries. Nigh's (1985) empirical results suggested that US multinational firms responded to both intercountry and intracountry variables when the host country was a developing country, but they only reacted to intercountry variables when the host country was an industrialised country.

Schneider and Frey (1985) compared the four different predictive models in explaining inflows of FDI for a sample of developing countries. The analysis included (i) a model with only economic variables; (ii) a model with only political variables; (iii) a model with an explanatory variable that incorporated political and economic factors in a single index; and (iv) a model that included in a disaggregated fashion both economic and political factors. They concluded that the fourth model provided the best forecast, indicating that economic variables should also be included in the estimation, and that indices which try to simultaneously capture political and economic effects do not perform well.

Tallman (1988), on the other hand, studied whether political risks in the home country had an effect on outward FDI. Using the US as the host country and a number of industrialised countries as home countries, he examined the effect of international and

domestic political and economic events on FDI. His results postulated that reducing domestic political risk reduced outward FDI, while it improved political relationship between countries increased outward FDI.

However, Kobrin believes that various risks have different degrees of importance depending on whether the firm is operating in a developing or an industrialised country. His survey results show "civil disorder and expropriation were seen as most important in less developing countries, while in industrial countries price control and labour disruptions were seen as most important" (Eiteman, Stonehill and Lessard, 1982: 289).

Schreiber's (1970) empirical work on different types of investment, found "political and economic stability" to rank quite low as an influence on both local-market-oriented and export-oriented subsidiaries of US FDI in Taiwan. Though "government attitude and business climate" were of moderate relevance to decisions in offshore-sourcing subsidiaries, their relevance to local-market sourcing was minimal. The results indicated that government guarantees on limited economic risk (for instance, limitations on competition, or an assured government market) were the most influential factor on local-market decisions.

The general belief that countries with relatively high political risk, as measured by available indices reported in commercial publications, provided higher returns on FDI. However, the empirical test of Chase, Kuhle, and Walther (1988) did not show support for this hypothesis. This may be attributed to the

following reasons: (i) that commercially available indices are not good representations of political risk, and (ii) the reported returns are different from actual returns owing to intra-company transfer pricing, or that expected returns are not well represented by actual returns (Lizondo, 1991: 78).

#### 2.4.8 Policy Imperatives

Government policies may lead to FDI. Basi (1963) and El-Haddad (1988) found "the host government's favourable attitude towards foreign investors" to be a consistently highly valued factor in their studies.

In discussing host government policies towards FDI, these are classified into two categories, i.e., incentives and disincentives, according to whether they tend to increase or decrease the flow of investment to a given country.

Incentives include, in addition to fiscal benefits such as tax credits and tax exemptions, some financial benefits such as grants and subsidised loans. Some countries provide non-financial benefits such as public-sector investment on infrastructure aimed at enhancing the profitability of a given foreign investment project, public sector purchasing contracts, and the establishment of free trade zones.

Disincentives include a number of impediments to FDI which range from the slow processing of authorisation for foreign investment to the outright prohibition of foreign investment in specified

regions or sectors. Most impediments, however, lie between those extremes and take the form of conditions attached to the authorisation to foreign investment in general, or for certain regions and sectors. Those conditions may include setting a lower limit on the portion of input purchased from local sources and on export levels, or a specified relationship between the value of exported output and the value of imported inputs. Other conditions may include requirements regarding levels of employment, transfer of technology, expenditure on research and development, or investment in unrelated areas. In addition, there may be some upper limit on foreign ownership of equity and restrictions on foreign exchange transactions, especially those associated with project remittances, and repatriation of capital. These regulations are particularly prevalent in developing countries.

Empirical works provide mixed evidence on the effect of host country incentives and inducement policies on the foreign-direct-investment decisions of transnational corporations. A survey of United Kingdom overseas investors found tax regulations and government incentives in host countries to have negligible influence on decisions (Shepherd, Silberston and Strange, 1985). However, Buckley and Thurwell (1978) in their studies of the first overseas production facilities of small United Kingdom enterprises, found that two-thirds of them investigated inducements offered by host-country governments before taking the decision to invest, and half of these proceeded to use some of the offered inducements.

