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MULTINATIONALS' STRATEGIC CHOICE
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MULTINATIONALS' STRATEGIC CHOICE OF INSTITUTIONAL MODE: A DECISION MODEL FOR MARKET ENTRY

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ABSTRACT

MULTINATIONALS' STRATEGIC CHOICE OF INSTITUTIONAL MODE: A DECISION MODEL FOR MARKET ENTRY

BY

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While the strategic choice of institutional mode for foreign market entry has a critical impact on the success of international operations, existing studies provide either piecemeal or partial analysis of this decision making process. By focusing primarily on economic efficiency maximization of the entrant, current works overlook the important role a strategic fit between a firm and its competitive environment plays in choosing the most appropriate foreign entry modes.

To overcome this shortfall, this study identifies and integrates the key variables involved in the entry mode decision by drawing on not only transaction cost but also strategic management literature. The propositions concerning the effects of these variables on the entry mode decision are then developed. The aim is to provide multinational managers with a comprehensive and managerially meaningful decision making framework for the foreign market entry mode choice.

Data analyses were based on 113 multinationals selected from the International Directory of Corporate Affiliations, 1987/88 edition. The findings indicated that an integrated

view of economic efficiency and strategic forces may be a useful perspective in explaining multinationals' choice of foreign market entry strategy. Significant variables that distinguish market entry modes come not only form the transaction cost set but also from the strategic set.

**For my parents, whose unspoken
love, expectations, and understanding
have always been treasured by their son.**

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Lastly, I would like to dedicate this accomplishment to my parents, who must have often wondered if this endeavor would ever end. It is their teaching in my early life the value of perseverance, patience, and endurance, that enables me to reach this end, and beginnings beyond.

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CHAPTER ONE

INTRODUCTION

One eminent issue in today's market reality is the internationalization of markets. The phenomena of new international division of labor and production sharing have been recognized and widely discussed by both the business and academic communities. Along with the realignment of the world economy, the choice of mode of foreign market entry has become a major concern for many firms expanding internationally.

In seeking to explain cross country investment, two conceptually distinct issues need to be addressed: (1) why production/marketing occurs where it does, and (2) why certain production/marketing activities occur under the control of foreign enterprises while others do not (Teece, 1985). The second issue is the focus of this dissertation and is central to the theory of the multinational corporation (MNC).

Having decided to operate in a given foreign market, a multinational corporation faces choices of institutional mode in organizing its business activities. One can choose, for example, a nonequity contractual mode such as licensing, franchising, an equity based joint venture, or a wholly owned

subsidiary. The common denominator of these various arrangements reflects the degree of control possessed by the investing firms (Root, 1982; Davidson, 1982; Anderson and Gatignon, 1986).

The institutional mode chosen and consequently the degree of control obtained in the process of foreign market expansion have a critical effect on the success of international operations (e.g., Root, 1983; Davidson, 1982; Killing, 1982). The existing literature, however, suggests very little about how these strategic choices are actually made.

The accepted theory in explaining the proper degree of control demanded by firms contemplating international business ventures has been internalization theory, based on transaction cost analysis. This stream of thought, originated by Coase (1937), has focused on maximizing long term economic efficiency of transactions. Internalization theory sees the desire to gain the appropriate level of control in foreign operations as a response to market failure (Rugman, 1982; Hennart, 1982; Buckley and Casson, 1976). The theoretical underpinning rests on the proposition that internal governance structure could circumvent the problems when bilateral dependence causes opportunistic behavior and costly haggling (Williamson, 1975, 1979). According to this view, the incentives of internalizing market imperfections determine the appropriate governance structure of transactions.

Although the transaction cost approach offers a sound theoretical framework to the theory of the MNC, it has two major weaknesses. First, because this approach is concerned with maximizing the long term economic efficiency of a transactor, it essentially addresses the institutional mode issue at the business unit level. For a firm with multiple business units such as a multinational, however, sub-optimization of the long term economic efficiency of each business unit does not necessarily lead to global-optimization at the corporate level. In fact, an MNC's corporate efficiency maximization in today's reality of global competition may often be achieved by having a particular business unit operate at a zero return or even at a loss to cross-subsidize a competitive battle for another strategically important affiliate (e.g., Hout, Porter, and Rudden, 1982; Hamel and Prahalad, 1985). Hence, competitive considerations forcing a business unit to operate at the optimal corporate strategic posture could outweigh the transaction cost economies obtained at the business unit level. Since a strategic fit between the organization and its competitive environment is a crucial dimension of the decision (Porter, 1980; Root, 1982; Harrigan, 1985a, 1985b), the efficiency based transaction cost approach, focusing on the efficiency maximization at the business unit level, may have limited value in explaining multinationals' entry mode choice.

Second, the transaction cost approach seems to overlook or downplay important non-transaction variables, such as competitors' strategic posture, the firm's corporate strategy, and industry conditions, that play a major role in the operational reality of multinationals. For example, the emerging phenomenon of international joint ventures as an intermediate mode of entry is often the result of strategic considerations rather than transaction cost economies (Berlew, 1984; Killing, 1982).

In contrast to the transaction cost approach focusing on long-run economic efficiency, the business strategy literature has offered another perspective on the choice of institutional mode. In particular, research on vertical integration (e.g., Porter, 1980; Harrigan, 1983, 1985a, 1985b) seems most relevant to the entry mode decision. These studies approach the range of choice (nonintegration, quasi-integration, taper-integration, and full integration) by explicitly considering corporate strategic needs and competitive settings. While these vertical integration studies have examined the entry mode issue mainly in a domestic context, the key variables and underlying logic used in their analyses can be extended into an international study. The factors reported to have a profound effect on the institutional mode decision include uncertainty concerning sales growth and industry development, industry traits affecting how firms compete, company attributes creating bargaining power vis-a-vis buyers/suppliers, and corporate

missions for the business unit or chain of businesses (Harrigan, 1983).

Several case studies have also suggested the important role corporate strategic motivations play in foreign market entry decision (e.g., Hamel and Prahalad, 1985; Watson, 1982; Hout, Porter, and Rudden, 1982). In particular, they propose a dominant control mode for those MNCs which aim to achieve effective strategic coordination of their foreign business units to meet today's global competition. Thus, an integration of the above two research streams into a institutional mode decision model seems to be a fruitful task.

OBJECTIVE OF THE STUDY

This study, investigating foreign market entry strategy in the 80's, has three objectives. The first is to determine whether the overall profiles of the key variables differ on the basis of the MNC's strategic choice of institutional mode. These key variables involved in the institutional mode decision are identified in the relevant literature and are integrated into a decision model to bridge the gap between economic and business strategic treatment of the institutional mode decision. To compare the performance of the overall variables relative to that of the transaction cost variables or the strategic variables in classifying the modes of foreign market entry decisions is the second

objective. The third is to examine specific differences on each of these key constructs with respect to the strategic choice of entry modes, holding the remaining constructs constant.

RESEARCH QUESTIONS

The research questions are presented according to the research objectives outlined above.

1. Does the choice of market entry mode in terms of high, medium, or low control differ on the basis of the variables identified? It is important to note that the final choice is the result of all the variables operating together.

2. How adequate is the integrated model compared with either the transaction cost or the strategic model in classifying high, medium, or low foreign market entry control modes?

