Determinants of Entry Mode of Japanese Multinational Enterprise in Thailand

By

MATHEE WONGVES

A Thesis Submitted in Partial Fulfillment
of the Requirements for the Degree of

Master of Business Administration

Graduate School of Business
Assumption University
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November, 2001

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Examined on : 23 November 2001
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Graduate School of Business
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Abstract

Entry mode choice of a MNE is influenced by several factors. The main objective of this research is to examine the influence of the firm-related determinants, including size of Japanese MNEs, size of foreign affiliate, diversification and international experience, on the choice of entry mode by Japanese MNEs in Thailand. The empirical study focuses on the Japanese affiliates established in the manufacturing sectors in Thailand. The modes of entry are restricted to new entities which initiate investments in new facilities, namely joint venture (JV) and greenfield wholly-owned affiliate (WOA).

Four hypotheses have been formulated to guide this study. First, the larger an investing firm, the more likely it will choose a wholly-owned affiliate for its foreign entry. Second, the larger a foreign affiliate, the more likely the foreign affiliate will be joint venture. Third, an investing firm will be less likely to choose a wholly-owned affiliate for foreign affiliate when diversifying into areas outside of its core business. Finally, an investing firm that has higher international experience will be more likely to choose a wholly-owned affiliate for foreign entry.

The sample of 328 cases is used for the analysis of firm-related determinants and entry mode selection of Japanese MNEs. Binomial Logistic Regression is used in this study. The results suggest that size of foreign affiliate and diversification are significantly related to shared

ownership structure for foreign firms. But, size of parent MNE and international experience are not statistically significant.

Finally, from this study, multinational firms may have the idea on entry mode decision making which is a difficult task and has a direct impact on performance of the affiliates. Therefore, MNEs should make this decision very carefully so that they will be able to find the most suitable type of entry modes for their firm-specific advantages and investment climate of that particular country. Also, policy maker must be cautious that foreign equity limits can be a significant barrier to inward FDI in some sectors. Thus, they should reconsider some restrictions and design new policy that can attract more FDI inflow into the country. Otherwise, the willingness to transfer sophisticated technology can be reduced.

Acknowledgements

I gratefully acknowledge the intellectual and personal debts that this research has incurred during the life of the study.

With greatest gratitude, I am indebted to my academic advisor, Dr. Tang Zhimin, who continues to give guidance, encouragement, and support in numbers of ways from the initial formulation of the study until its fruitful conclusion.

Many thanks are due my examination committee, Dr. Ismail Ali Siad and Dr. Jakarin Srimoon, for their helpful comments and suggestions which contribute to the improvement in this dissertation.

Finally, my deep thanks also go to members of my family who always give endless supports and encouragement that made me complete this study.

Mathee Wongves

November 2001

Table of Contents

Chapter 1: Introduction

1.1 Overview

Foreign direct investment (FDI) plays significant roles in cross border resource transfers, from outward investment countries to inward investment countries (host countries). This transference of capital and other non-financial resources is very important for the economic development in the world, particularly in inbound investment countries which are less-developed countries (LDCs).

Japanese MNEs have been the most active investors in Asia. The period of most intense foreign investment activity occurred in the late 1980s when firms from Japan were looking for production base abroad to escape appreciating yen and high wages. A liberalization of FDI regulations and cheap labors attracted a great deal of Japanese investors into the region.

Thailand is one of the major recipients for Japanese outward investments in the world. Japanese FDI in the manufacturing sector in Thailand involves wide variety of industries ranged from primary industries to high-technology industries. In 1995, Thailand was the forth largest Japanese investment recipient in the world, in term of number of investment projects, following U.S., China, and Hong Kong. There were in total 1,289 Japanese affiliates in Thailand in 1996. Since the onset of the financial crisis, FDI in Thailand has boomed to historical highs, increasing by 85.3 percent on 1997 to US$6.9

billion in 1998 because of the greater export competitiveness due to weaker currency, lower asset prices, and deregulation.

To establish its affiliate in a foreign market, a MNE has two options in determining the affiliate's ownership structure, including full ownership (wholly-owned subsidiary) and shared ownership (equity joint venture). Entry modes may be differentiated on control, resource commitment, and dissemination risk. A firm seeking to enter a foreign market must make an important strategic decision on which entry mode to use for that market. Entry mode selection is contingent upon several factors. The first factor is called firm-related determinants, which involve size of parent MNE, size of foreign affiliates, diversification, international experience, product differentiation, R&D intensity and advertising intensity. Another factor is host country-related determinants, including investment risk, host attitude towards a particular ownership structure, and cultural similarity between the home and host country.

Nevertheless, this research is focused only on the influence of firm-related determinants, including size of Japanese MNE, size of foreign affiliates, diversification and international experience, on the Japanese MNEs' entry mode selection in Thailand.

1.2 Research Objectives

The main objectives of this research are as follows:

- To examine the choice of entry mode by Japanese manufacturing MNEs in Thailand.
- To test whether the firm-related determinants, including size of Japanese MNEs, size of foreign affiliate, diversification and international experience, influence the choice of entry mode by Japanese MNEs in Thailand.
- To determine what influence (if any) these firm-related determinants have on the choice of entry mode by Japanese MNEs in Thailand.

1.3 Statement of Problem

What determines a firm's choice between wholly-owned subsidiaries and joint ventures? Do the firm-related determinants, including size of Japanese MNEs, size of foreign affiliate, diversification and international experience, influence the choice of entry by Japanese MNEs in Thailand? How do these firm-related determinants influence the choice of entry mode by Japanese MNEs in Thailand?

1.4 Scope of the Study

The empirical study is conducted to examine the firm-related determinants that influence the entry mode decision of Japanese MNEs in Thailand. Four variables will be investigated, including size of Japanese MNEs, size of foreign affiliate, diversification, and international experience. The study

focuses on the Japanese affiliates established in the manufacturing sectors in Thailand during 1986-1994, in other words, after the appreciation of the Japanese Yen. The modes of entry are restricted to new entities which initiate investments in new facilities, namely joint venture (JV) and greenfield wholly-owned affiliate (WOA). This is to control the effects of prior advantages inherited in affiliates such as in merger or acquisition modes.

1.5 Limitations

This study investigates only the influence of firm-related determinants on the entry decision. Based on data availability, four types of firm-related factors, including size of parent MNE, size of foreign affiliate, diversification, and international experience, will be used. Moreover, it does not consider the host country-related determinants, such as cultural difference, investment risk and host country's attitude toward foreign investment, which also have the impact on choice of entry mode of MNEs. In addition, the focus of this study is on the Japanese affiliates established in the manufacturing sector in Thailand. Therefore, the conclusion from this study cannot be applied with the affiliates in service sector and in manufacturing sector outside Thailand. The comparison among the affiliates of different nationality MNEs and in other sectors in terms of entry mode determinants would be interesting extension.

1.6 Significance

This research provides information about the influence of firm-related determinants on Japanese MNEs' entry mode selection. Therefore, this information can be used as a guideline for the multinational firms that want to engage in FDI. From this research, they can realize that there are several factors, including firm-related determinants, influencing the entry mode selection of the company. They can know about the impact of each firm-related variable. It provides the better understanding of the way to make entry mode decision. As a result, the company can use it as the basic information in making the decision about the entry mode.

1.7 Glossary

- ***Multinational Enterprise (MNE):*** is a corporation which owns (in whole or in part), controls and manages income-generating assets in more than one country.
- ***Foreign Direct Investment (FDI):*** the cross border transfer of capital which is related to the firm's activities overseas.
- ***Entry mode:*** an institutional arrangement for organizing and conducting international business transactions
- ***Wholly-owned affiliate (WOA):*** an operation in which 95 percent or more of the equity is possessed by one foreign company.
- ***Joint venture (JV):*** a share-equity undertaking between two or more parties, each of whom hold at least 5 percent of the subsidiary's equity.

- ***Control:*** the ability to influence operational and strategic decisions of the foreign operation.
- ***Resource commitment:*** dedicated assets that cannot be redeployed to alternative uses without cost.
- ***Dissemination risk:*** the risk that a firm's specific know-how or proprietary technology may be expropriated by another firm.
- ***Firm-related determinants:*** size of parent MNE, size of foreign affiliate, diversification, international experience, product differentiation, R&D intensity and advertising intensity.
- ***Host country-related determinants:*** investment risk, host attitude towards foreign investment, cultural similarity between the home and host country.

Chapter 2: Literature Review

2.1 Multinational Enterprise and Foreign Direct Investment

The world business today is no more restricted by national boundary. Highly-advanced technology in transportation and communication facilitates a national firm to move across national boundary to multinational operations. In the present times, the contribution of multinational enterprises (MNEs); so called multinational corporations (MNCs) or transnational corporations (TNCs), to the world economy is enormous. "A multinational enterprise (MNE) is a corporation which owns (in whole or in part), controls and manages income-generating assets in more than one country. In so doing, it engages in international production, namely production across national boundaries financed by foreign direct investment (Hood and Young, 1979:3)".

There are two forms of international investment; portfolio investment and foreign direct investment. Portfolio investment is the capital investment in foreign securities such as stocks or bonds. Foreign direct investment (FDI) is the cross border transfer of capital, which is related to the firm's activities overseas. FDI differs from international portfolio investment in two major attributes. First, through FDI, the investors have authority to *control* over decision-making in the invested foreign firm. Second, FDI usually involves several types of cross border *resource movement*, not only financial capital, but other types of non-financial resources as well. The non-financial

resources refer to either tangible assets such as machinery, equipment, and human resources of intangible assets such as product of production technology and management know-how.

Foreign direct investment (FDI) is important because production facilities aboard comprise a large and increasingly important part of international companies' activities and thus are integral part of their strategic thrusts. In fact, FDI is now more important than trade as a vehicle for international economic transactions (World Investment Report, 1995).

2.2 Reasons for Foreign Direct Investment

Firms expand internationally for a variety of reasons. An overview of the major determinants of FDI is provided in Table 2.1.

Marketing Factors

Marketing considerations and the corporate desire for growth are major causes of the increase in FDI. Even a sizable domestic market may present limitations to growth. Firms, therefore, need to seek wider market access in order to maintain and increase their sales. Some firms make investments in order to be closer to and better serve some of their major clients. The growth objective can be achieved most quickly through the acquisition of foreign firms. Other reasons for FDI include the desire to gain know-how and the need to add to existing sales-force strength.

Table 2.1

Major Determinants of Direct Foreign Investment

Marketing Factors	Barriers to Trade	Cost Factors	Investment Climate	General
Size of market	Government – erected barriers to trade	Desire to be near source of supply	General attitude toward foreign investment	Expected higher profits
Market growth	Preference of local customers for local products	Availability of labor	Political stability	Other
Desire to maintain Share of market		Availability of raw materials	Limitation on ownership	
Desire to advance Exports of parent Company		Availability of technology/capital	Currency exchange regulations	
Need to maintain Close customer Contact		Lower labor costs	Stability of foreign exchange	
Dissatisfaction with Existing market Arrangements		Lower other production costs	Tax structure	
Export base		Lower transport costs	Familiarity with country	
Desire to follow Customers		Financial (and other) inducements by government		
Desire to follow Competition		More favorable cost levels		

Source: Adapted from Organizations for Economic Cooperation and Development, International Investment and Multinational Enterprises (Paris: OECD, 1983), 41.
Quoted from: International Business, 3rd edition.

A major cause for the recent growth in FDI is derived demand. Often, as large multinational firms move abroad, they are quite interested in maintaining their established business relationships with other firms. Therefore, they frequently encourage their supplier to follow them and continue to supply them from the new foreign location. Often, firms invest aboard for defensive reasons, out of fear that their clients may find other sources aboard, and this eventually might jeopardize their status even in the domestic market. For example, Bridgestone sold tires to Toyota and Honda,

which in turn exported fully assembled cars (including the tires) to foreign markets. Bridgestone's decision to make automobile tires in Thailand was based partially on its desire to continue selling to Honda and Toyota once those companies initiated Thailand production (Financial Times, 29 January 1996).

For similar reasons, firms follow their competitors abroad. Competitive firms influence not only their engaging in FDI, but even where the investments are made (Flowers, 1976, in Czinkota et al., 1994). Many firms have found that even their competitive position at home is affected by their ability to effectively compete in foreign markets.

Barriers to Trade

FDI permits firms to circumvent barriers to trade and operate abroad as domestic firms, unaffected by duties, tariffs, or other import restrictions.