Bennett, Merchan and Metcalfe (1982), in their analysis of Australian overseas investment, found the inclination to take advantage of specific encouragement by host countries to be the second most important factor influencing decisions on subsidiaries manufacturing for export. However, this factor rated only fifth (of a total of eight factors) overall and for subsidiaries manufacturing for host-country markets.

On the contrary, Schreiber (1970) found incentives to have had an influence on investments to serve the market of Taiwan and very limited relevance to export-oriented investments there.

El-Haddad (1988) ranked "tax incentives" in the foreign country "highly as an influence". But, Basi (1963) found "tax structure of the foreign country" to be only moderately influential. Hill and Lindsey (1987) found host-country incentives to have limited influence on foreign direct investment decisions in the Philippines. Similarly, Agarwal (1980) and Organization for Economic Corporation and Development (1989) reported incentives to have a limited effect on risk and return considerations that are only marginally affected by incentives.

Dunning's (1986) study of Japanese investors in the United Kingdom found "incentives" and "foreign direct investment policies" to have a modest influence on decisions, but that of "taxes" and "procurement policies" was negligible.

Forsyth's (1972) study provides support for the view that while "inducement" and "incentives" may often not play a key role in

influencing decisions on whether or not to undertake a particular overseas investment, they may strongly affect precise location decisions. Foreign investors may well accept these incentives as windfall profits. Thus, over half the respondents gave "reason for choosing a location in Scotland rather than in some other region or country once the decision to come to the United Kingdom (or Europe)" had been made. They were attracted by "government financial inducements" and "aspects of central government regional policy" there.

## **2.5 Empirical Studies in Malaysia**

Hughes and You (1969: 62-65) revealed that Japanese, American, and Australian affiliates in Singapore and Malaysia were mainly established to gain access to local markets, and made use of them as centre for regional distribution. They also found that concessions offered in the tax incentive schemes were perceived as of relatively minor importance by various capital-exporting countries.

The most detailed study on the determinants of FDI in Malaysia was based on Saham's survey undertaken in 1972 (Saham, 1980). He was interested in the motivation of British firms in Malaysia. The uniqueness of this study was that the survey was conducted in Britain.

Saham's findings led him to conclude that the critical reason for British operations in Malaysia was market factors. Fifty-six per cent of the respondents cited "to take advantages of markets that

already established", and 35 per cent relegated "to take advantage of expected growth of market". However, this motivation did not explain why British affiliates were actually involved in operations abroad per se, since the market would have to continue to be served by exports from UK factories. As pointed out by Brash (Goh, 1973: 22), "without any obstacle to trade, an expanding foreign market might be served by exports from the US". Similarly, the studies by May (1965) on Nigeria and Deane (1970) on New Zealand discovered that the desire to avoid or overcome import restrictions was the most important single factor influencing foreign investment in establishing manufacturing activities in both countries. As a result, 15 per cent of Saham's respondents considered "to overcome expected rise in tariffs" as crucial, while 49 per cent voiced it as an important determinant.

In terms of cost, the desire "to avoid and reduce freight charges" was a prime factor for 4 per cent of affiliates, and 46 per cent regarded it as important. On the contrary, "to take advantage of lower Malaysia costs" was cited as supplementary motivation by 49 per cent of respondents.

Regarding government incentives, Saham's survey showed that 73 per cent of the total samples viewed them as marginally significant. The insignificance of government incentives was later supported by Hoffman and Tan (1980), Maisom (1980) and Bardai (1989). Hoffman and Tan and Bardai concluded that tax incentives were not a decisive factor in the decision to invest abroad. On the other hand, they agreed that the availability of

the incentives is favourably accepted by capital-importing countries.

To determine whether there were significant variations from the general pattern of motivation discussed, Saham further subdivided the samples according to the size of employees, namely, small, medium, and large. The results, however, did not significantly differ from the broad results above (Saham, 1980: 72-76).

In a survey of Australian manufacturing companies in Malaysia, BIE reported that 60 per cent of the cases indicated that manufacturing for the Malaysian market was their most important objective, followed by reverse import (20 per cent), and export to third countries (about 9 per cent) (BIE, 1983: 31).