3. Which variables are useful in differentiating high, medium, or low foreign market entry control modes?

CONTRIBUTION TO MARKETING THEORY

The success or failure of foreign operations is to a large extent affected by the choice of an appropriate market entry mode. Wind and Perlmuter (1977) identified foreign

market entry modes as a frontier issue in international marketing. Although theoretical work in this area has been fruitful, there is still much room to improve. Consider the following comment made by Anderson and Gatignon (1986):

> much of the literature contains many seemingly unrelated considerations, with no identification of key construct. ...Furthermore, relevant work is scattered across books and journals in several disciplines, obscured by varying terminology, and separated by differences in problem setup, theory, and method. (p. 2)

To overcome these shortcomings, this dissertation addresses the following issues. First, the transaction cost paradigm may only offer a partial explanation of entry mode decision. This inadequacy mainly comes from overlooking the important role competitive forces and corporate strategic needs play in the decision making process, an inadequacy which is remedied by adding strategic variables to an integrated decision model (see Chapter Three for a detailed discussion). Second, empirical testing in this area of inquiry has been confined either to a specific type of market entry, such as international channel selection, or to a dichotomy market-hierarchy comparison (e.g., Anderson and Coughlan, 1987; Davidson and McFetridge, 1984). This dissertation offers an opportunity to conduct a comprehensive test of market entry strategies in general.

CONTRIBUTION TO MARKETING PRACTICE

This dissertation has significant implications for corporate managers. First, they need to know how to match foreign entry modes with different scenarios they are facing. By modeling key constructs of the entry mode decisions, managers could enhance their understanding of this important issue. Second, the expected results should indicate the importance of strategic effectiveness vis-a-vis economic efficiency in foreign entry strategies. In particular, empirical testing of the hypotheses should help isolate key variable differentiating among modes of market entry.

METHODOLOGY

A survey methodology was used to collect the data. The survey instrument was developed based on the key constructs identified in the decision model for foreign market entry. Samples of items representing the domains of each construct were generated through the relevant literature and interviews with firms operating abroad. Each construct was defined conceptually, and a poll of items were generated consistent with the definitions.

Cronbach's alpha was the first measure calculated to assess the reliability of the constructs. Principal component factor analysis was then performed to examine the data structure. This was done to check whether the items

developed properly loaded on their respective construct. Multivariate data analyses were then used to test the hypotheses. Specifically, multivariate analysis of variance (MANOVA) was used to check the overall significance of three control mode decisions with respect to the nine constructs. Multiple discriminant analysis (MDA) was employed to compare the accuracy performance of the transaction cost model, strategic model, and integrated model. Analysis of covariance (ANCOVA) and planned comparisons were performed to explore further the effect of each construct on the choice of institutional mode.

ORGANIZATION

The organization of this dissertation is as follows. Chapter Two provides a background of the study through a literature review. It contains three sections. The first two review the economic and business strategy literature on the choice of institutional mode in foreign market entry. The third section reviews the effect of host country environment on this strategic decision. Based on the literature review, a decision model for foreign market entry is constructed in Chapter Three. Definitions are given to variables identified, and hypotheses are also formulated. Chapter Four contains a description of the methodology used to test the hypotheses. Chapter Five presents empirical analyses and results. Chapter Six discussed implications, limitations, and the directions for future research.

CHAPTER TWO

LITERATURE REVIEW

This chapter develops the underlying theoretical structure for the research by reviewing the literature related to the research questions. The first section investigates alternative ways of organizing economic activities across national boundaries. It equates the choice among various institutional modes to the degree of control demanded by multinational corporations (MNCs), which in turn shows the level of integration desired by them.

The second section examines the rationale of foreign direct investment (FDI) and, consequently, the existence of MNCs found in the economics literature. This section explores theoretical development in the field. It is argued that, under certain circumstances, one institutional mode is more efficient for governing international economic activities than others. For reasons of simplicity and theoretical clarity, the market-hierarchy paradigm representing two extreme forms of governance structures is used to illustrate the point of relative efficiency. Both international horizontal and vertical integration are discussed.

Section three reviews the business strategy literature which stresses that the degree of integration is a function

not only of efficiency maximization but also of searching for a best fit between a firm, dynamic competitive forces, and corporate needs.

Section four reviews the effect of host country environment on the degree of integration decisions. Two elements, county risk and location familiarity, are investigated. On the basis of the literature review, a decision model for an MNC's choice of institutional mode is proposed in Chapter Three.

MODES OF FOREIGN MARKET ENTRY AND CONTROL

A foreign market entry mode is an institutional arrangement whereby the entry of a company's products, technology, human skills, management, or other resources enter a foreign country (Root, 1982). Foreign economic activities can be organized in a variety of ways, ranging from anonymous spot market transactions at arm's length, through a variety of contractual arrangements, to full integration (Caves, 1982). Root (1982) provided a rather comprehensive list of entry modes, classifying into three major groups, export, contractual, and investment, as shown in Table 1. The basis of this classification is clear in that it represents three unique ways of entering foreign markets.

Table 1

Root's Classification of Entry Modes

Export Entry Modes
Indirect
Direct agent/distributor
Direct branch/subsidiary
Other
Contractual Entry Modes
Licensing
Franchising
Technical agreements
Service contracts
Management contracts
Construction/turnkey contracts
Contract manufacture
Co-production agreements
Other
Investment Entry Modes
Sole venture:new establishment
Sole venture: acquisition
Joint venture: new establishment/acquisition
Other

Source: Root, Franklin R., 1982, Foreign Market Entry Strategies, New York: Amacom, p. 7.

Table 2

Davidson's Four Dimensions of Participation

	DIMENSION			
LEVEL	Ownership	Managerial	Marketing	Manufacturing
High	Wholly owned	Complete responsibility by parent	Internal staff and sales force	Full Production
	Majority	Strategic Operation Financial		Component production
	Co-owned	Specialized, Limited responsibility by parent	Distributors	Assembly Import from parent
	Minority		Agents	
Low	Licensee	Passive Parent role	Brokers	Indigeneous procurement

Source: Root, Franklin R., 1982, Foreign Market Entry Strategies, New York: Amacom, p. 7.

Davidson (1982) highlights four major dimensions of participation decisions in foreign operations, as shown in Table 2. Of special interest here is the correspondence between ownership participation and the degree of control in foreign operations. Anderson and Gatignon (1986) offered another entry mode classification scheme, presented in Table 3. It clusters modes on the basis of three level of control, high, medium, and low, in each, respectively, a firm would have dominant, balanced, and diffused interests. Note that this classification focuses on a firm's operation in foreign markets without addressing the export entry modes. It conceptually agrees with other research, which structures the issue in terms of the degree of control each mode affords the entrant (e.g., Daniels, Ogram, and Radebaugh, 1982; Robinson, 1978; Vernon and Wells, 1986). Conceivably, there are many other possible variations both as to overall classification and within any one form of entry mode (Kindleberger, 1984; Hayashi, 1978).

The connection between the institutional mode of foreign market entry and the degree of control is of particular interest here. The concept of control is prominent in the entry mode literature because the optimal level of control should assure maximum economic efficiency and preserves strategic flexibility, which are two major concerns in foreign operations (Anderson and Gatignon, 1986). It is important to note that the level of control is generally

Table 3

Entry Mode Classified by the Entrant's Level of Control

High-Control Modes: Dominant Equity Interest
Wholly-owned subsidiary
Dominant shareholder (many partners)
Dominant shareholder (few partners)
Dominant shareholder (one partner)
Medium-Control Modes: Balanced Interests
Plurality shareholder (many partners)
Plurality shareholder (few partners)
Equal partner (50/50)
Contractual joint venture
Contract management
Restrictive exclusive contract (e.g., distribution agreement, license)
Franchise
Nonexclusive restrictive contract
Exclusive nonrestrictive contract
Low-Control Modes: Diffused Interests
Nonexclusive, nonrestrictive contracts (e,g., intensive distribution, some licenses)
Small shareholder (many partners)
Small shareholder (few partners)
Small shareholder (one partner)

Source: Anderson, Erin and Hubert Gatignon, "Modes of foreign entry: A transaction cost analysis and propositions," Journal of International Business Studies, 17 (Fall), P. 5.

related to the amount of resource commitment, which in turn leads to the degree of integration in foreign operations. Thus the factors influencing the degree of both vertical and horizontal integration also bear on the entry mode decision.