In addition to government-erected barriers, barriers may also be imposed by customers through their insistence on domestic goods and services, either as a result of nationalistic tendencies or a function of cultural differences. Furthermore, local buyers may wish to buy from sources that perceive to be reliable in their supply, which means buying from local producers. For some products, country-of-origin effects may force a firm to establish a plant in a country that has a built-in positive stereotype for product quality (White and Cundiff, 1978, in Czinkota et al., 1994).

Cost Factors

Servicing markets at sizable geographic distances and with sizable tariff barriers has made many exporters' offerings in foreign markets prohibitively expensive. Many manufacturing multinationals have established plants oversea to gain cost advantages in terms of labor and raw materials. For example, in the late 1980s, Japan's high wages and strong exchange rate forced many Japanese firms to relocate more labor intensive processes to economies with lower labor costs, and Thailand has been a favorite location for these investments.

FDI occurs not only horizontally, by firms acquiring or establishing similar firms abroad, but also vertically. Some firms engage in FDI to secure their sources of supply for raw materials and other intermediary goods. This usually secures supply and may provide it at a lower cost as well. All in all, cost factors are not necessarily the primary attraction for manufacturers to make FDI.

Investment Climate

FDI by definition implies a degree of control over the enterprise (Vukmanic et al., 1985, in Czinkota et al., 1994). Yet this may be unavailable because of environmental constraints, even if the firm owns 100 percent of the subsidiary. The general attitude toward foreign investment and its development overtime may be indicative of the long-term prospects for investment. In many countries, FDI tends to arouse nationalistic feelings.

Political risk has to be defined broadly to include not only the threat of political upheaval but also the likelihood of arbitrary of discriminatory government action that will result in financial loss. This could take the form of tax increases, price controls, or measures directed specifically at foreign firms such as partial divestment of ownership, local-content requirements remittance restrictions, export requirements, and limits on expatriate employment (Kobrin, 1981, in Czinkota et al., 1994). The investment climate is also measured in terms of foreign-currency risk. The evaluations will typically focus on possible accounting translation exposure levels and cashflows in foreign currency.

2.3 Contribution of FDI

FDI and Host Country Exports

FDI plays a leading role in bringing about rapid, export-led growth. Exports have been the main engine of Thailand's economic growth, particularly since the mid-1980s. This is the result of the shift in strategy of Japanese MNEs in Thailand from a local-market orientation to developing an export base, and the export performance of Japanese affiliates substantially improved (Sibunruang and Brimble, 1992).

Historically one of the world's leading rice exporters, Thailand has become a major exporter of manufactured goods, rising from only one third of total exports in 1980 to over 80 percent by 1997. This shift in exports is mirrored in the structural transformation of the Thai economy, from agriculture and to

industry. While agriculture's contribution to GDP was three times that of manufacturing in 1960, by the early 1990s it was less than half as important as manufacturing (OECD, 1999b).

Foreign investors have played a key role in this process. Electronics products, particularly computer parts and integrated circuits, make up almost one third of total Thai exports. These sectors are dominated by foreign MNEs. Through inward investment, Thailand has become the ninth largest exporter of computers during the 1990s (OECD, 1999b).

Nevertheless, exports have been limited to a small number of products (usually intermediate ones) and sectors, and to varying degrees these export sectors have been virtual foreign enclaves within host countries. They have often been characterized by low value-added (principally from labor-intensive assembly operations).

FDI and the Balance of Payment

Many of the most export-oriented foreign investors located in export processing zones in Thailand are heavily dependent on imported inputs. In some sectors, imports represent 80-90 percent of the value of exports. The high import dependence ratio for MNE-related exports is symptomatic of the poor linkages between foreign affiliates and the local economy more generally (OECD, 1999b).

According to the life cycle of any given investment projects, the foreign firm injects substantial amounts of new equity capital in the initial phase of investment. Once the project is operating profitably, however, the affiliate will begin to repatriate a share of the profits, while reinvesting the rest in the ongoing operations of the enterprise. Payments of dividends to the parent can be expected to exceed the capital invested and reinvested in the enterprise in the long run.

FDI also has the effects on the trade balance. Initially, the investor imports most of the capital equipment necessary to begin production, and in the first few years of operation, the affiliate will be heavily dependent on imported components. As the operations achieve a sufficient scale and as a local supplier industry develops, the affiliate will find it increasingly advantageous to source locally and the local content level will rise. The net effect on the trade balance will be strongly positive in the long run.

FDI and Host Country Employment

In economy with unemployed or under-employed resources like Thailand, the presence of foreign firms is likely to help to absorb the pool of labor by providing employment in non-traditional sectors, sometimes for sections of the population that would not otherwise find the same kinds of jobs. Employment created in manufacturing and services has absorbed persons who were unable to find work in rural areas, creating opportunities for them to rise above the poverty line and to share more fully the benefits of growth.

Foreign affiliates tend to pay higher wages than domestic firms and, through training and on-the-job experience, provide local employees with skill which can improve their future employment opportunities elsewhere in the economy (OECD, 1998).

Nevertheless, these benefits may be imperfect because of the following reasons:

- Despite the enormous growth in manufactured exports and the labor-intensive character of many exports, the number of jobs created has been relatively modest.
- Although persons employed in manufacturing have high income, the wages paid have been in declined since 1992.
- The pressures on producers to retain the competitiveness of especially labor-intensive products has led them to seek saving in areas that have reduced the quality of jobs and increased the vulnerabilities of workers.
- Producers of labor-intensive exports have made ever-greater use of foreign workers, depriving Thais of jobs they may once have held. The number of registered foreign workers, mainly from Myanmar, Laos, Cambodia, and China, increased since1990.

Technology Transfer

Technology is the key to economic development, and the technology and know-how flowing from parent firms to their foreign affiliates is one of the principal channels for international technology transfer. Foreign investors

can contribute to the economic growth because they tend to be more productive than local firms.

In the past, host government have tried various means to augment transfers: stipulating that an investor must operate though a joint venture with a local firm or transfer technology as a condition for investment approval, compulsory licensing, mandatory divestiture after a number of years, local content requirements, obligatory training for employees and weak intellectual property rights protection. All of these policies are designed in part to enhance potential spillover to the local economy. They may well have had the opposite effect. Indeed, technology imports of foreign affiliates tend to increase as the level of performance requirements imposed by the host government falls. The reason is that technology is a proprietary product which is often closely linked with the source of competitiveness of the firm. An investor would therefore be extremely reluctant to share its most advanced technologies with a local joint venture partner who may one day become a competitor. In many cases, MNEs respond by not investing in a particular market or by not transferring the most up-to-date technologies (OECD, 1998).

In Thailand, technology transfers from FDI have been moderate, according to several studies. One finds some evidence of transfer through foreign firms' training of high level staff, while another finds little evidence of transfer through the training of local suppliers. These studies generally cover the

period of the 1980s when FDI was relatively recent and when certain sectors were still heavily protected. A more recent analysis suggests that technology transfer has arisen to some extent through relations between foreign companies and local suppliers (TDRI, 1994).

Technology transfer and development have been hampered by the relatively low level of human resources development, which impacts not only on the work of laboratories but also on the shopfloor, with Thais often operating the equipment owned and understood only by foreigners.

2.4 The outlook for Japanese FDI

There are several factors influencing the outlook for Japanese foreign direct investments in East Asia and elsewhere:

Japanese Economy

Japan's domestic economic recession, combined with the prospect of sharply declining corporate earnings, has reduced the funds available to firms for investing overseas. These problems have been exacerbated by the acute problems of the banking sector, which has triggered a severe credit crunch for the majority of firms. Moreover, business confidence remains depressed. In light of these factors, several leading Japanese firms have been forced to review their offshore investment plans. Japanese electrical giants Fujitsu, Hitachi and Mitsubishi Electric recently decided to close respective international semiconductor plants. Given deteriorating domestic

and international economic conditions, Japanese FDI in Asia and elsewhere is likely to be muted (Oxford Analytica Ltd, 1998).

Yen's Appreciation

Outward Japanese investment expanded because there was a sudden and rapid appreciation of the yen against the dollar and other major currencies following the Plaza Accord. Most Japanese firms relied heavily on production within Japan and the rise in the yen caused their costs to balloon in dollar terms. Japanese firms initially reacted by reducing costs where possible, but not raising prices in dollar terms (Delios and Keeley, 2001). Therefore, the appreciation of the yen after 1985 pushed many Japanese firms to establish lower cost production bases within the region.

Host Country's Demand

The principal factor influencing Japanese investment in East Asia will be the evolution of regional domestic demand, especially in ASEAN economies. Notwithstanding the bubble economy period of rapid economic growth experienced by the region during the early 1990s, domestic demand in these economies has not evolved in line with the earlier expectations of Japanese investors. Because of the crisis, five East Asian countries (Indonesia, Korea, Malaysia, the Philippines and Thailand) experienced domestic demand declines of up to 26 percent during 1998. Japanese firms are resigned to the prospect of a protracted collapse in domestic demand in these East Asian economies. Although they will probably maintain the majority of existing

investments in these countries, Japanese firms are unlikely to invest in new capacity for the foreseeable future. As a result of collapsing demand in ASEAN and other Asian economies, Japanese manufacturing firms' affiliates in these countries have begun to export larger volumes of goods to Japan. Reverse exports accounted for 28 percent of the total output of Japanese firms with overseas operations in the latter part of 1997.

In addition to reflecting the adverse impact of the East Asian crisis, this is symptomatic of the fact that ASEAN lacks the degree of regional integration, where goods can flow relatively unhindered across national borders (Oxford Analytica Ltd, 1998). For example, the import barriers by host countries have forced Japanese manufacturers of home electrical appliances to locate separate plants producing similar products in each of ASEAN countries. Production of small lot size and wide variety items is indeed a cost advantage. When import tax is abandoned, the operation in one country then can be substituted by ones in other countries. Therefore, the process of regional integration through the ASEAN Free Trade Area (AFTA) and the ASEAN Investment Area (AIA) has been accelerated partly to restore the competitive advantages in attracting inward FDI into the region. Under regional integration, foreign investors can take advantages of reductions in tariff barriers, subregional growth triangles, brand-to-brand complementation schemes (BBC schemes), and so forth.

2.5 Characteristics of Japanese FDI in Asia

Japanese FDI grew rapidly in the 1980s, especially after 1985, and by the end of 1980s Japan topped among countries in terms of FDI outflow. The rapid growth in Japanese FDI in the 1980s can be attributed to the following factors: considerable strengthening of Japan's balance of payments, liberalization of controls on capital outflow, real wage increases which rendered many labor-intensive industries uncompetitive, land scarcity and environmental pollution considerations which led to the relocation of certain activities, resource scarcity, and finally a more liberal attitude towards foreign investment by some Asian economies. One of the most important factors was the rapid appreciation of the yen following the Plaza Accord of 1985 which reduced the competitiveness of Japanese industries and thus provided impetus for relocation of Japanese firms abroad.

But, after 1990, there was a reversal of the upward trend. Japanese FDI declined sharply between 1990 and 1993, from $ 48.1 billion to $ 13.8 billion. There has been a revival in FDI outflow from Japan since 1993. Between 1993 and 1996, FDI outflow from Japan increased by about 70 percent. The recent surge in Japanese FDI since 1993 seems to be attributable mainly to yen appreciation. The rapid growth in Southeast Asian economies and the potential of exploiting these markets has been perhaps another contributing factor (Goldar and Ishigami, 1999).

The dominant part of Japanese FDI goes to non-manufacturing industries/activities. In 1995, about two-thirds of the FDI was in non-manufacturing. The biggest recipient of Japanese FDI is the United States. But, if we consider only the FDI going into manufacturing industries, the share of East and Southeast Asia was higher than the share of the United States.

It may be useful to point out certain other features of Japanese FDI (Goldar and Ishigami, 1999).

(1) The ratios of overseas manufacturing are relatively low for Japan.

(2) Mergers and acquisitions (M&A) have been the most typical measures adopted by the big business in a scene of international competition. Indeed, a large part of the FDI flows among industrialized countries involve M&A. But, Japanese business has been lagging behind in this respect.

(3) While Japanese firms are not using M&A within the country, for outside investment there is a growing tendency to resort to M&A. Most of the cross-border M&A by Japanese firms are concentrated in the US and Asia. The M&A by Japanese companies in Asia has generally involved a small size of investment. The object of these M&A has been less of investments and more of strengthening relations for securing sources of supply of products (JETRO 1997).

(4) After establishing themselves well in the host country, the Japanese affiliates have been raising loans locally for investment.

(5) Major industries of Japanese FDI in Asia are electronic, electrical, machinery and transport equipment, assembly type. Also, in Asia, small- and medium-scale firms (some are keiretsu ones, others independent) are major investors from Japan in terms of the number of investments.