Concerning the reasons for Australian investment in Malaysia, it is apparent that expected growth of the Malaysian market was overwhelmingly the main reason. The advantage of low unit costs emerged as the second motive, followed by the use of patterns or expertise. The other important motives cited by firms were: "to take advantage of specific encouragement offered by Malaysian government", and "to overcome tariff walls" (BIE, 1983: 32).

Poon (1993), in his study of Korean manufacturing, identified the dominant factor in Korean companies' decisions to invest in Malaysia as lower labour cost (mean value 4.43). On the contrary, investment incentives received higher attention than market factors in this study compared to the afore-mentioned findings (mean value 4.13). To the Korean manufacturers, gaining access to markets, either domestic or export, received very low priority.



Nevertheless, they want to maintain their competitiveness in this region as a result of currency appreciation (mean value 4.00). Despite the fact that Malaysia is rich in human resources, "to tap availability of skilled labour" was of less importance to the Korean affiliates.

Zulkornain (1992) asked the foreign manufacturers to rank ten aspects of Malaysia according to their attractiveness in investing in Malaysia. He observed that political and economic stability was accorded the most attractive ranking with a mean of 2.46. Human resources, namely disciplined and cheap labour in this case, and availability of local finance, efficient banking and insurance services were cited as the second and third most attractive, both with a mean value of 2.06. Government incentives, either in terms of tax concessions, investment policies, or tariff exemptions, received relatively low mean rankings. Similarly, market factor and raw material inputs were of less concern to respondents. The respondents cited "availability of local partners" as the least important.

In his quantitative analysis using simple regression, Zulkornain found that the level of gross national product (GNP), net external reserves, interest rates, ratio of manufactured output to GNP, current profits of foreign-controlled companies in Malaysian manufacturing and total assets of the banking system are the important factors influencing FDI activities in Malaysian manufacturing.

Regarding Taiwanese small and medium-sized firms' FDI in Malaysia, Ariff and Ng (1994: 19, Table 2.2) found that political stability and good infrastructure were among the reasons cited by more than 50 per cent of the firms for investing in Malaysia rather than in other Southeast Asian countries. Reasons such as racial homogeneity and good potential for local markets were considered important by a much smaller percentage of the firms. In addition, "sound legal framework and commercial practices" and "attractive fiscal incentives" played some role in determining Taiwanese FDI in Malaysia. About 2 per cent of the firms gave "no language or communication problem" as a reason for choosing Malaysia over other Southeast Asian countries.

Ariff and Ng later subdivided the samples according to their size. Between large (more than 300 employees) and small (less than 300 employees) firms, they found that there are significant differences in the proportion of firms reporting "good potential for local market", "cheap labour" and "have familiar entrepreneurs or people". More large firms reported "cheap labour" as the motivation for investment in Malaysia, while a higher percentage of small firms cited "good potential for local market" and "have familiar entrepreneurs or people" as the reasons for choosing to invest in Malaysia.

Although there was a number of empirical studies on determinants of FDI in Malaysia, Ariff and Ng made the only attempt at statistical analysis of the qualitative data. Most of the empirical studies discovered that capital-exporting countries

are more concerned with market factors of Malaysia. In addition, they emphasised the importance of labour costs and political stability. To some extent, a number of home countries concentrate on investment policies.

The afore-mentioned results were analysed according to the home countries' point of view. However, these may not be true in the case of investment in detailed industry subsectors or particular industries from specific home countries. A misleading picture of the factors influencing FDI in Malaysia will be provided if the above criteria are not taken into account. It has been found by researchers that such misconceptions exist between the agenda adopted by host countries to attract foreign investment and the items about which foreign investors are most concerned (Robinson, 1961: 2). If the attention of the policy makers could be drawn to the right direction and policy measures judiciously selected to match the needs of the investors, the attractiveness of a country would increase. Since none of the studies focused on this matter, the gap must be filled by studies such as this one.

#### Notes

1. See, for example, T. Agmon and C.P. Kindleberger (eds.), Multinational from Small Countries, Cambridge, Massachusetts: M.I.T. Press, 1977.
2. Competitors are not confined to indigenous firms, but inclusive of other foreign-owned firms which may threaten the position of the firm in the industry.

3. The managerial costs of producing in the US for export plus the cost of transport, are less than the full cost of producing in a foreign subsidiary.
4. FDI and US GNP are measured as percentage deviation from trend.