THEORETICAL DEVELOPMENT AND BACKGROUND OF THE TRANSACTION COST APPROACH

In the postwar world the main role of multinational enterprises has been the international diffusion of technology, marketing skills, management expertise, and other proprietary know-how. During the past few decades many researchers have attempted to explain the phenomenon of MNCs from different angles (e.g., Agarwal, 1982; Calvet, 1981; Caves, 1974, 1982; Teece, 1983; Dunning, 1981).

In an excellent review article, Agarwal (1982) has surveyed the main currents of thought regarding foreign direct investment. The following discussion, based on Agarwal's work, briefly summarize these main currents as a backdrop to the theoretical development of concepts explaining the FDI phenomenon. Detailed discussion is not provided here since the focus of this review is on the dominant theoretical framework in this field, that is, the transaction cost paradigm.

Several hypotheses assume full or nearly full competition in factor and/or product markets. For example, the portfolio hypothesis, postulates that investors consider not only the

rate of return but also the risk in selecting their portfolios (Rugman, 1979).

Another group of hypotheses assume that output and/or factor markets are imperfect. In other words, it is assumed that firms investing in foreign countries have one or more comparative advantages over their rivals in the host countries (Vernon, 1979; Buckley and Casson, 1976; Caves, 1982).

A third group of hypotheses focus on the factors influencing the propensities of countries, industries, or firms to undertake FDI. For example, one variant, the liquidity hypothesis, seeks to establish a positive relation between the internal cash flows and investment outlays of a firm (Barlow and Wender, 1955). The expansion of foreign operations is seen as occurring through reinvestment of local profits.

A fourth body of hypotheses deal with the factors influencing the propensities of countries to attract FDI, such as political instability, incentives provided by the government, and cheap labor (Green and Cunningham, 1975; Korbin, 1976). Recognizing that each of these groups of hypotheses accounts only partially for the determinants of FDI, Agarwal (1982) concluded that a general theory is needed to integrate the existing relevant knowledge. Although there still is a long way to go toward this end, internalization theory, based on transaction cost analysis, has emerged as the dominant theoretical thrust (Rugman, 1980; Dunning, 1981;

Buckley and Casson, 1976; Teece, 1985; Caves, 1982). Rugman (1980) has commented on this issue:

> A large literature has developed in order to offer explanations of the phenomenon of foreign direct investment (FDI) and the reasons for international production by the multinational enterprise. It is argued in this study that the existing theories are sub-sets of the general theory of internalization. (p. 24)

Internalization Theory

The essence of internalization theory is that activities of foreign production and sales take place in response to imperfections in the goods and factor markets. The theme of market imperfections dates back to the seminal work of Hymer (1960), which was refined and publicized by Kindleberger (1969). The key argument is that firms must overcome disadvantages as regards the ignorance of local consumers' taste, legal system, institutional framework, business and other social customs, media system, language barriers, and so forth. Among the competitive advantages an MNC has or must have are brand name, trade secrets, patents, marketing skills, special access to markets, management expertise, cheap sources of financing, and economies of scale (Kindleberger, 1969).

Recently, however, it was argued that these oligopolistic advantages resulting in market imperfections are necessary but not sufficient conditions for foreign operations (Teece, 1985; Agarwal, 1982; Dunning and Rugman, 1985). The reasoning advanced by Hymer and Kindleberger did not explain

why some firms possess these advantages yet serve foreign markets with exports or by selling to local firms in foreign countries (Caves, 1982; Teece, 1985; Dunning and Rugman, 1985). Dunning and Rugman (1985) pointed out that Hymer's work explicitly recognized that the MNC is a creature of market imperfections, but he missed the distinction between structural and transaction cost that is, cognitive market imperfections. According to these authors:

> Hymer's entire analysis is based upon structural imperfections...include scale economies, knowledge advantages, distribution networks, product differentiation, and credit advantages. All of these help the MNE to close markets and ,thereby increase its market power. ...On the other hand, cognitive imperfections are Williamson-type transaction costs. ...The MNE then responds to the transaction costs by creating an internal market. (p. 229)

This recognition of cognitive market failure set the tone for the modern theory of the MNC. The internal markets created by MNCs allow firms to engage in transactions which may be costly through arm's length market mechanism. This theory was first developed by Coase (1937), who conceptualized a firm as an organization for allocating economic resources without the exchange of ownership. The optimal size of the firm or degree of internalization is determined by the margin at which costs and benefits of internalization are equalized. The literature subsequently developed is generally referred to as the transaction cost approach.

Among other researchers, Williamson (1975, 1979) is recognized as the most significant contributor to the

transaction cost approach. Given the fact that transaction cost can be too broadly defined, Williamson (1979) highlights the factors on which general consensus appears to be developing. (1) Opportunism is a central concept in the transaction cost approach; (2) opportunism is especially important for economic activity that involves transaction-specific investments in human and physical capital; (3) the efficient processing of information is an important and related concept; and (4) the assessment of transaction cost is a comparative institutional undertaking. Identifying the critical dimensions, Williamson was able to match governance structures to transactions with different characteristics. This is shown in Figure 1.

Teece (1985) asserted that transaction costs embrace all the costs associated with organizing the economic system. He itemized transaction costs in a market and nonmarket context as follows. When transactions are governed by the market mechanism, transaction costs include the costs of discovering with whom one wishes to deal with; informing market agents that one wished to deal and on what terms; conducting negotiations leading up to the bargain; and understanding the inspection needed to make sure that the terms of the contract are being observed. When transactions are conducted within an organization, transaction costs include employing administrative processes to organize economic activities and identifying exchange opportunities.