(6) Profitability of Japanese FDI is very low compared to that of US and some European FDI, but it is relatively much higher in Asia. These relatively high profit rates assure Japanese firms their re-investment fund in host countries and remittance of returns to the parent companies in Japan.

There has been a change in the objectives of the Japanese FDI in Asian countries: from that of utilizing cheap labor to produce for exports to the US and Europe, to taking advantage of growing markets in Asia and to produce final consumer goods for this market (Fukushima and Kwan, 1995).

Four major factors have been contributing to the rise in FDI in Asia (Fukushima and Kwan, 1995). These are: (1) the worsening of competitive position of Japanese companies caused by appreciation of the yen since 1993; (2) rising wages in the NIEs (also, increasing problems of environmental pollution); (3) infrastructure investment and technology upgrade in ASEAN countries putting them in a better position to receive the transfer of higher technology products; and (4) rising final demand in Asia thanks to the rapid growth attained by several countries of the region. It must be added here that while FDI flows to the Asian region lured by a growing

market is on the rise in recent years, the main stream of FDI in the region still remains the efficiency-seeking type, i.e., outsourcing to achieve lower production cost and aimed at the export market.

2.6 Japanese FDI in Thailand

Before the Financial Crisis

For many years, Thailand was one of the most open in the developing world to foreign investment. It was quick to recognize the powerful role that foreign investors could play in fuelling export-led growth, and it was well-placed to attract such investment during the years of regional structural adjustment in the late 1980s. Partly as a result of FDI inflows, Thailand was one of the world's fastest growing economies before the crisis (OECD, 1999b).

One of the main sources of Thailand's inward FDI has historically been Japan. The period of most intense Japanese foreign investment activity occurred in the late 1980s when firms from Japan were looking for production based abroad to escape appreciating home currencies. Japan's high wages and strong exchange rate forced many Japanese firms to relocate more labor intensive processes to economies with lower labor costs. As a result, Thailand was a principal recipient of the general increase of Japanese FDI for the purpose of establishing overseas manufacturing operations. In 1997, Thailand possessed the fourth largest stock of Japanese FDI worldwide and third in Asia (only China and Hong Kong had more foreign subsidiaries in existence) (Delios and Keeley, 1995).

Compared to the first half of the 1980s, the number of subsidiaries formed in the latter half of the 1980s more than quintupled. Measured on an approval basis, during the five years from 1989 to 1993 a total of 758 new Japanese subsidiaries were established in Thailand. This figure represents 32 percent of all FDI in Thailand during this period (Magomi and Kuroda, 1995, in Delios and Keeley, 1995). However, as Japanese FDI slowed down in the rest of the world, the breaks were applied to investment in Thailand, as subsidiary formation rates were more than halved in 1993 and 1994 (See Table 2.2).

Table 2.2

Entry Pattern of Japanese Firms in Thailand

Date of Entry	Number of Subsidiaries Formed	Percent of Total
Pre-1970	89	6.7
1970 to 1974	119	9.0
1975 to 1979	62	4.7
1980 to 1984	75	5.6
1985 to 1989	393	29.5
1990 to 1991	212	16.0
1992 to 1993	110	8.3
1994 to 1995	151	11.3
1996 to 1997	118	8.9
Total	**1,329**	**100.0**

Source: Calculated from data in Toyo Keizai's Kaigai Shinshutsu Kigyou Souran 1999 ed.
Note: Thirty-three subsidiaries did not provide a date of entry.
Quoted from: Japanese Foreign Direct Investment in Thailand: Characteristics and Performance of Japanese Subsidiaries.

Although growth in Japanese FDI increases year-by-year through the 1980s, it declined in the early 1990s (Toyo Keizai, 1997). Japan's investment share

fell to around 20 percent in the early 1990s as Japanese companies relocating process overseas favored economies with lower effective labor costs such as China, India and Mexico (Urata and Kawai, 1998).

After the Financial Crisis

The financial crisis in Asia erupted in July 1997 and Thailand was the first Asian country to be stricken by the crisis. Falling demand caused by worsening economic conditions and a credit crunch resulting from local banks reluctance to lend have had a negative impact on inward FDI in Thailand, which has been affected by the crisis. This has been offset to a degree, however, by greater export competitiveness due to weaker currency, the perception that the fall in asset prices has made Thai assets more attractive, and deregulation triggered by the crisis. As a result, FDI in Thailand, unaffected by plummeting GDP growth, has boomed to historical highs since the onset of the crisis, increasing by 85.3 percent on 1997 to US$6.9 billion (JETRO, 2000) (See Table 2-3). A significant proportion of new FDI is thought to be in the form of capital increases by existing foreign-affiliated forms and M&As deals with local firms (JETRO, 1999).

The currency devaluations, lower property prices and more company assets offered for sale, given the heavy indebtedness of domestic firms and their reduced access to liquidity, have reduced the foreign currency costs of acquiring fixed assets such as land, buildings and capital goods manufactured locally. In addition, such advantages are particularly relevant for export-oriented foreign affiliates, since they improve their international

Table 2-3

FDI Inflows into Main Developing Economies (BOP Basis)

(Units: US$ million, %)

	1993	1994	1995	1996		1997		1998	
					%change		%change		%change
East Asia	43,759	53,931	58,461	67,447	15.4	73,789	9.4	68,632	-7.0
Asian NIEs	6,192	10,735	10,541	12,141	15.2	14,802	21.9	12,856	-13.1
R.O.K.	589	810	1,776	2,326	31.0	2,844	22.3	5,146	90.4
Taiwan	917	1,375	1,559	1,932	23.9	2,248	16.4	222	-90.1
Singapore	4,686	8,550	7,206	7,883	9.4	9,710	23.2	7,218	-25.7
ASEAN4	10,052	9,408	12,070	15,125	25.3	14,751	-2.5	12,025	-18.5
Thailand	1,804	1,366	2,068	2,336	13.0	3,746	60.4	6,947	85.3
Malaysia	5,006	4,342	4,178	5,078	21.5	5,106	0.5	3,727	-27.0
Philippines	1,238	1,591	1,478	1,515	2.6	1,222	-19.4	1,713	40.2
Indonesia	2,004	2,109	4,346	6,194	42.5	4,677	-24.5	-356	n.a.
China	27,515	33,787	35,849	40,180	12.1	44,236	10.1	43,751	-1.1
Latin America	20,009	31,451	32,921	46,162	40.2	68,255	47.9	71,652	5.0
Brazil	1,292	3,072	4,859	11,200	130.5	19,650	75.4	31,913	62.4
Mexico	4,389	10,973	9,526	9,186	-3.6	12,831	39.7	10,238	-20.2
Argentina	2,763	3,432	5,279	6,153	23.4	8,094	24.3	6,150	-24.0
Chile	1,034	2,583	2,957	4,634	56.7	5,219	12.6	4,638	-11.1
Venezuela	372	813	985	2,183	121.6	5,536	153.6	4,435	-19.9
Russia, and Central and Eastern Europe	6,757	5,932	14,266	12,406	-13.0	18,532	49.4	17,513	-5.5
Poland	1,715	1,875	3,659	4,498	22.9	4,908	9.1	6,365	29.7
Czech Republic	654	878	2,568	1,435	-44.1	1,286	-10.4	2,552	98.4
Russia	n.a.	638	2,016	2,478	22.9	6,243	151.9	2,200	-64.8
Romania	94	341	419	263	-37.2	1,215	362.0	2,031	67.2
Hungary	2,350	1,144	4,519	1,982	-56.1	2,079	4.9	1,936	-6.9
Slovakia	199	270	236	351	48.6	174	-50.5	562	223.5
Middle East and Africa	7,178	6,875	3,727	6,528	75.2	12,295	88.3	12,511	1.8
Saudi Arabia	1,369	350	-1,877	-1,129	n.a.	2,575	n.a.	4,646	80.4
Israel	596	432	1,337	1,382	3.4	1,622	17.4	1,850	14.1
Egypt	493	1,256	598	636	6.4	891	40.0	1,076	20.8
Nigeria	1,345	1,959	1,079	1,593	47.6	1,539	-3.4	1,051	-31.7
Turkey	636	608	85	722	-18.4	805	11.5	940	16.8
Republic of South Africa	11	374	1,248	816	-34.6	3,811	367.0	550	-85.6

Notes: 1. East Asia defined as the three Asian NIEs other than Hong Kong SAR, the ASEAN4 and China.
2. Data on all economies except Taiwan are from *IFS* (IMF), and 1998 figure for Malaysia is from *WIR* (UNCTAD).

Sources: Prepared by JETRO from *IFS* (IMF) and *WIR* (UNCTAD).

Quoted from: JETRO White Paper on Foreign Direct Investment 2000: FDI Inflows to Japan Double

competitiveness vis-à-vis firms located in other countries that have not devalued. As a result, there were large increases in actual FDI flows into a number of industries during the second half of 1997 and the first quarter of 1998. For instance, FDI flows into financial services tripled in 1997 in comparison with 1996 and flows in the first quarter of 1998 alone are 30 percent higher than total flows in 1997 and FDI in such export-oriented

industries as electrical appliances and electronics has risen considerably (UNCTAD, 1998).

However, the capital flow of foreign direct investment during the liquidity crunch and the excess production capacity surplus came largely from parent companies to buy additional shares, to recapitalize, and to provide assistance to their affiliated companies here rather than constructing plants or expanding the production capacity directly as happened during the investment expansion period.

According to the Thai Board of Investment's annual survey covering foreign affiliates in all industries in Thailand in early 1998, they found that most companies alleviated their crisis-related problems by reducing production costs such as transportation, packaging and stock. Seeking new export markets presented another important solution. Among other measures, nearly half the respondents reported turning to the use of domestic raw materials in place of imported inputs. Some laid off employees.

Japan was one of the largest sources of FDI in Thailand. During the financial crisis, Japanese investment in Thailand recovered. It accounted for around 30 percent of all inflows in 1997 and 1998. This mainly reflected existing Japanese investors taking advantage of new foreign investment guidelines to buy out local partners. According to the Thai Board of Investment (BOI), Japanese firms accounted for 86 of the 138 capital increases that took place

between January 1997 and the end of August 1998, indicating that Japanese firms were noticeably more active than other firms in capital increases in the region (JETRO, 1999).

Nevertheless, according to national statistics on investment approved, Japanese FDI outflows to Thailand fell again in 1999. This is explained in large part by the sluggish state of the Japanese economy and weak demand among industries in Thailand that depend on domestic demand (JETRO, 2000). Another reason is that those parent companies accelerated their financial assistance by lending or recapitalizing to their ailing affiliated firms here and Thailand liberally eased joint venture rules and thus came a heavy flow of foreign investment during 1997-1998. As their affiliated companies' financial and liquidity situation improved, their financial assistance slowed in 1999.

In addition, flows of FDI to Thailand dropped 18 percent, to $6.1 billion in 1999, due in part to the flattening of the wave of massive recapitalizations in the banking industry, which had reached exceptionally high levels in 1998 (UNCTAD, 2000). In 1999, FDI (including that of bank sector) was invested mostly in major business sectors such as: (1) financial institutions which accounted for 48% of entire FDI, (2) manufacturing sector at 23% especially in the electrical appliances industry, and (3) the trade sector, with services and holding companies seeing a significant increase in FDI.

Thailand struggled to restore investment confidence in 2000 by offering many incentives to prospective investors. BOI relaxed export performance criteria on BOI promoted projects and offered all investors a duty exemption on raw material imports. In addition, Thai government has relaxed controls on foreign capital, reduced the number of industries closed to foreign capital and abolished export ratio requirements for foreign equity participation. Its efforts have proven fruitful as the country has enjoyed a steady increase in foreign investment over the past few years. Major investment in Thailand still focused on the export sector, particularly the electronic, petrochemical and automobile industries.

In the first 10 months of 2000, 967 projects applied for promotional privileges with a total investment of 301.8 billion baht. This compared with 652 projects, worth 127.7 billion baht, in the same period in 1999. Japanese investors ranked first with 254 projects, followed by Europe (148) and Taiwan (88). Projects that obtained investment promotion in the first 10 months of 2000 totaled 956, up 72% from the 555 successful projects in the same period in 1999. The investment was worth 245.8 billion baht, an 80% increase over 1999, and had the potential to create 197,320 new jobs.

Sectoral distribution

In the late 1980s, Thailand benefited from massive relocation of industries from Japan as a result of currency appreciation in this economy. Japanese firms have invested in a wide variety of industries in Thailand. However,

there is a strong concentration in the manufacturing sector. During the early stages of Japanese investment in Thailand, about 55 percent of investments were made in the manufacturing sector. In the 1987-1993 period, 61 percent of investments were involved in manufacturing, and in the final period (post-1994), this percentage had increased to 71 percent. Corresponding to the greater proportion of manufacturing investments over time is a decline in several other sectors (Delios and Keeley, 1995).

For subsidiaries established prior to 1986, a comparatively large amount of subsidiaries (25 percent) were formed in the food, tobacco and textile industries. In the later periods, however, the proportion of subsidiaries formed in these sectors declined. This decrease in the importance of these industries was concurrent with an increased volume of Japanese investment to opening transitional economies such as China. Thailand became a less favorable location for labor-intensive manufacturing, perhaps because of the relative increase in the cost of labor within the country. In 1987-1993 period, Japanese investment focused on electronics and industrial machinery. Thailand has also been successful in drawing investment in the automotive sector (Delios and Keeley, 1995). Electrical equipment accounted for 36 percent of the cumulative total of investment in manufacturing between 1979 and 1996 on a BOP basis (in terms of bath), a higher proportion than any other area of manufacturing (JETRO 1999).

During the 1990s, as Thai industry became less competitive because of the relative increase in the cost of the labor, real estate boomed and private infrastructure increased, the composition of inward FDI shifted significantly to real estate and other sectors, which included infrastructures. Although FDI in the manufacturing sector is dominated by projects in electronics, with significantly more investment in that sector than in any other manufacturing activity, manufacturing as a whole represents only one third of total inflows (OECD, 1999b).

Recent FDI growth reflects the recapitalizing of financial institutions now that FDI access to this sector is more liberal, and the easing of joint venture restrictions has increased industrial investment. Therefore, The sectors receiving high levels of foreign direct investment in recent years include financial institutions, manufacturing industries (such as machinery and transport equipment, and electrical appliances), and trade (See Table 2.4).

Future and Prospect

Thailand's location at the junction of Indochina and Southeast Asia, its large and increasingly wealthy population, its relatively low labor costs, particularly since the 1997 depreciation, its strong natural resource base and its desire to serve as a regional transport and manufacturing hub will remain attractive to the foreign investors. Regaining and maintaining the international competitiveness by drawing on foreign resources and skills will be critical to Thailand's medium term economic recovery. However, the sustainability of

investment growth is facing great challenges from China and Vietnam which foreign investors are eyeing more eagerly. Competition for foreign investment was likely to become fiercer in the region in the future, especially once China joins the World Trade Organization.

Table 2.4

Recent FDI by Industry Sector

Sector	1997		1998		1999	
	Amount (US$ Million)[a]	*Shares* (%)	*Amount* (US$ Million)[a]	*Shares* (%)	*Amount* (US$ Million)[a]	*Shares* (%)
Primary production	22	1	60	1	-80	-2
Mining & quarrying	21	1	59	1	-82	-2
Agriculture	1	0	1	0	2	0
Manufacturing	**1,863**	**50**	**2,022**	**29**	**1,075**	**21**
Food & sugar	223	6	72	1	-20	0
Textiles	48	1	90	1	19	0
Metals & non-metals	211	6	323	5	226	4
Electrical appliances	589	16	248	4	418	8
Machinery & transport	411	11	659	10	397	8
Chemicals	193	5	213	3	36	1
Petroleum products	14	0	308	4	6	0
Construction materials	-13	0	-2	0	22	0
Other manufacturing	186	5	110	2	-29	-1
Services	**1,788**	**48**	**4,393**	**62**	**3,852**	**74**
Financial institutions[b]	119	3	2,628	38	2,243	43
Retail & wholesale trade	1,084	29	828	12	1,152	22
Construction	185	5	149	2	-137	-3
Services	290	8	293	4	474	9
Real estate	111	3	494	7	120	2
Other	**85**	**2**	**450**	**7**	**354**	**7**
Total FDI	**3,758**	**100**	**6,925**	**100**	**5,201**	**100**

Note: a CEIC data from the Bank of Thailand are converted into US dollars using the average yearly exchange rate.

b 1998 and 1999 figures include US$2.2 billion in bank recapitalization. The Bank of Thailand plans to update its statistics so that FDI for 1998 will be approximately US$7 billion (World Bank, 2000).

Source: CEIC, 2000.

Quoted from: New Opportunities for Foreign Investors.

Apart from the few major sectoral opening reforms achieved during the crisis, FDI regime has been very slow and restrictions remain considerable compared to regional competitors like the Republic of Korea, China,

Malaysia and Indonesia. Ongoing liberalization of the foreign investment regime and related economic and legal reforms are necessary to ensure Thailand can compete with other regional FDI destinations.

Analysts predict the next wave of FDI into Thailand will be associated with privatization of state enterprise (Bangkok Post, 16 December 1999). About US$6 billion worth of state enterprises are being readied for privatization over the period to 2005. If this proceeds, it will attract considerable FDI. Beyond possible large scale investments in privatized industries, the BOI sees export potential in light industries, including textiles, garments and luggage, especially high value products. Opportunities will continue in the agrifood sector for frozen food, processed food and vegetables. Other areas of high potential include parts and component manufacturing for electronics and electrical appliances. Exports of these are forecast to grow rapidly over the short to medium term. The service sector also should grow rapidly during the next decade.

Viewing Thailand as base for future export operations, Japanese manufacturers in export industries such as the electronics industry have also begun to transplant production offshore and invest in increased production capacity in the region. At the same time, there is a growing trend among Japanese automakers in Thailand to take on production transferred from Japan and switch to exporting to markets outside the region, such as Australia, in order to maintain operating levels (JETRO, 2000).

In sum, Thailand's medium to long term foreign investment outlook depends on the successful implementation of domestic structural reforms, the external environment, including regional competition for foreign capital, the depth of future FDI regime liberalization and investment promotion restructuring.

- External factor

During the 1990s, China's low effective labor costs attracted substantial FDI, and its attractiveness should increase following its WTO accession in 2001 (World Trade Organization, 1999). It could significantly affect longer term FDI flows to Southeast Asia.

- Domestic factors

Apart from the economy's medium term recovery, the pace of deregulation and corporate and financial restructuring, three key factors will determine the level of foreign investor interest in Thailand: how fast remaining constraints to FDI are removed, how fast state enterprise privatization and government regulatory streamlining occurs, and how FDI promotion measures change.

2.7 Investment Policies and Laws

The Thai government recognizes the important contribution of foreign investment to the domestic economy. The Board of Investment has been established to encourage foreign as well as local investment. BOI is the government agency responsible for administering incentives and providing services with a view to encouraging investment in priority areas. Various

measures have been initiated to attract more foreign investment that contributes to the country's industrialization process. The BOI gives special consideration to investment projects which are export oriented, support resource development, substantially increase employment, locate in the provinces, establish of develop industries which from the base for further stages of industrial and technological development. The basic incentives offered by the BOI include tax incentives such as corporate income tax holidays, exemption or reduction of import duties, and exclusion from taxable income of dividends during the tax holiday, etc.

Throughout most of the 1990s, the Alien Business Act, 1972 and the Investment Promotion Act, 1977 governed FDI in Thailand. The alien business law restricted foreign access to many business sectors, including agriculture, manufacturing, construction, retailing, real estate and most business, professional and financial services. The investment promotion law provided incentives, including tax holidays and capital goods duty waivers, to both foreign and local investors investing in priority regions and sectors.

Since mid 1997, the Government with IMF support has introduced a series of new laws to facilitate FDI:

- The new foreign business law and financial sector reforms somewhat broaden areas in which foreign investors can participate, and ease foreign ownership ceilings and other restrictions.

- The alien land law amendments extend the circumstances under which foreigners can own and mortgage land.

The new foreign business law made it easier for foreigners to obtain business licenses and hold larger shares of local businesses, facilitating increased FDI. However, while the new law reduces the number of restricted business sectors from 63 to 43, it still extensively restricts foreign majority participation in many economic activities. The new foreign business law does amend usefully the definition of an alien, now defined as any juristic person (including companies and properly registered partnerships) in which foreigners hold 50 per cent or more of the value of the shares.

The new law has several new restrictions. Foreign investors now must invest at least Baht 3 million (US$79,000) in foreign currency in a proscribed business to gain permission to enter it; the previous law did not set a minimum foreign currency investment. The new law also roughly doubles the fine, to between Baht 100,000 and 1,000,000 (US$2,600 to $26,000) for foreigners engaging in a restricted business, and offenders can be imprisoned for up to three years.

However, some aspects of the new law are less prohibitive than previously. For example, the new law stipulates foreigners cannot undertake retail business with a capital investment less than Baht 100 million (US$2.6 million) or operate retail stores worth less than Baht 20 million (US$526

000). By inference, foreign companies can engage in retail business with foreign equity over Baht 100 million (US$2.6 million) and several large retailers already have entered Thailand. In addition, Thailand has relaxed regulations so foreign investors can own 100 per cent of banks, finance companies and security houses.

Since the financial crisis began, the BOI has reintroduced incentives to encourage FDI to bolster foreign exchange reserves. To help Thailand remain an attractive investment destination during the crisis, the BOI relaxed export performance criteria on BOI promoted projects and offered all investors a duty exemption on raw material imports. The BOI removes 35 business activities from its promotion list such as abattoirs, drinking water production, hydroponics farming, marble and granite mining, ship assembling, paints, warehousing container production and joint land-railway transport. Five new business activities are promoted: herbal product manufacturing, machinery and industrial equipment maintenance, e-commerce, electronics and electrical appliance maintenance, and recycling of waste or chemicals. The BOI also continues to grant special privileges to businesses involving public utilities, infrastructure services, environmental protection and conservation, and technological and human resource development. It exempts such businesses from import duties on machinery and grant an eight-year corporate tax exemption, irrespective of locality or level of foreign ownership. BOI would step up support for investments by small and medium-sized enterprises in 2001. In 2000, about 50 per cent of

the projects applying for BOI privileges were valued at less than Baht 50 million each. Many investors misunderstood that the BOI focused only on large projects. It was prepared to offer promotional privileges to sound ventures valued as low as Baht 1 million.

BOI would still focus on offering more incentives to promote investment in Thailand in 2001. For example, the BOI was considering waiving machinery import taxes and corporate taxes for factories that organize training courses for vocational students. A skilled workforce was one of the biggest confidence-boosters for foreign investors. There are 20,000 students from 216 vocational institutes nationwide studying in industrial areas. Training courses conducted in factories will allow students to gain valuable work experience.

2.8 Entry Mode

As a multinational corporation established its affiliate in a foreign market, it has two options in determining the affiliate's ownership structure: full ownership (wholly-owned subsidiary) and shared ownership (equity joint venture). Wholly-owned subsidiary is an operation in which 95 percent or more of the equity is possessed by one foreign company (Davidson and McFetridge, 1984). Joint venture is a share-equity undertaking between two or more parties, each of whom hold at least 5 percent of the subsidiary's equity (Beamish, 1987).

Entry modes may be differentiated on the basis of the three constructs identified in the international business literature: control, resource commitment, and dissemination risk (e.g., Andersen, 1997; Hill et al., 1990). Control is the focus of the entry mode literature because it is the single most important determinant of both risk and return (Anderson and Gatignon, 1986). It is defined as the ability to influence operational and strategic decisions of the foreign operation (Porter, 1986). Since wholly-owned subsidiaries give MNEs complete control of foreign production and marketing activities, they are designated full-control mode, while all other entry modes are labeled shared-control modes (Erramilli and Rao, 1993). By resource commitment, we mean dedicated assets that cannot be redeployed to alternative uses without cost (Hill et al., 1990). These assets may be tangible (e.g., physical plants) or intangible (e.g., marketing expertise). Dissemination risk refers to the risk that a firm's specific know-how or proprietary technology may be expropriated by another firm (Agarwal and Ramaswami, 1992). This risk will be much lower in the case of a wholly-owned subsidiary than in the case of shared-control modes like joint ventures. The entry mode decision consists primarily of defining the level of control, resource commitment, and dissemination risk desired by the foreign investor (Andersen, 1997; Gatignon and Anderson, 1988; Hill et al., 1990).

2.9 Entry Mode Decision

A firm seeking to enter a foreign market must make an important strategic decision on which entry mode to use for that market. Because all of entry

modes involve resource commitments, firm's initial choices of a particular mode are difficult to change without considerable loss of time and money (Root, 1987). Entry mode selection is therefore, a very important, if not a critical, strategic decision.