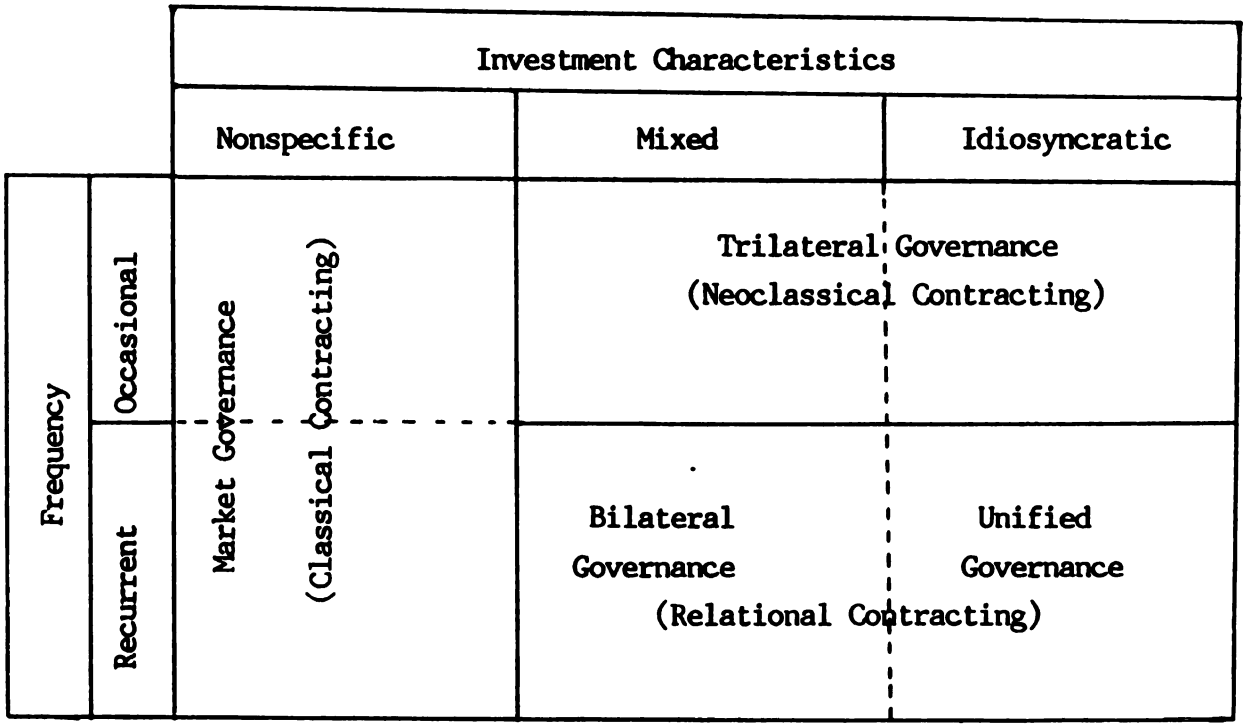

Figure 1

The Dimensions of Transaction Cost

Source: Williamson, Oliver E., 1979, "Transaction-cost economics: The governance of contractual relations," Journal of Law and Economics, 22 (October), 233-262.

Rugman (1980) extended the notion of market-hierarchy paradigm into a global context by comparing the relative efficiency of organizing international economic activities through spot markets that is, international trade and within firms that is, FDI. He argued that the theory of FDI is the converse of the pure theory of international trade. The theory of comparative advantage in international trade has made it clear that global welfare is maximized by nations producing and exchanging goods compatible with respective factor endowments under the assumption of constant return to scale and identical technologies of production, identical tastes between nations, zero transportation cost, and perfect goods and factor markets. The relaxation of these assumptions does not change the conclusion of gains from international trade; however, the existence of goods and factor market imperfections limits the explanatory power of trade theories as regards international economic activities. Specifically, the role of MNCs in international economic activities emerges as a response to market imperfections. Through the internal market, MNCs overcome distortions from the goods market, such as tariffs, quotas, and other trade barriers, which prevent the efficient operation of international trade. Equally important, MNCs also respond to market failures in such factor markets as knowledge and information.

In summary, there are two messages of this section. First, there has been a transition of research inquiry from

structural market imperfections which focus on firm-specific advantages to cognitive market imperfections emphasizing market failures due to transaction costs. Second, the latter argument builds up the central role of internalization in the theory of MNCs couched in the market-hierarchy paradigm. The generality of internalization theory is evident by its applicability to both international horizontal and vertical integration (Caves, 1982; Teece, 1983, 1985; Hennart, 1982). The next section reviews the relevant literature in these two areas.

International Horizontal Integration

International horizontal integration refers to MNCs establishing plants in different countries to produce and market the same or similar goods. The transaction cost approach asserts that horizontal MNCs exist only if the plants operate more efficiently under their control than under separate managements.

According to Hennart (1982), horizontal subsidiaries can be classified into two normally exclusive categories those that depends on their parents for knowledge, and those that draw on goodwill created by parents. Other authors (e.g., Teece, 1985), however, prefer to combine these two categories and discuss them under the rubric of proprietary know-how. This review follows the second approach, as goodwill could be considered a specific know-how.

It is widely recognized today that the theory of MNCs is about the transfer of nonfinancial and firm-specific advantages across national boundaries. The connection between MNCs and proprietary know-how is generally found in the industrial organization literature. The philosophy of this stream of research is best reflected in the following comments by Caves (1982):

> The usual strategy of research involves correlating the prevalence of MNCs in an industry with structural traits of that industry: If attributes x promote the formation of MNCs, and successful firms in industry A have a lot of x, then MNCs should be prevalent in industry A. (p.8)

The attributes studied are basically those generating proprietary knowledge for firms. There is ample evidence that industries characterized by high research and development (R&D) expenditures also have a high ratio of foreign to domestic production. In addition, firms that own manufacturing subsidiaries abroad tend to spend more on R&D (Caves, 1974; Lall, 1980). The well-known phenomenon that service industries, such as banking, accounting firms, advertising agencies, and consulting firms, usually follow their customers abroad is also a case in point (Hennart, 1982; Nigh, Cho, and Krishnan, 1986). Since it takes a rather long time to develop a good deal of specific knowledge about a client's business, firms in the service industry enjoy a transactional advantage for supplying the same service to the client abroad.

Lall (1980) attempted to integrate the traditional explanation of industrial market structure within countries

with foreign investment and international trade. He found that the same factors, (technology, product differentiation, capital intensity, scale economies, and skills, including production, managerial, and technical skills) that lead to greater internal concentration also lead, by affording the dominant firms certain monopolistic advantages, to greater success in foreign markets. The evidence suggests that MNCs are likely to possess some forms of proprietary knowledge relative to indigenous firms. Hennart (1982) asserted that MNCs tend to have high innovative capabilities. It is important to note that innovation process, through which new products and processes are commercialized, requires a fusion of three different types of knowledge: scientific principles, production engineering, and market conditions (Hennart, 1982). The knowledge thus generated by a successful innovation process serves as an important base for international expansion.

Having established the role of proprietary knowledge in the theory of MNCs, it is now appropriate to compare the transactional characteristics of different governance structures regarding the exchange of this asset. The market-hierarchy paradigm again is adopted to illustrate the differences of these two extreme forms of exchange.

An important factor in horizontal FDI stems from the fact that the market is seriously flawed as an exchange mechanism for facilitating trading in many important types of intangible know-how. As Teece (1981) argues,

> market failure considerations lie at the heart of horizontal foreign investment. If markets operate in the frictionless fashion portrayed in economics textbooks then all of the advantages from horizontal investment could be captured using contracts. (p. 7)

There are many types of natural market failure associated with the pricing of knowledge or similar firm-specific intangible advantages including technological and managerial skills. In many cases, there is no regular market for the sale of information and therefore no price for it. Even if a reasonable price is reached by the transacting parties, there is a prohibitive transfer cost from one party to the other.

Williamson (1973) provided a brief description of transacting intangible assets through conventional markets. First, these assets are, at least to some degree, public goods. The marginal cost of exploiting these assets in other locations is zero or approximately zero without reducing the original value. However, the efficient allocation of resources from the societal point of view requires that the price of intangible assets be equal to their marginal cost. Since no firm would sell its intangible assets for zero, their prices tend to be unprovided or priced inefficiently. Second, transactions in intangibles suffer from information impactedness combined with opportunism. Third, the unsymmetric information structure between transaction parties entails uncertainty. In most circumstances, therefore, it is necessary for firms to demand control by creating an internal market where the intangible advantages can be developed and explored in an optimal manner on a world-wide basis. The

costs of low control include the risk of dissipation of the advantages and possible opportunistic behavior from the other party.

Similarly, Hennart (1982) asserts that the knowledge buyer, by definition, does not know what exactly he will be purchasing a priori, hence interpersonal exchange of knowledge will be difficult unless mutual trust is established. As it is clear that few firms, if any, will engage in transactions on a mutual trust basis, information search costs for both buying and selling parties accordingly will be high. It is, therefore, more efficient to transfer knowledge within firms. Teece (1985) characterized this transaction difficulty as the "fundamental paradox" of information. It amounts to saying that the value of knowledge is not known until one has the information, but then one in effect has acquired it without cost. In addition to the difficulties of information searching and exchange, it is also possible that potential buyers do not realize the existence of certain knowledge. The issue of nonrecognition arises since it is natural for firms to disguise or conceal important R&D accomplishments. Exchange of knowledge through the market, however, is still likely to be faulty even when potential buyers recognize and are willing to pay the due value of a specific know-how to sellers. This is because knowledge transfer often require intimate personal contact, demonstration, and involvement.