Most past studies on the foreign market entry strategies of multinational firms have adopted one of two theoretical approaches. One is the transaction cost approach (Anderson and Gatignon 1986; Caves 1982; Erramilli and Rao 1993) which prescribes cross-border activities according to the economic rationale that firms will minimize all costs associated with the entire value-added chain (from production to consumption of goods). Anderson and Gatignon (1986) postulate that, in choosing entry modes, firms make trade-offs between the possible benefits from the internalization (degree of control) and the costs of integration (cost of resource commitment). This approach stresses the importance of firm-specific variables and has been used to explain how the firms enter and operate in foreign markets (Agarwal and Ramaswami 1992; Erramilli and Rao 1993; Gatignon and Anderson 1988; Kogut and Singh 1988, in Tse et al., 1997).

The second approach was proposed by Dunning (1980, 1988). His eclectic framework integrates several strands of international business theories on cross-border business activities. It proposes that cross-border business activities are influenced by three types of factors: ownership advantages of a firm, location advantages of a market, and internalization advantages of

integrating transactions within the firm. Ownership advantages refer to firm-specific assets and skills, such as firm size, multinational experience, or ability to develop and market a differentiated product. Location advantages refer to the attractiveness of a foreign market. And internalization advantages refer to the benefits of retaining assets and skills within the firm when market fails or there is potential for opportunistic behavior by a partner (Agarwal and Ramaswami 1992; Dunning 1988, in Ekeledo and Sivakumar, 1998).

Hill, Hwang, and Kim's (1990) version of the eclectic framework identifies strategic variables, environmental variables, and transaction variables as the broad groups of variables that influence entry mode choice. According to them, strategic variables influence entry mode choice mainly through control needs of the firm, environmental variables influence entry mode choice primarily through their impact on resource commitment, and transaction variables influence entry mode choice through their impact on risk exposure.

2.10 Factors that Influence Entry Mode Decision

Stopford and Wells (1972) developed one of the first international entry mode models when they argued that entry mode selection was contingent upon the firm's international experience and product diversification. Johanson and Vahlne's (1977) case-based research along with empirical studies by Dubin (1975) and Davidson (1980) provide further support for this contingent, incremental entry mode relationship. The latter studies also

found that cultural and other national differences between the host and home countries appear to influence entry mode decisions.

More recently, a variety of studies have considered country, industry, and firm-specific factors and their contingent influence on wholly owned entry mode decisions. Caves and Mehra (1986) found that entry mode selection was influenced by a variety of industry and firm-specific factors, including firm size, advertising intensity, research intensity, industry growth, and industry concentration. A subsequent study by Zejan (1990) confirmed many of Caves and Mehra's results.

Other studies have compared the joint venture and wholly-owned entry modes. Gatignon and Anderson (1987) found that locational factors, the degree of multinationality, and research and advertising intensity influence the selection decision between joint ventures or wholly owned entry modes. Kogut and Singh (1988) found that industry, firm, and country-specific factors influence the selection decision between the three ownership-based entry modes: joint venture, acquisition, and new venture. More recently, Kim and Hwang (1992), and Agarwal and Ramaswami (1992) examined a wide variety of entry modes. They found that locational, ownership and internalization advantages contingently influenced all of the various entry modes.

Firm-related determinants

A larger investing firm is more likely to possess the necessary financial resources for full ownership of its foreign operations and is better positioned for a (more resource-demanding) full ownership structure than a smaller firm (Padmanabhan and Cho, 1996). There are some empirical evidence supports this contention. For example, Doz (1988) (in Agarwal and Ramaswami, 1991) found that A larger organization may be less concerned than a smaller organization with the potential possibility of exploitation by the host country partner; Casson (1979) suggested that the smaller firms, which lack managerial and financial resources to make direct investment, would favor low control entry mode over high control entry mode. However, Kogut and Singh (1988b) and Hennart (1991) (in Padmanabhan and Cho, 1996) found that the size of investing firm was not significantly related to full ownership structure for foreign firms investing in the U.S.

Small firms may find that they do not have the necessary resources to put up the whole capital of greenfield plants or to make full acquisitions of existing firms in industries where the minimum size of a plant is large. Thus, the larger the asset size of the subsidiary relative to the parent, the greater the incentive to joint venture (Hennart, 1991; Padmanabhan and Cho, 1996). This empirical evidence is supported by Kogut and Singh's study (1988b) (in Padmanabhan and Cho, 1996), which found that the size of foreign affiliate was positively and significantly related to shared ownership of foreign affiliates.

The need to joint venture will be particularly strong when the foreign affiliate represents a diversification for the parent, i.e., when the affiliate manufactures a product which is not produced by the parent. The parent may find that the intermediate inputs needed to venture into a new industry (such as product-specific knowledge, or access to distribution) are held by another firm, are difficult to acquire by contract, are costly to replicate, and are therefore most efficiently obtained through a joint venture (Stopford and Wells, 1972; Hennart, 1991, in Padmanabhan and Cho, 1996). However, Gomes-Casseres (1989) found that the relatedness of foreign affiliate's products to those of the parent (he used this as a proxy for experience) had no effect on the probability of establishing a joint venture.

When a firm possesses the ability to develop differentiated products, it may run the risk of loss of long-term revenues if it shares this knowledge with host country firms. This is because the latter may acquire this knowledge and decide to operate as a separate entity at a future date. Therefore, when the firm possesses these skills, higher control modes may be more efficient (Anderson and Coughlan, 1987; Caves, 1982; Coughlan, 1985; Coughlan and Flaherty, 1983; Davidson, 1982; Stopford and Wells, 1972, in Agarwal and Ramaswami, 1991).

A firm that enters a foreign country for the first time is likely to joint venture. Such a firm will lack the knowledge of local conditions. On the other hand, parents that have made previous investments can be expected to have

accumulated the required knowledge in-house, and to feel less need to share the ownership of their affiliates (Hennart, 1991; Gomes-Casseres 1989, 1990, in Padmanabhan and Cho, 1996). This means experienced MNEs were less likely to establish joint ventures in foreign markets (Gatignon and Anderson, 1988; Stopford and Wells, 1972).

The extent to which R&D intensity influences the ownership choices is not well established. On the one hand, a firm with high R&D intensity may prefer to have complete control over its proprietary know-how in order to preserve and/or best exploit the know-how, given imperfections in the external markets for technology (Buckley and Casson, 1976; Rugman, 1981; Caves, 1982, in Padmanabhan and Cho, 1996). Thus, the higher the parent R&D intensity, the greater the possibility that the foreign affiliate will be fully-owned (Stopford and Wells, 1972; Davidson, 1982). On the other hand, firms having R&D core competencies are less susceptible to losing them in joint ventures (Singh and Kogut, 1989) because R&D resources are tacit in nature, and therefore, more difficult to transfer and imitate (Teece, 1982, in Woodcock et al., 1994). Hence, joint ventures were favored in research-intensive firms and industries (Singh and Kogut, 1989, in Woodcock, Beamish, and Makino, 1994).

When a firm's involvement is in an industry that is characterized by high advertising intensity, it is inclined to shy away from joint ventures and is favorably inclined to seek entry modes which provide full control over the

foreign venture (Kogut & Singh, 1988b, in Phatak et al., 1996). In other word, the higher the parent's expenditures on advertising relative to sales, the higher the probability that the firm will choose sole ownership (Franko, 1971; Stopford and Wells, 1972; Gatignon and Anderson, 1988; Gomes-Casseres, 1989, in Hennart, 1991).

Host country-related determinants

The investment risk in a host country reflects the uncertainty over the continuation of present economic and political conditions and government policies which are critical to the survival and profitability of a firm's operations in that country (Agarwal and Ramaswami, 1992). When country risk is high, an MNE would do well to limit its exposure to such risk by restricting its resource commitments in that particular national domain (Kobrin, 1983; Vernon, 1983; Bradley, 1977, in Kim and Hwang, 1992).

The host attitude towards a particular ownership structure may affect the firm's choice between the two alternative structures. Some host countries prohibit majority foreign ownership of local operations possibly out of concern over loss of national control and the resultant competitive ramifications associated with majority foreign ownership, while others require prior governmental approval for establishing such ownership structure in most local industries, except for strategic ones. Such requirements discourage full foreign ownership of local operations (Padmanabhan and Cho, 1996). Gomes-Casseres (1989, 1990) found that restrictive host

policies strongly encouraged U.S. firms to establish joint ventures in such countries.

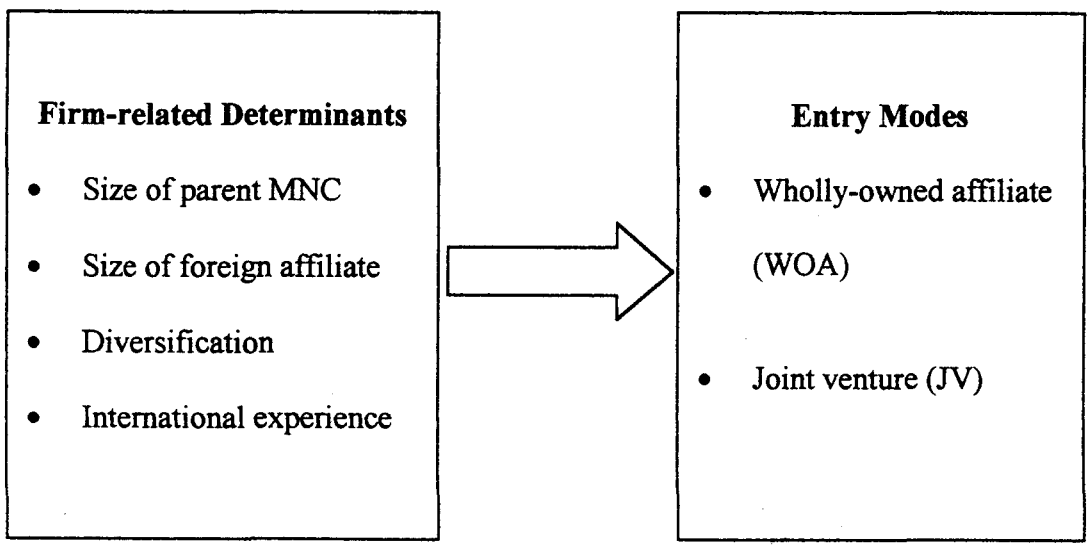
Cultural similarity between the home and host country seems to affect the choice of ownership structure (Kogut and Singh, 1988b). From a Japanese perspective, entry into culturally dissimilar countries may motivated the Japanese firms to establish fully-owned affiliates to allow easy application of organizational routines developed at home. Thus, they can avoid the costs and uncertainty involved in assimilating equity partners to their routines (Abbeglen and Stalk, 1985; Rapp, 1993, in Padmanabhan and Cho, 1996). Japanese firms are expected to be more likely to choose a full ownership structure when they enter into culturally distant foreign markets than culturally similar ones (Padmanabhan and Cho, 1996).

Chapter 3: Research Framework

This empirical study examines the effect of firm-related factors on Japanese manufacturing MNEs' choice of foreign ownership structure. There are several factors influencing the entry mode decision. However, this study will be focused only on the firm-related factors. Based on data availability, four types of firm-related factors, including size of parent MNE, size of foreign affiliate, diversification, and international experience, are used as the independent variable. These variables have the influence on MNE's choice of entry mode. Therefore, the dependent variable is entry mode that can be divided into wholly-owned affiliate (WOA) and joint venture (JV).

3.1 Diagram of Framework

Figure 3.1
Diagram of Framework



Dependent Variable

In this study, entry mode will be divided into wholly-owned affiliate and joint venture. First, wholly-owned affiliate (WOA) is an operation in which 95 percent or more of the equity is possessed by one foreign company (Davidson and McFetridge, 1984). Second, joint venture (JV) is a share-equity undertaking between two or more parties, each of whom hold at least 5 percent of the subsidiary's equity (Beamish, 1987).

Independent Variable

Size of parent MNE (PSIZE) is measured by the number of employees at the time of entry of the Japanese parent. Size of foreign affiliates (ASIZE) is captured by a dummy variable which takes a value of one for small and zero for big. Diversification (DIVER) is captured by a dummy variable equal to one if none of the products to be produced by the overseas affiliate was in the same industry group (or a closely related industry group) as the parent's prime product lines (diversification) and zero otherwise (non-diversification). International experience (IEXP) is measured by the length of time (in years) that the parent had been operating abroad at the time (year) of foreign entry.

3.2 Hypothesis Development

Size of Parent MNE

A larger investing firm is more likely to possess the necessary financial resources for full ownership of its foreign operations and is better positioned for a (more resource-demanding) full ownership structure than a smaller firm

(Padmanabhan and Cho, 1996). In contrast, the smaller firms, which lack managerial and financial resources to make direct investment, would favor joint venture over wholly-owned affiliate (Buckley and Davies, 1979; Casson, 1979; Mirus, 1980, in Agarwal and Ramaswami, 1991).