In a study of international technology transfer, Teece (1977) concluded that the resources required are considerable. In general, the transfer involves physical items, such as equipment and blueprints, and relevant information relating to methods of organization and operation, quality control, and various other manufacturing procedures. While the physical items can be embodied in the hardware, the relevant unembodied knowledge accounts for the major portion of the transfer cost. Beyond the transfer of technology per se, other barriers include language, and differences in terms of economic development and the attendant socioeconomic structure. Many other firm-specific intangible assets likewise face similar difficulties.

In summary, the ability of MNCs to penetrate foreign markets is a result of firm-specific advantages which give rise to intangible proprietary know-how. Market entry through a wholly owned subsidiary by creating an internal market is a response to cognitive market failures in transferring these intangible assets.

International Vertical Integration

The transaction cost approach employed to explain horizontal MNCs is equally applicable to the analysis of vertical integration (Caves, 1982; Teece, 1985; Hennart, 1982), although the mechanism, however, is a little different. While the horizontal MNCs internalize the market

for intangible assets, vertically integrated firms internalize the market for an intermediate product, such as raw materials, components, and semiprocessed materials. In fact, Teece (1985) asserts that vertical foreign direct investment ought to be seen primarily as a response to cognitive market failure without the need for referring to classical market power considerations. He further comments that, except under restrictive assumptions, vertical integration cannot be employed as a mechanism to extract monopoly or monopsony rents. There are, however, rival theoretical interpretations of international vertical integration. Recently, for example, Anderson and Coughlan (1987) have supported the neoclassical economic approach emphasizing scale economies and fully utilizing lumpy indivisible inputs. Their findings also indicate that entrants tend to pyramid their products within a channel, thereby cementing their current arrangements and raising barriers. Thus, there is also some support for the traditional market power theory.

An vertically integrated integration system can help firms transfer and protect their intangible assets. For example, an integrated channel can make it easier for firms to set up intermediate product specification. It can also prevent information from leaking via independent channels (Anderson and Coughlan, 1987). Vertical foreign investments are of two types: backward integration into raw materials or forward integration into distribution. Most of the first

type are concentrated in only three industries: oil, copper, and aluminum (Hennart, 1982). Raw material extraction and processing both involve heavy fixed investment, hence high asset specificity. Moreover, supplies for these industries are geographically concentrated. As a consequence, market transactions between independent producers and processors would be characterized by small numbers, and would be high dependent on each other. Backward vertical integration could reduce uncertainty about crude supplies in times of shortage and opportunistic behavior from supplies. McKern (1976) provides a comprehensive examination of the extractive industries. He concludes that an important motive for vertical integration is the use by MNCs of the knowledge they have acquired about the international market for the raw materials in question.

Studies in forward vertical integration are relatively more scarce than for backward vertical integration and horizontal integration. Most recently, Anderson and Coughlan (1987) empirically tested the choice between an integrated and an independent distribution channel to serve a foreign market. Ten variables, drawing from several complementary approaches to the choice of distribution channels for products introduced in foreign markets, were hypothesized to influence the choice between independent versus integrated channels for U.S. semiconductor companies. The result lends support to several of the vertical integration theories. Consistent with transaction cost analysis, the result

suggests that entrants use integrated channel for products requiring the distribution agent to undergo considerable training to learn about the product. The authors speculate that complex products also require the development, deepening, and specialization of working relationships in order to distribute effectively. According to this view, an integrated channel serves as a means to transfer and specify necessary knowledge from downstream manufacturers to upstream distribution agents. This is consistent with the intangible asset view discussed in the international horizontal integration.

In summary, it has been shown that international vertical integration is the result of responding to cognitive market failure resulting in high transaction cost between firms in the upstream and downstream industry. Together with the motivation of international horizontal integration discussed above, internalization theory thus plays a dominant role in the theory of MNCs. The crux of the previous review is that firms would compare transaction costs associated with different governance structures and choose one that maximizes economic efficiency. In an extreme form, a wholly owned subsidiary would exist if markets for intangible assets or intermediate goods fail to function appropriately.

THE BUSINESS STRATEGY LITERATURE

In contrast to the transaction cost literature, which focuses on long-run economic efficiency in explaining the amount of control needed in intrafirm exchanges, the business strategy literature emphasizes competition and corporate strategic needs (Porter, 1980; Harrigan, 1983, 1985a, 1985b; Root, 1982). Although in both literatures the objective function is to optimize the degree of control in intrafirm exchanges, they differ significantly in terms of theoretical thrusts. While the former approach argues that the degree of internal transfer hinges on transaction cost heights, the latter approach asserts that it is really a matter of searching for a best fit between a firm, the industry, and the environment in which it operates.

Since the theory of the MNC is dominated by the transaction cost paradigm as reviewed in the previous section, very little work has been done in examining the same issue from the strategic perspective. Although there is no established theoretical framework in this regard, domestic research on vertical integration casts fresh new insights on the theory of the MNC. The common denominator of these two theories lies in the notion of control. That is, both theories investigate the optimal degree of control desired in integrating business units. The decision will consequently determine the form of integration. Just as the transaction cost approach is applicable to the study of vertical

integration, strategic analysis is equally applicable to the phenomenon of the MNC. It is important to note that these two approaches are complementary rather than supplementary in nature, since they explore the same issue from two different angles.

With this in mind, the following review first will discuss a model addressing foreign market entry strategies from a strategic perspective. It will be shown that it contributes little to theory building and therefore should be considered as the starting point of a strategic approach to the theory of the MNC. Key elements regarding strategic considerations of the degree of control desired in foreign market entry then will be drawn from the vertical integration and other relevant strategic literature.

An overall review of the factors influencing the choice of foreign market entry mode is offered by Root (1982), as shown in Figure 2. This model groups all forces into external and internal factors. The formal include target country market factors, target country environmental factors, target country production factors, and home country factors. Internal factors include company product factors and company resource/commitment factors. A detailed breakdown of these factors and their effect on the choice of foreign market entry mode is listed in Table 4. Given the large number of factors to consider, Root provides a flow chart to facilitate the decision-making process, as shown in Figure 3. This model contributes to the literature by highlighting and

classifying many important elements in the market entry decision. However, the main flaw of this model is that it does not simplify complex issues and thus does not assist in model building. In addition, it provides little guidance to business practices. For example, facing as many as 43 factors, managers can only make decisions based on heuristic rules.

A more promising attempt to simplify the issue is the theoretical framework laid out by the vertical integration research (e.g., Harrigan, 1983; 1985a; 1985b). This research stream highlights the realities of industry structure and corporate strategy in investigating intrafirm exchanges (Porter, 1980; Harrigan, 1985b). Key elements influencing the decision of optimal integration can subsequently be derived from these considerations. The following review centers around the effect of industry and corporate factors on this decision.

Industry Evolution and Volatility

The strategic literature has made it clear that competition is at the heart of any strategy (Porter, 1980; Aaker, 1984). Porter (1980) asserts that industry evolution and volatility are the results of underlying competitive forces and therefore have strategic significance for firms. It his been shown that these two forces are especially vital

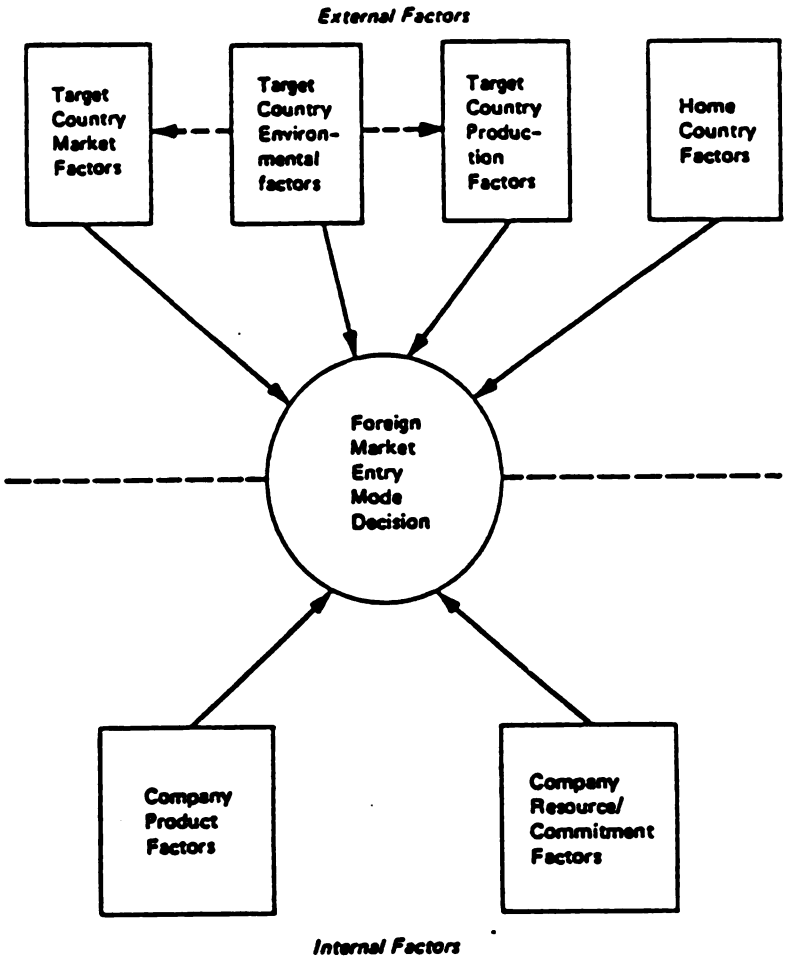

Figure 2

Factors in the Foreign Market Entry Mode Decision

Source: Root, Franklin R., 1982, Foreign Market Entry Strategies, New York: Amacom, p. 10.

Table 4

External and Internal Factors Influencing the Entry Mode Decision

Factor	*Generally Favors:* *Indirect and Agent/ Distributor Exporting*	*Licensing*	*Branch/ Subsidiary Exporting*	*Equity Investment/ Production*	*Service Contracts*
External Factors (Foreign Country):					
Low sales potential	X	X			
High sales potential			X	X	
Atomistic competition	X		X		
Oligopolistic competition				X	
Poor marketing infrastructure			X		
Good marketing infrastructure	X				
Low production cost				X	
High production cost	X		X		
Restrictive import policies		X		X	X
Liberal import policies	X		X		
Restrictive investment policies	X	X	X		X
Liberal investment policies				X	
Small geographical distance	X		X		
Great geographical distance		X		X	X

Table 4 (cont'd.).

Factor	Generally Favors: Indirect and Agent/ Distributor Exporting	Licensing	Branch/ Subsidiary Exporting	Equity Investment/ Production	Service Contracts
Dynamic economy				X	
Stagnant economy	X	X			X
Restrictive exchange controls	X	X			X
Liberal exchange controls				X	
Exchange rate depreciation				X	
Exchange rate appreciation	X		X		
Small cultural distance			X	X	
Great cultural distance	X	X			X
Low political risk			X	X	
High political risk	X	X			X
External Factors (Home Country):					
Large market				X	
Small market	X		X		
Atomistic competition	X		X		
Oligopolistic competition				X	
Low production cost	X		X		
High production cost		X		X	X
Strong export promotion	X		X		

Table 4 (cont'd.).

Factor	Generally Favors: Indirect and Agent/ Distributor Exporting	Licensing	Branch/ Subsidiary Exporting	Equity Investment/ Production	Service Contracts
Restrictions on investment abroad	X	X			X
Internal Factors:					
Differentiated products	X		X		
Standard products				X	
Service-intensive products			X	X	
Service products		X		X	X
Technology-intensive products		X			
Low product adaptation	X				
High product adaptation		X	X	X	
Limited resources	X	X			
Substantial resources			X	X	
Low commitment	X	X			X
High commitment			X	X	

Source: Root, Franklin R., 1982, Foreign Market Entry Strategies, New York: Amacom, p. 17-19.

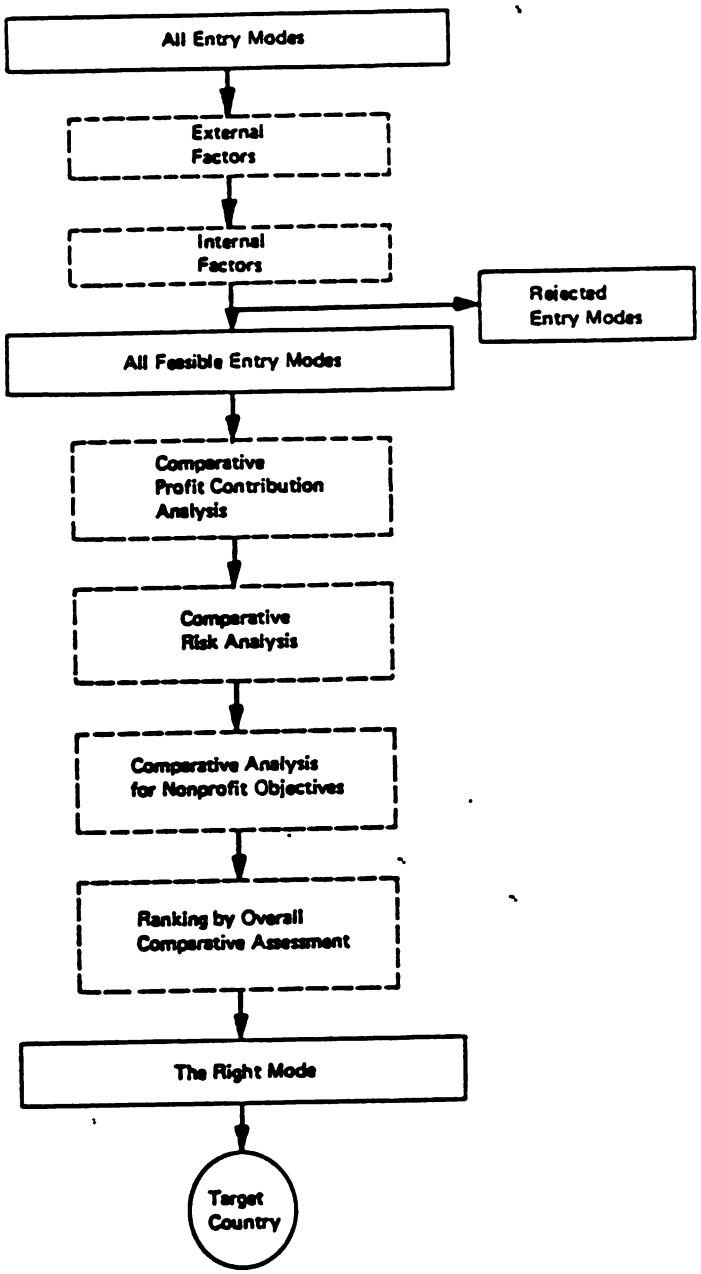

Figure 3

Deciding on the Right Entry Mode

Source: Root, Franklin R., 1982, Foreign Market Entry Strategies, New York: Amacom, p. 183.

to the vertical integration decision (Porter, 1980; Harrigan, 1985b). If the degree of control is the central issue of any integration decision, then the foreign market integration decision should not be immune to these competitive considerations. In what follows, industry evolution and volatility will be discussed in turn.