Hypothesis 1: The larger an investing firm, the more likely it will choose a wholly-owned affiliate for its foreign entry.

Size of Foreign Affiliate

Gatignon and Anderson (1988) have argued that the size of the operation will have an impact on the extent of control sought by the entrant. Empirical evidence (Gatignon & Anderson, 1988; and Kogut & Singh, 1988a, in Phatak et al., 1996) supports the proposition that firms shy away from wholly-owned entry modes in favor of joint ventures when the size of the venture is big. This means a foreign operation that requires larger resources (relative to the resource availability of the parent) is more likely to be structured as jointly-owned (Padmanabhan and Cho, 1996).

Hypothesis 2: The larger a foreign affiliate, the more likely the foreign affiliate will be joint venture.

Diversification

The need to joint venture will be particularly strong when the foreign affiliate represents a diversification for the parent. A firm entering into a product area

not produced by the parent may find that the necessary product-specific capability (such as technology, manufacturing know-how, distribution, etc.) is possessed by another firm (and/or is costly to create internally), and is therefore most efficiently obtained through a joint venture (Stopford and Wells, 1972; Hennart, 1991, in Padmanabhan and Cho, 1996).

Hypothesis 3: An investing firm will be less likely to choose a wholly-owned affiliate for foreign affiliate when diversifying into areas outside of its core business.

International Experience

A firm that enters a foreign country for the first time is likely to joint venture. Such a firm will lack the knowledge of local conditions. On the other hand, parents that have made previous investments can be expected to have accumulated the required knowledge in-house, and to feel less need to share the ownership of their affiliates (Hennart, 1991). This means the firms can be expected to pursue the wholly-owned entry mode relative to a joint-venture as firms gain experience and learn more about the local environment (Kogut & Singh, 1988a, in Phatak et al., 1996).

Hypothesis 4: An investing firm that has higher international experience will be more likely to choose a wholly-owned affiliate for foreign entry.

Table 3.1

Summary of Variables and Expected Signs

Variable Name	Description	Expected Sign (+ = Encourages WOA)
PSIZE	Size of parent MNE	+
ASIZE	Size of foreign affiliate	-
DIVER	Diversification	-
IEXP	International experience	+

Chapter 4: Research Methodology

4.1 Data Source

The data for entry mode is derived from the Toyo Keizai, Kaigai Shinshutsu Kigyo Soran (Toyo Keizai, Japanese Overseas Investments), the database that covers all Japanese overseas investments undertaken by Japanese firms listed on the Japan stock exchanges (Tokyo, Osaka and Nakoya) as well as by major unlisted Japanese firms. The classification of entry modes is based on the percentage of share ownership of major shareholders reported in this database.

The data for size of parent MNEs is obtained from Nikkei Zaimu database. The data for size of foreign affiliate and international experience is obtained from Toyo Keizai, Kaigai Shinshutsu Kigyo Soran. Finally, the data for the diversification can be obtained by comparing the parent MNEs' industry to the foreign affiliates'. The data for parent MNEs' industry is derived from Nikkei Zaimu database and the data for foreign affiliates' industry is derived from Toyo Keizai, Kaigai Shinshutsu Kigyo Soran.

Table 4.1

Table of Operational Definition

Concept	Conceptual Definition	Operation Component	Level of Measurement
1.Entry modes	An institutional arrangement for organizing and conducting international business transactions	• Joint venture (JV) • Wholly-owned affiliate (WOA)	Nominal
2.Size of parent MNC	The size of the parent firm at the time of foreign entry	• Number of Employees	Interval
3.Size of foreign affiliate	The size of foreign affiliate relative to the parent.	• Large = 0 • Small = 1	Nominal
4.Diversification	The extent to which the foreign affiliate manufactures products different from those of the parent.	• Non-diversification = 0 • Diversification = 1	Nominal
5.International experience	The length of time (in years) that the parent had been operating abroad at the time (year) of foreign entry.	• The year of foreign entry minus the year of the oldest foreign investment by the parent	Interval

4.2 Data Analysis

In this analysis, the entry mode is classified into two categories: wholly-owned affiliate and joint venture. Because of the nature of the dependent variable, the Binomial Logistic Regression is used to test the hypotheses developed in the previous section. It is a form of regression which is used when the dependent is a dichotomy and the independents are continuous variables, categorical variables, or both. It determines the probability (P) of full ownership as a function of a set of independent variables. A positive sign

for the coefficient implies that the variable increases the likelihood of full ownership. The model can be expressed as

$$P(y_i = 1) = 1/[1 + \exp(-a - bx_i)],$$

where y_i is the dependent variable (Wholly-owned affiliate and Joint venture), x_i is the vector of independent variables (Size of parent MNE, Size of foreign affiliates, Diversification and International experience) for the *i*th observation, a is the intercept parameter, and b is the vector of regression coefficients (Altman et al., 1981, in Padmanabhan and Cho, 1996).

Table 4.2
Table of Hypothesis and Statistics

Hypothesis	Statistics
H1: The larger an investing firm, the more likely it will choose a wholly-owned affiliate for its foreign entry.	• Binomial Logistic Regression
H2: The larger a foreign affiliate, the more likely the foreign affiliate will be joint venture.	• Binomial Logistic Regression
H3: An investing firm will be less likely to choose a wholly-owned affiliate for foreign affiliate when diversifying into areas outside of its core business.	• Binomial Logistic Regression
H4: An investing firm that has higher international experience will be more likely to choose a wholly-owned affiliate for foreign entry.	• Binomial Logistic Regression

Chapter 5: Data Analysis

5.1 Profile of the Sample

According to the scope of this study mentioned in the previous section, manufacturing affiliates of Japanese manufacturing firms, which are established in either wholly-owned affiliate and joint venture, are examined. From the census of affiliates under focus of this study, those with all firm-related determinants data available are selected. As a result, the sample of 328 cases is used in order to examine the effect of firm-related determinants on entry mode selection of Japanese MNEs. These affiliates can be divided into 270 cases (82.3%) for joint venture and 58 cases (17.7%) for wholly-owned affiliate (See Table 5.1).

Table 5.1
Entry Modes

Entry modes	Frequency	Percent
Joint venture	270	82.3%
Wholly-owned affiliate	58	17.7%
Total	328	100.0%

This study focuses on four types of firm-related determinants, including size of parent MNE, size of foreign affiliate, diversification, and international experience. First, size of parent MNE, measured by the number of

employees at the time of entry, ranges from 4 to 81,488 employees with the mean of 7,478 employees (See Table 5.2).

Table 5.2
Size of parent MNE

	N	Minimum	Maximum	Mean	Standard deviation
PSIZE	328	4	81488	7477.69	15040.41

Second, size of foreign affiliate can be divided into large and small size. From Table 5.3, the result shows that 231 affiliates or 70.4% have large size, while 97 affiliates or 29.6% have small size (See Table 5.3).

Table 5.3
Size of foreign affiliate

Size	Frequency	Percent
Large (0)	231	70.4%
Small (1)	97	29.6%
Total	328	100.0%

In Table 5.4, the information about diversification is shown. It indicates that 260 affiliates (79.3%) are diversification because the products produced by these affiliates do not match those produced by the parent. On the other hand, 68 affiliates (20.7%) are non-diversification.

Table 5.4
Diversification

	Frequency	Percent
Diversification (0)	260	79.3%
Non-diversification (1)	68	20.7%
Total	328	100.0%

Finally, international experience of parent MNE is measured by the length of time that the parent had been operating abroad at the time of foreign entry. The result from Table 5.5 shows that the international experience ranges from 0 to 11 years with the mean of 4.63 years.

Table 5.5
International Experience

	N	Minimum	Maximum	Mean	Standard deviation
IEXP	328	0	11	4.63	3.70

5.2 Results of the Empirical Analysis

The results of binomial logistic regression of the model containing firm-related determinants are shown in Table 5.6, together with the results of the statistical tests reported at the bottom.

Table 5.6

Binomial Logistic Regression Results for Entry Mode Selection: The Effect of Firm-related Determinants[a]

Variables	Statistical Results
PSIZE	-9.6E-07
	(0.0103)
ASIZE	-0.6523*
	(3.1796)
DIVER	-0.9648**
	(4.4210)
IEXP	0.0359
	(0.8138)
Constant	-1.3848***
	(25.2172)
Number of cases	328
Chi-square	9.952**
Classification Result	82.32%

[a] Wald-statistics in parentheses; * significant at the 10% level, ** significant at the5% level, and *** significant at the 1% level.

The binomial logistic regression has a significant overall explanatory power with a model chi-square of 9.952 (p = 0.0412). In addition, approximately 82.32 percent of the sample observations are correctly classified whereas the baseline rate is 70.87 percent.[1]

[1] The baseline rate, that is the classification rate that would have been obtained by chance, is equal to $a^2 + (1 - a)^2$, where a is the proportion of full ownership in the sample.

PSIZE, size of parent MNE, is statistically not significant with the unexpected sign. Therefore, the result does not support the first hypothesis: the larger an investing firm, the more likely it will choose a wholly-owned affiliate for its foreign entry.

The coefficient of ASIZE, size of foreign affiliate, is negative (-0.6523) as predicted and significant at the 0.10 level. This means the larger a foreign affiliate, the more likely the foreign affiliate will be joint venture.

As expected, affiliates that manufacture products different from those of the parent are more likely to be joint ventures: the coefficient of DIVER is negative (-0.9648) and significant at the 0.05 level.

Finally, international experience of Japanese MNE (IEXP) has the correct sign (0.0359), but is insignificant. This means international experience does not significantly increase the probability that MNE will fully own its affiliate.

5.3 Explanation of the Results

This empirical study examines the effect of firm-related determinants, including size of parent MNE, size of foreign affiliate, diversification and international experience, on entry mode selection of Japanese MNEs in Thailand. The results of this study show that the coefficients for size of foreign affiliate and diversification variables are significant and have the

correct sign, and the coefficients of other variables are not statistically significant.

For the first variable, size of parent MNE, its coefficient is not significant. This is consistent with the findings of Kogut and Singh (1988b) and Hennart (1991) (in Padmanabhan and Cho, 1996) that the size of investing firm was not significantly related to full ownership structure for foreign firms.

The size of foreign affiliate is positively and significantly related to shared ownership of foreign affiliates. This suggests that the larger the asset size of the foreign affiliate relative to the parent, the greater the incentive to joint venture. This finding is consistent with those reported by Kogut and Singh (1988b), Hennart (1991), and Gatignon and Anderson (1988).

The coefficient of diversification is statistically significant. This result supports the previous study of Stopford and Wells (1972) and Hennart (1991) (in Padmanabhan and Cho, 1996) that when the firms diversify into product areas outside of their core businesses, they are more likely to share the ownership of their foreign affiliates to obtain complementary resources, such as product-specific know-how or access to distribution, from their partners.

Finally, international experience is statistically not significant but with the expected positive sign. This positive relationship suggests that a firm with

greater international experience is more likely to be able to bear the risks and management responsibility associated with full ownership of foreign operations and, thus, may find it less compelling to form a joint venture to share the risks. This finding seems to be in line with those reported by Gatignon and Anderson (1988), and Stopford and Wells (1972).

Chapter 6: Conclusion and Recommendation

6.1 Summary of Findings

A multinational enterprise (MNE) invests overseas since it realizes the advantages of international market expansion and/or international production. A firm, which intends to engage in foreign direct investment (FDI), has to make decisions about which forms FDI should take. It has two options in determining the affiliate's ownership structure: full ownership (wholly-owned affiliate) and shared ownership (joint venture). Entry mode choice of a MNE has been determined by several factors, including firm-related and host country-related determinants.

The study in this research investigates the effect of firm-related determinants on the entry mode selection of Japanese MNEs which engage in international production in Thailand. This study focuses on four types of firm-related determinants, which are size of parent, MNE, size of foreign affiliate, diversification, and international experience, and they are the independent variables. The dependent variable is entry mode that can be divided into wholly-owned affiliate (WOA) and joint venture (JV).

The empirical study focuses on the Japanese manufacturing MNEs which established new entities, using either wholly-owned affiliate or joint venture, in manufacturing sector in Thailand. The data for entry mode and firm-related determinants is obtained from Toyo Keizai, Kaigai Shinshutsu Kigyo

Soran (Toyo Keizai, Japanese Overseas Investments) and Nikkei Zaimu database. According to the scope of this study, those with all firm-related determinants data available are selected. As a result, the sample of 328 cases is used for the analysis of firm-related determinants and entry mode selection of Japanese MNEs. These affiliates can be divided into 270 cases (82.3%) for joint venture and 58 cases (17.7%) for wholly-owned affiliate.