Four stages of industrial evolution are identified (Porter, 1980; Harrigan, 1985b), the embryonic, growing, maturing, and declining stages. Sales volume in embryonic industries is generally low, which does not justify a highly integrated strategy. Such strategy, for example, a high control mode of foreign investment, could be risky not only because underutilized capacity would be costly until demand were established but also because high capital involvement makes the possible adjustment difficult. A growing industry, faces different situations. When the final demand is expected to exceed the depreciable life of assets, firms can undertake highly integrated strategies without worrying too much that integration will be difficult to achieve later. As industries mature, sales volumes is generally predictable and substantial. At this point, more integration may be advantageous to reap economies of scale and increase market power. As industries progress toward the endgame, it becomes risky to commit a substantial amount of capital. In conclusion, the stages of industry development should coincide with the integration strategy a firm pursues. An

attractive market with sufficient demand is an important consideration in integration decisions.

Similarly, in many popular product portfolio models (Wind and Mahajan, 1981; Day, 1977) the concept of market attractiveness has been recognized as one of the few dimensions crucial to a firm's resource allocation decisions. These models usually prescribe that an attractive market provides firms with a good opportunity to build market share. However, as the standard portfolio models point out, an attractive market alone may not justify the additional investment decision, since it also hinges on the competitiveness of a firm relative to its major rivals. Everything else being equal, however, a promising market is at least a necessary condition for firms to commit long term resources as compared to firms facing a declining demand. For example, Burke (1984) maintains that business units with a strategic thrust of building market share should be in more attractive markets than businesses with hold or pull back market share strategies.

The volatility of competition in an industry also bears on the willingness to commit resources abroad by MNCs. Here, demand fluctuation due to fierce competition is the force at work. Demand fluctuation is usually the result of rapid technology change, frequent product innovation, low switching cost, and low consumer loyalty (Porter, 1980). Facing volatile competition, firms find it more difficult to determine optimal production and marketing scale or have to

adjust quickly to the market reality once operation scale is decided. When demand is underestimated firms have to expand operations with painful replanning, rescheduling, and reassigning of capacities. When demand is overestimated, price wars are likely to be initiated to dispose of excess supply (Harrigan, 1983). To maintain strategic flexibility, less resource commitment is appropriate when competition is volatile. As a corollary, to the extent that a firm can stabilize its demand through product differentiation or technology superiority, for example, a firm should be willing to commit more resources. Studies in the industrial organization literature lend support to this assertion. Lall (1980) and Caves (1974) found that industries with high R&D expenditure and high product differentiation tend to exhibit higher FDI.

Corporate Strategic Needs

As suggested in Chapter One, in analyzing foreign market entry, the appropriate unit of analysis is the corporate level. As it is clear that the optimization of one business unit does not necessarily lead to the optimization of the firm as a whole, corporate objectives necessarily take precedence over business unit objectives. Therefore, a business unit's investment abroad should be viewed in a corporate context by referring to other business units as well.

Synergy highlights this important concept: the combined effect of two businesses is greater than the sum of each business functioning independently. Domestic research on horizontal expansion suggests that firms exploiting synergy tend to enjoy higher profits (Rumelt, 1974; Palepu, 1985). This is mainly due to the fact that a firm can use its core factors that is, common resources, to serve many business units. When business units can share common resources, such as research and development personnel, technological know-how, and production processes, it is less costly for firms to expand horizontally. Rumelt (1974) developed a categorical measure of diversification, basing classification on the relationship of a firm's diverse business activities to one another. He and other researchers found that unrelated, across industry diversifiers, presumably failing to obtain synergistic effect, tend to exhibit lower levels of economic performance than firms belonging to other strategic classifications (Chrestensen and Montgomery, 1981; Palepu, 1985). Aaker (1984) notes that related diversification offers greater potential for a firm to exploit the commonalities of the involved businesses to obtain synergy based on the exchange of skills or resources. Varadarajan (1986) empirically supports the notion that firms pursuing high related-low unrelated strategies outperformed firms with high unrelated-low related and high unrelated-high related strategies.

Synergistic consideration is not only confined to diversification in general but also relates to vertical integration in specific cases. To the extent that vertical integration can increase or enhance innovation by sharing technological information, R&D personnel, and R&D facilities, which are common to separate stages of an industry, corporate management will be more likely to sanction vertical integration, especially if it promises to create or make use of strengths the firm values. Harrigan (1985b) found synergy plays an important role in vertical integration decisions, that is, the higher the synergistic effect, the higher is the degree of vertical integration.

Referring to the importance of the corporate rather than the business unit view of foreign market entry, Hamel and Prahalad (1985) caution that a subsidiary should not always be required to stand on its own to fight for profits. Hout, Porter, and Rudden (1982) argue that competing globally demands a number of unconventional approaches to managing a multinational business, such as launching major investment projects with zero or even negative return on investment. Clearly, this suggests that corporate strategic objectives may ask sacrifices from a specific business unit unless it is a single business unit corporation. However, research has shown that this is generally not the case, as most MNCs come from oligopolistic industries and have more than one business units (Caves, 1974; Horst, 1972). Under certain circumstances an MNC may be willing to take suboptimal profit

from its foreign subsidiary to reap other benefits. In other words, situations may dictate that firms commit resources abroad without economic efficiency in mind.

For several reasons a firm might establish foreign subsidiaries with significant resource commitment even when economic efficiency is absent. First, an MNC will be in a better position to both identify the strategic intentions of its global contenders and gain insider information on new developments of technology and product offerings in its rivals' market. For example, by establishing a market presence in Japan, NCR was able quickly to adjust its production method from electromechanical to electronic technology, which was first introduced by TOKYO Electronic Company. Second, MNCs can limit the market share of contenders in their home market and their ability to expand globally. Caterpillar entered the Japanese market by forming a 50-50 joint venture with Mitsubishi so as to check the market share and cash flows of its chief competitor, Komatsu (Watson ,1982). Third, when an MNC establishes a subsidiary in its competitor's home market, it can pose a threat to the rival's cash cow market. In the 1970s, Good year successfully counterattacked Michelin's intrusion into the U.S. market by striking back in Europe and thus reducing the resources available to Michelin to push ahead in the United States (Hout, Porter, and Rudden, 1982). Thus, motivations for gaining control over foreign subsidiaries obviously can be

quite different from what the transaction cost approach would argue.

A high degree of integration poses the danger of strategic inflexibility since it necessarily accompanies significant resource commitment. As a result, MNCs should consider the flexibility of exit if business conditions change. Exit barriers are those factors which make firms hesitate to withdraw from operations with subnormal rate of return (Caves and Porter, 1977). Exit barriers, prevent firms from repositioning themselves to serve more attractive customers and from retrieving the value of their investments when abandoning markets once served (Caves and Porter, 1977; Porter, 1976).

The concept of exit barriers could be differentiated into two subcategories, economic and strategic barriers (Porter, 1980). Economic exit barriers are costs associated with eliminating physical assets or the deterrent effect caused by the absence of a resale market (Caves and Porter, 1977). Porter (1976) suggests that the factors influencing the height of economic exit barriers are predominantly related to product manufacturing technology, such as capital intensity, asset durability and specificity, asset age, and technological or operating reinvestment requirements. In addition, Harrigan (1983) postulates that if the expenditures for other types of investment - advertising, R&D, or plant improvements - are not expensed, they, too, could constitute economic exit barriers in that they might appear as an

undesirable reported loss upon disposal when firms decide to withdraw. If economic exit barriers are high, competition tends to be volatile among trapped firms.