Four hypotheses are developed to examine the effect of firm-related determinants on entry mode selection. First, the larger an investing firm, the more likely it will choose a wholly-owned affiliate for its foreign entry. Second, the larger a foreign affiliate, the more likely the foreign affiliate will be joint venture. Third, an investing firm will be less likely to choose a wholly-owned affiliate for foreign affiliate when diversifying into areas outside of its core business. Finally, an investing firm that has higher international experience will be more likely to choose a wholly-owned affiliate for foreign entry. Binomial Logistic Regression is used to test these hypotheses in order to determine the probability of full ownership as a function of a set of independent variables.

The results of this study show that the coefficients for size of foreign affiliate and diversification variables are significant, but the coefficients of size of parent MNE and international experience variables are not statistically significant. All significant variables have the correct sign.

6.2 Implications

The knowledge contributed by this study is beneficial to multinational firm, international business scholar, and policy maker. This study suggests that entry mode selection is a very important strategic decision. Because all of entry modes involve resource commitments, firm's initial choices of a particular mode are difficult to change without considerable loss of time and money (Root, 1987).

Entry mode selection was influenced by several factors. Firm-related determinants are some of the major factors being used frequently to explain the decision process of MNEs on mode selection. These factors consist of size of parent MNE, size of foreign affiliate, diversification, international experience, product differentiation, R&D intensity and advertising intensity. In addition, host country-related determinants, including investment risk, host attitude towards foreign investment, cultural similarity between the home and host country, also affect the choice of entry mode.

According to the transaction cost theory, the choice between full and shared ownership depends on the relative costs and benefits of the two alternative ownership structures (Anderson and Gatignon, 1986; Gatignon and Anderson, 1988; and Hennart, 1991, in Padmanabhan and Cho, 1996). But, in Thailand, foreign firms of which sales are oriented to local market have been forced to form joint venture with local partners under the regulation on foreign equity restriction. Such restriction can induce a MNE to select a

shared ownership structure in instance where transaction cost analysis would suggest a full ownership structure.

From this study, multinational firms may have the idea on entry mode decision making. Because entry mode selection is a difficult task and has a direct impact on performance of the affiliates, MNEs should be careful in making this decision. To do this, several factors should be considered simultaneously. Eventually, MNEs will be able to find which type of entry modes that fit to their firm-specific advantages and investment climate of that particular country.

This research informs the policy maker that foreign equity limits can be a significant barrier to inward FDI in some sectors and can reduce the willingness to transfer sophisticated technology. In technology-sophisticated sectors and sectors with highly product differentiation, full ownership is usually preferred. Transaction costs to protect crucial intangible assets, e.g. product knowledge and technological or managerial know-how, are substantial. Thus, a firm which owns such specific assets will more reluctant to transfer all aspects of technologies where there is an external partner sharing control in an affiliate or to invest in the country that has this restriction. This implies that the outcome from this restriction is not positive as the policy maker expected. Therefore, they should reconsider this restriction and design new policy that can attract more FDI inflow into the country.

6.3 Suggestions for Future Research

This study is aimed to analyze the effect of firm-related determinants on entry mode selection of Japanese MNEs in Thailand. It focuses on MNEs based in a single country (Japan) and investing in a single country (Thailand). There are three suggestions for the future research. First, it may be more extensively tested with the samples including multiple-nationality parents in one host country. Non-Japanese MNEs investing in Thailand should be considered in order to examine whether the firm-related determinants using in this study play a similarly important role in the foreign affiliate ownership strategy of these non-Japanese MNEs.

Another interesting extension is the further research of one-nationality parents investing in several host countries. The effect of firm-related determinants on entry mode selection of Japanese MNEs in several countries should be investigated in order to find whether each country gets the same effect from these determinants or not.

Finally, the further investigation about the effect of other firm-related determinants, such as product differentiation, R&D intensity and advertising intensity, is needed. In addition, it should incorporate host country-related factors, for example, host government policy regarding the ownership structures and the degree of cultural similarity between the home and host countries, to determine what influence (if any) these variables have on the choice of ownership structure by Japanese MNEs.

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Appendix

No.	Affiliate name	Mode	ASIZE	DIVER	PSIZE	IEXP
1.	Bangkok Container Industries	JV	0	1	4	0
2.	Hamanaka (Thailand)	WOA	1	1	17	0
3.	K.U. Nomura Thai	JV	1	0	41	0
4.	Eastern Silicate	JV	1	0	57	6
5.	Thai Tech Matsuda	WOA	1	0	61	5
6.	Sunny Precision (Thailand)	JV	1	0	63	8
7.	Union Itoh Molds	JV	0	1	67	0
8.	Thai Tsunoda	WOA	1	0	75	0
9.	Sanden Theco	JV	0	1	76	8
10.	Sunden Commercial Refrigeration	WOA	0	1	76	2
11.	Thai Hirota	JV	0	0	79	0
12.	Slik	WOA	1	0	80	8
13.	Nakagawa E.S.A.	WOA	0	0	85	10
14.	Sum Hitechs	JV	1	0	102	8
15.	Thai Mitsuwa	JV	0	0	104	0
16.	Koshin (Thailand)	JV	0	0	108	0
17.	Koshin Electronics (Thailand)	JV	0	0	108	6
18.	Hexa Color (Thailand)	JV	0	0	113	0
19.	Thai Wire & Cable Services	JV	0	0	120	7
20.	Isuzu Fishing Tackle	JV	0	1	124	0
21.	United Kyoei Foods	JV	1	0	125	0
22.	Top Tube Manufacturing	JV	1	0	126	0
23.	Top Tube Parts	JV	1	0	126	4
24.	Thai Mitsuboshi	JV	0	0	142	0
25.	Esarn Diaries	JV	0	1	145	10
26.	Siam Soga Glass	JV	1	0	150	0
27.	Osothsapha Snow	JV	1	1	155	6
28.	Hakko	JV	1	0	156	6
29.	Kyoto Electric Wire (Thailand)	JV	1	0	170	0
30.	Yamaha Sports (Thailand)	JV	1	1	174	4
31.	NIC Starch Products	JV	1	0	178	7
32.	CP-Meiji	WOA	0	0	182	1
33.	Takacom (Thailand)	JV	0	0	188	10
34.	Co-op Foods (Thailand)	JV	0	0	200	0
35.	GK-Kyowa	JV	1	0	205	0
36.	Strapack	JV	1	0	206	9
37.	Thai Takaya	JV	0	1	213	0
38.	Siam IKK	JV	1	0	220	6
39.	Thai Silicate Chemicals	JV	1	0	221	2
40.	Sanko Fastem	JV	0	1	225	4
41.	Mitani (Thailand)	JV	0	0	229	0
42.	SIK Thailand	JV	1	0	237	10
43.	Satake	JV	0	0	248	0
44.	Nippo Mechatronics Parts Thailand	WOA	0	0	260	0
45.	Timfood	JV	0	0	263	8
46.	Aderans Thai	WOA	0	0	274	0
47.	World Quality	WOA	0	0	274	6
48.	Yanmar SP	JV	0	0	278	5
49.	Die Resibon (Thailand)	JV	0	0	313	0

50.	Adcomat (Thailand)	WOA	1	1	315	8
51.	Siam Chuo Build Industry	JV	1	1	316	0
52.	Siam Nissan Tools and Dies	JV	0	1	322	7
53.	Z.Kuroda (Thailand)	WOA	0	0	354	10
54.	Thai Fuji Latex	JV	0	0	356	2
55.	Thai Pigeon	JV	0	0	361	4
56.	Kohbunshi (Thailand)	JV	0	0	363	0
57.	KDK Fujikura	JV	0	0	367	11
58.	Thai Nakanishi	WOA	1	0	381	0
59.	A.U.K.	WOA	0	0	382	0
60.	Tanaka (Thailand)	JV	0	0	391	4
61.	Thai Export Packing	JV	0	1	396	0
62.	Matsui (Asia)	JV	0	0	403	4
63.	Siambrator	JV	1	0	405	0
64.	Thai GCI Resitop	JV	1	0	415	0
65.	Tomy Thailand	JV	0	0	416	4
66.	Kikuya Garment	JV	0	1	443	0
67.	Thai Namsiri Chubu	JV	0	1	443	1
68.	Thai Namsiri Intertex (Thai Namsiri Weav	JV	0	1	443	11
69.	Thai Namsiri Printing and Dying	JV	0	1	443	5
70.	Thai Okabe Promotion	JV	1	1	443	8
71.	Asahi Electronics (Thailand)	JV	0	0	446	9
72.	Tep Kinsho Foods	JV	0	1	455	7
73.	Nalco	JV	1	0	458	0
74.	Lighting Endo	JV	0	0	461	0
75.	Siam Orient Electric	JV	1	0	464	0
76.	KSS Electronics (Thailand)	WOA	0	0	469	7
77.	TBK Krungthep	JV	1	0	476	0
78.	Takahata Precision (Thailand)	JV	0	0	506	3
79.	Siam Tone	JV	0	0	507	3
80.	Takahashi Plastics	JV	0	1	514	9
81.	Bangkok Elyna	JV	0	0	523	0
82.	Okamoto Thai	WOA	0	0	533	1
83.	Family Glove	JV	0	0	535	1
84.	Apple Film	JV	0	1	540	3
85.	Shaldan	JV	1	0	543	4
86.	Nozaki Apparel (Thailand)	WOA	0	1	545	3
87.	Thai Tabuchi Electric	WOA	0	0	552	4
88.	Sunstar Engineering Thailand	JV	0	0	572	2
89.	Sunstar Chemical Thailand	WOA	1	0	572	5
90.	Asia Modified Starch	JV	1	0	574	0
91.	Thai Jichodo	JV	0	0	591	0
92.	Metek Kitamura (T)	WOA	0	0	600	4
93.	Narai Superbag	JV	1	0	604	0
94.	Toyo Valve (Thailand)	JV	0	0	610	6
95.	Thai Komada	JV	0	0	615	1
96.	Nichirin Thailand	JV	1	0	626	2
97.	Yokoo Applied	JV	0	0	628	0
98.	TTK (Thailand) = Noble Electronics (Thai	WOA	0	0	634	2
99.	Srithai Miyagawa	JV	1	0	634	0
100.	Thai Seisen	JV	0	0	640	0
101.	Mussashi Auto Parts	JV	0	1	647	7
102.	Thai Arai	JV	0	0	666	4
103.	Teral Thai	JV	1	0	676	0

104.	Starlite Manufacturing	WOA	0	0	693	9
105.	Sodick (Thailand)	JV	0	0	707	5
106.	Nippon Hume Concrete Thailand	JV	1	0	708	0
107.	Osaka Diamond Industries	JV	1	0	708	7
108.	DDK	JV	0	0	721	0
109.	Thai Kokoku Rubber	WOA	1	0	723	5
110.	Thai Wah Footwear	JV	0	1	751	6
111.	Bandai and K.C.	JV	0	0	770	1
112.	Hitachi Ferrite (Thailand)	WOA	0	0	770	0
113.	Thai Carbon Product	JV	1	0	770	5
114.	Nidec Electronics	WOA	0	0	790	5
115.	Ogihara	JV	0	0	812	8
116.	FCC (Thailand)	JV	0	0	816	1
117.	ROHM Apollo Electronics (Thailand)	JV	0	0	824	0
118.	Nitsuko	WOA	0	0	831	10
119.	KITZ (Thailand)	JV	0	0	840	6
120.	Thai Staflex	JV	1	0	854	7
121.	Lotte	JV	0	0	866	2
122.	Union-Nifco	JV	1	0	876	9
123.	Murata Electronics (Thailand)	JV	0	0	882	10
124.	Organo	JV	1	0	886	5
125.	Thai Nisca	WOA	0	0	939	0
126.	Union Zojirushi	JV	0	0	953	0
127.	Lanna Products	JV	1	0	967	6
128.	Able Sanoh Industries	JV	1	0	970	9
129.	Thai Fukuvi	JV	0	0	971	0
130.	Thai OKK Machinery	JV	1	0	1004	4
131.	Siam Yamato Industry	JV	0	0	1023	0
132.	Thai Y.G.T.	JV	0	0	1023	6
133.	Thai Nippon Concrete	JV	0	0	1029	3
134.	Sanko Gosei Technology	JV	1	0	1047	10
135.	Siam Furukawa Battery	JV	0	0	1065	7
136.	Seafresh-Katokichi	JV	1	0	1092	9
137.	Valqua Industries (Thailand)	JV	1	0	1111	0
138.	Densei (Thailand)	JV	0	0	1116	0
139.	Nitto Seiko Thailand	JV	0	0	1149	2
140.	Thai Benkan	JV	0	0	1152	3
141.	Bangkok Komatsu Industries	JV	0	0	1164	5
142.	Jibuhin	JV	1	0	1202	1
143.	Shinano Kenshi	WOA	0	1	1220	9
144.	Uni-Charm	JV	0	1	1230	10
145.	N&N Foods	JV	0	0	1245	8
146.	Asahi Somboon Aluminium	JV	0	0	1300	8
147.	CKD	JV	0	0	1318	0
148.	Gochu Chemical	JV	1	0	1337	0
149.	Thai NJR	JV	0	0	1342	5
150.	Mikuni Thailand	JV	0	0	1356	11
151.	Oriental Electronics Device	JV	0	0	1387	4
152.	Shindengen	JV	0	0	1426	11
153.	Pacific Industries	JV	1	0	1429	8
154.	Central Metal	JV	0	1	1437	2
155.	Nissin Foods (Thailand)	JV	1	0	1443	6
156.	Lepia International (Thailand)	JV	1	1	1522	7
157.	TORC	JV	1	0	1586	3
158.	Daihen Thailand	JV	0	0	1620	6

159.	Ekarat-Daihen Transformer	JV	0	0	1620	9
160.	Bangkok Al-TOA	JV	0	1	1673	10
161.	Thai Fujibo Textile	JV	0	0	1704	3
162.	Dainichi Color Thailand	JV	0	0	1729	7
163.	Alcast	JV	0	0	1737	4
164.	Nissin Brake System	JV	1	0	1737	0
165.	Well Garment	JV	0	1	1743	7
166.	Nissho Nipro	JV	0	0	1813	0
167.	Mitsumi (Thailand)	WOA	0	0	1822	5
168.	Siamese-Bando Rubber Industry	JV	0	0	1977	2
169.	Thai QP	JV	0	0	2007	3
170.	Ascot Int'l	JV	1	0	2025	2
171.	FDK Tatung (Thailand)	JV	0	0	2112	5
172.	Keihin Seiki Thailand	JV	0	0	2142	10
173.	Thai Fujibo Garment	JV	0	0	2251	3
174.	Surapon Nichirei Foods	JV	0	0	2291	2
175.	Indo-Rama Chemicals (Thailand)	JV	0	1	2312	0
176.	Riken (Thailand)	JV	0	0	2390	8
177.	Ikosha (Thailand) = ' 97 "SEIKO P&C	WOA	0	0	2400	10
178.	Nissin Electric	JV	0	0	2426	6
179.	Pornpat Chemical	JV	1	0	2432	0
180.	Siam Okamura Steel	JV	0	0	2465	0
181.	Mitsuboshi Belting (Thailand)	JV	0	0	2496	11
182.	Thai Shin Maywa	JV	1	0	2546	0
183.	Thai Shikibo	JV	0	0	2630	0
184.	Thai Summit Mitsuba Electric Mfg.	JV	1	0	2813	7
185.	Thai Janome	JV	0	0	2826	0
186.	SKJ Metal Industries	JV	1	0	2829	0
187.	Siam United Cannery (1990)	JV	1	1	2883	3
188.	Thai Nisshin Seifun	JV	0	0	2888	7
189.	Nisshin-STC Flour Milling	JV	0	0	2894	3
190.	Siam Shikibo Dyeing	JV	0	0	2945	5
191.	Thai Refrigeration Components	JV	1	0	2975	2
192.	Muramoto Electron □Thailand)	WOA	0	0	2981	0
193.	Toyo-Toa Coating	JV	1	0	2984	3
194.	Century Inoac	JV	0	0	3003	1
195.	Techno Foam (Thailand)	JV	1	0	3003	8
196.	Thai Yamaki	JV	1	1	3014	9
197.	Thai Ferrite	JV	0	0	3015	10
198.	Thai Summit PKK	JV	0	0	3065	2
199.	Thai Topy International	JV	0	1	3138	3
200.	Data Products Toppan Moore	JV	0	0	3144	11
201.	Lohakit Steel Service Center	JV	0	1	3207	2
202.	Thai NOK	WOA	0	0	3260	11
203.	Minebea Electronics	JV	0	0	3266	11
204.	NMB Hi-Tech Bearings	WOA	0	0	3266	5
205.	NMB Precision Balls	WOA	0	0	3266	5
206.	Tool Products (Thailand)	JV	0	1	3266	3
207.	Royal Time Citi	JV	0	0	3301	8
208.	YHS International	JV	0	0	3343	0
209.	Asain Stanley Intl	JV	0	0	3409	11
210.	A&N Foods	JV	1	0	3427	1
211.	Thai Yanagawa	JV	0	0	3514	9
212.	Thai Sports Garment	JV	0	0	3568	1
213.	Thai Koito	JV	1	0	3581	11

214.	Thai Best Packers	JV	0	0	3600	9
215.	PCTT	WOA	0	0	3722	0
216.	LTEC	JV	0	0	3744	9
217.	Fujikura Engineering (Thailand)	JV	1	1	3744	6
218.	Thai Textile Development & Finishing	JV	0	0	3749	9
219.	Sun Valley Thailand	JV	0	0	3769	9
220.	Fujitsu General (Thailand)	WOA	0	0	3784	9
221.	Thai Gunze	JV	0	0	3797	2
222.	K.M.E. Garments	JV	0	0	3828	5
223.	Rinnai Thailand	JV	1	1	3842	6
224.	TLT Wako (Thailand)	JV	0	0	3879	10
225.	Thai Nippon Foods	WOA	0	0	3908	8
226.	Bangkok Shrimp Cultivation	JV	1	0	3973	9
227.	Kanagata (Thailand)	JV	1	0	4007	6
228.	SMC Thailand	WOA	1	0	4202	11
229.	Matsushita Refrigeration (Thailand)	WOA	0	0	4420	1
230.	Tostem Thai	WOA	0	0	4530	7
231.	Sun Metal	JV	0	0	4540	7
232.	Mitsui Toatsu Chemicals (Thailand)	JV	1	0	5244	7
233.	Thai Epoxy and Allied Products	JV	0	1	5307	2
234.	SNB Agriproducts	JV	1	1	5336	3
235.	Bangkok Metal Industry	JV	0	0	5402	9
236.	Hymold	JV	0	0	5462	4
237.	United Coil Center	JV	0	1	5474	0
238.	Thai Mitsui Toatsu (Thai Mitsui Specialt	JV	0	0	5494	3
239.	Molten (Thailand)	JV	0	0	5593	7
240.	Thai Yamashita Garment	JV	0	1	5676	9
241.	Thaitech Rubber	JV	0	1	5676	3
242.	Nissan Diesel	JV	0	0	5735	4
243.	Eslen Thai	JV	1	0	5913	2
244.	Nikon (Thailand)	WOA	1	0	5980	3
245.	Thai Seat Belt	JV	1	0	6318	4
246.	CS. Metal	JV	0	1	6366	8
247.	Daikin Airconditioning (Thailand)	JV	1	0	6514	0
248.	Bangkok Can Mfg.	JV	0	0	6782	1
249.	Koyo Manufacturing (Thailand)	JV	0	0	6822	7
250.	Furukawa Metal (Thailand)	JV	0	0	6891	1
251.	Unimac Rubber	JV	0	1	7179	8
252.	Sam-D Farm	JV	0	1	7185	0
253.	Marubeni Steel Processing (Thailand)	JV	1	1	7190	2
254.	Daido Electronics (Thailand)	JV	0	1	7194	11
255.	Sahaviriya Plantation	JV	1	1	7252	2
256.	VP Eucalyp Chipwood	JV	1	1	7252	2
257.	Thai Wool Industries	JV	0	0	7336	11
258.	Teijin (Thailand)	JV	0	0	7398	2
259.	Siam Sanitary Ware	JV	0	0	7526	8
260.	Daikin Industries (Thailand)	WOA	0	0	7569	6
261.	Siam Sanitary Fittings	JV	0	0	7593	11
262.	Thai Yoshitake	JV	0	0	8013	10
263.	Bangkok Polyethylene	JV	0	1	8262	10
264.	TDK Thailand	WOA	0	0	8421	1
265.	Floor Industry	JV	1	1	8670	10
266.	Bangkok Coil Center	JV	0	1	8784	9
267.	Mitsiam Plastics	JV	1	1	8929	3

268.	Thai Refined Salt	JV	0	0	9046	11
269.	SMTC	JV	0	1	9215	6
270.	Siam Asahi Technoglass	JV	0	0	9295	11
271.	MMC Carbide (Thailand)	JV	1	0	9616	3
272.	Siam High-Tech Steel Center	JV	0	1	9827	10
273.	HMT Polystyrene	JV	1	1	9827	7
274.	Bangkok Float Glass	JV	0	0	9921	2
275.	Thai Asahi Electronic Devices	JV	0	0	9921	4
276.	Bangkok Cut Diamond	JV	0	1	9937	11
277.	Toray Fibers (Thailand)	JV	0	0	10143	7
278.	3TM Plastics	JV	1	1	10143	4
279.	Takeda Chemie Thai	JV	1	1	10946	0
280.	Siam Printing & Packaging	JV	0	0	11420	11
281.	Thai Copper Rod	JV	1	0	12012	6
282.	JVC Manufacturing (Thailand)	WOA	0	0	13060	9
283.	Thai Metal Processing	JV	0	1	13117	2
284.	Thai International Die Making	JV	0	1	13693	11
285.	Siam Matsushita Steel	JV	0	0	13851	6
286.	Isuzu Engine Mfg	JV	0	0	13952	3
287.	Oki (Thailand)	WOA	0	0	14111	7
288.	Sumitomo Electric Wiring Systems	JV	0	0	14323	4
289.	Thai Foods International	JV	0	0	14920	6
290.	Matsushita Electric Works (Thailand)	WOA	0	0	15316	7
291.	Sony Magnetic Products	WOA	0	0	15858	4
292.	Sony Semiconductor Thailand	WOA	0	0	15858	7
293.	Sony Siam Industries	WOA	0	0	15858	9
294.	Canon Hi-Tech (Thailand)	WOA	0	0	16802	7
295.	Canon Engineering (Thailand)	WOA	1	1	17377	11
296.	Sharp Appliances	WOA	0	0	17379	5
297.	Canon Precision (Thailand)	WOA	0	0	17917	11
298.	Sharp Thebnakorn	JV	0	0	18282	4
299.	Thai Sumilox	JV	1	1	20335	9
300.	Kobe Mig Wire	JV	0	0	21679	4
301.	Thai Coated Steel Sheet	JV	0	0	22214	8
302.	MMC Sittipol	JV	0	0	22997	3
303.	Sukosol & Mazda Engineering	JV	1	0	29835	1
304.	Sanyo Semiconductor (Thailand)	WOA	0	0	30725	10
305.	(Nippon)denso Tools & Die (Thailand)	JV	0	1	36648	11
306.	NEC Communication System (Thailand)	JV	1	0	37721	5
307.	NEC Technologies (Thailand)	WOA	0	0	38004	4
308.	Panasonic Welding Industry (Thailand)	JV	0	1	42510	1
309.	MHI Pornchai Machinery	JV	1	0	45353	7
310.	MHI Mahajak Air-Conditioners	JV	0	0	45411	4
311.	Thai Compressor Mfg	JV	0	0	45411	4
312.	Melco Consumer Products (Thailand) (Mits	JV	0	0	47693	8
313.	Siam Compressor Industry	JV	0	0	48562	9
314.	Mitsubishi Elevator Asia	WOA	0	0	48616	1
315.	Melco Mfg. (Thailand)	WOA	0	0	49138	4
316.	Thai CRT	JV	0	0	49138	7
317.	Fujitsu (Thailand)	JV	0	0	50866	4
318.	Thai Automotive Industry	JV	0	0	51237	9
319.	Thai Nippon Steel Engr&Const	JV	0	0	55565	6
320.	Siam Toyota Manufacturing	JV	0	0	64797	9
321.	Thai Auto Works	JV	0	0	65926	0

322.	Toshiba Consumer Products (Thailand)	JV	0	0	69201	3
323.	Toshiba Semiconductor (Thailand)	WOA	0	0	69643	0
324.	Toshiba Display Device (Thailand)	JV	0	0	70288	10
325.	Hitachi Industrial Technology (Thailand)	JV	0	0	76479	6
326.	Siam Hitachi Automotive Products	JV	1	0	79339	2
327.	Siam Hitachi Elevator	JV	0	0	79801	1
328.	Hitachi Compressor Thailand	JV	0	0	81488	0