In contrast, strategic barriers refer to firms, reluctance to give up the benefits of cumulative, intangible assets created through previous investments. Caves and Porter (1977) believe that the force of intangibles as exit barriers can be substantial. The effects they isolate include: (1) high-quality image which could be damaged for other products in terminating the business. (2) physical facilities shared with other healthy businesses that the firm prefers to retain. (3) goodwill and loyalty in distribution channels and strong corporate recognition which could be damaged for other businesses by abandoning the business in question. (4) customer industries possessing strong bargaining positions that have relied on the products to be discontinued and that could potentially damage the firm's competitive position in other markets, and (5) businesses that are of high strategic importance to the firm.

MNCs are likely to experience higher exit barriers than do indigenous firms. Transportation and tariff costs will increase the difficulties of absorbing physical assets. Language barriers and cultural differences will pose difficulties in absorbing foreign engineers and managers. Moreover, such intangible assets as marketing expertise and brand name, which are necessary for MNCs to enter, could actually create strategic exit barriers as well. Also, since

foreign market entry is usually part of an overall strategic plan, exit from a foreign market could hamper the achievement of a planned global position. Thus, exit barrier heights should be a major consideration in determining the degree of foreign integration.

HOST COUNTRY ENVIRONMENT

The uniqueness of global as compared to domestic competition lies in the fact that conducting simultaneous operations in a large number of varied environments is different in kind rather than degree from operating in a single political economy. Although it is difficult to isolate the separate effects of political, social, culture, legal, and economic variables associated with environments, various studies indicate that host country environment has a considerable effect on the achievement of an MNC's goals (Vernon and Wells, 1986). International corporate executives face governmental institutions and a variety of risks that distinguish their tasks from those of domestic corporate executives. They are likely to view host country environments as adding more and difficult dimensions to the conduct of business operations.

Research on location factors commonly has been associated with the question of where to invest (Davidson, 1980; Green and Cunningham, 1975). Yet, MNCs may choose to operate in a particular country or countries despite the unpredictability

of the environment due to other considerations, such as easy access to raw materials and cheap labor. Thus, it is important to investigate the environment as a factor in MNCs willingness to commit long-term resources in a given location. It is useful to distinguish between two conceptually different dimensions regarding host country environments, country risk and location familiarity. Country risk relates to the likelihood a sovereign power will interfere with the operations, policies, and strategies of MNCs. Constraints on the firm typically include expropriation, restrictions on remittance of profits, discriminatory taxation, and public sector competition (Fitzpatrick, 1983). Location familiarity addresses such factors as the degree of similarity of socioculture, political system, and business practices between host and home countries as perceived by managers. A firm's past experience with and knowledge about a specific location increases familiarity.

Studies concerning the nature of country risk have been controversial. On the one hand, there is ambivalence about what constitutes country risk. For example, some scholars opt for a trichotomized taxonomy, that is, the economic, sociocultural, and political aspects of country risk (Herring, 1983). Other researchers prefer a dual conceptualization, namely, economic and political risks (Korbin, 1979). Kunreuther and Kleindorfer (1983) propose that country risk can be decomposed into political, economic,

and safety and environmental elements. On the other hand, it is not clear whether it is necessary to distinguish distinct country risk dimensions. Sources of country risk, such as sociocultural, political ,and economic contingencies, are often interconnected. For example, price controls imposed to control inflation seem to be largely economic, but their implementation is rarely free of political overtones. Similarly, social unrest usually results in economic uncertainty. The following discussion focus on the ownership participation effect of country risk.

Transaction cost analysis suggests that, in a volatile environment, low control modes of foreign market entry could free entrants to change partners or renegotiate contract terms and working arrangements relatively easily as circumstances develop and change (Anderson and Gatignon, 1986). Similarly, Williamson (1979) hypothesized that firm should react to volatility by avoiding ownership, since it commits them to an operation that may not be appropriate when the next environment shift occurs. The main hazard facing MNCs engaging in high control modes when country risk is high is information impactedness. A wholly owned subsidiary, for example, is in a relatively weak position to collect environmental information in a foreign country. Environment scanning often requires deep understanding about the local culture, social system, language, and so forth. Furthermore, inside information is often necessary to detect local government intentions. Therefore, an MNC may become isolated

in a foreign environment if a wholly owned subsidiary is adopted. In addition, strategic flexibility should be a major concern when the environment is volatile; less resource commitment is desirable under these circumstance.

Mascarenhas (1982), developing a framework which helps managers choose a method for coping with international uncertainty, suggests that MNCs undertake more exporting, leasing, licensing, franchising, and subcontracting to avoid committing resources to fixed, durable, and specific assets abroad when the environment is unstable.

Vernon (1983) maintains that the choice among various alternatives in foreign involvement (e.g., go alone or invest in partnership with others) is commonly affected by country risk. He identifies several institutional responses to country risk. A consortium of foreign investors from several countries joining together to form a subsidiary in the host country may reduce country risk by blurring the identity of the home country's subsidiary. A joint venture with a state-owned enterprise seems to offer ideal protection against unfavorable actions by the host government. MNCs could also use long term management contracts to gain some of the advantages of direct investment without the vulnerability that results from owning assets in foreign countries. In sum, Vernon's analysis implies that a wholly owned subsidiary, an extreme form of high control mode, is not advisable when environmental uncertainty is high.

Korbin (1983) found that vulnerability to expropriation varies by ownership structure. He posited that wholly owned subsidiaries are considerably more vulnerable to expropriation on the average than are joint ventures with local partners.

Certainly, just country intervention, either implicitly through interference in strategic decision making or explicitly by requiring a certain amount of ownership control, would also influence the choice of the institutional form in foreign investment. Joint ventures, for example, are often imposed on the firm by the host government (Herring, 1983). In summary, the literature indicates that high control modes of market entry are not recommended when a host country's environment is uncertain. We now turn to the issue of location similarity perceived by MNCs engaging in foreign operations.

The more similar nations are in terms of sociocultural conditions, language, business practices, and so forth, the more economic interaction in international trade and investment can be expected. Linder (1961) asserts that trade and consequently investment occur primarily between nations with similar tastes.

One important aspect of country similarity is reflected in sociocultural distance. The research conclusions with respect to this factor and sociocultural the degree of control demanded by MNCs have been contradictory. Authors arguing for high control modes have asserted that the greater

the sociocultural difference, the higher is the uncertainty executives perceive in foreign involvement (Davidson, 1982). Consequently, executives may shy away from high control modes that accompany large resource commitment. Goodnow and Hansz (1972) reports in an empirical study that U.S. MNCs tend to reduce their control and investment as they move away from socioculturally similar countries. Davidson (1980) finds that market similarity is attractive to foreign investment. For example, Canada, the United Kingdom, and Australia receive higher investment priority by U.S. multinationals controlling for their sizes. Market similarity encourages investment activity because of the ready transferability of marketing, technology, and human resources to similar countries and because of lower levels of uncertainty facing managers in such environments. Anderson and Coughlan (1987) supports the widespread belief that firms are somewhat hesitant to manage integrated operations in cultures that are very foreign to the executives of MNCs.

Another important aspect of location familiarity is directly related to the MNE's international experience with and knowledge about that location. Evidence suggests that firms tend to become more confident and aggressive in foreign markets, moving toward more direct investment rather than export, when international experiences accumulate (Bilkey, 1978). This is supported by the fact that inexperienced firms exhibit greater preference for near, similar markets than do firms with broader international operating experience

(Davidson, 1982). Hence, international experience leads to more control. Although it is possible for firms to adopt high control modes due to ethnocentric reasons in an unfamiliar environment, the result is generally considered inefficient (Anderson and Gatignon, 1986). Therefore, this phenomenon should not be considered as a norm.

In summary, the effects of host country risk and location familiarity on foreign market entry decision were reviewed. It has been shown that MNCs would carefully evaluate the risks of and their familiarity with the location when committing resources abroad.

CHAPTER THREE

A DECISION MODEL FOR FOREIGN MARKET ENTRY STRATEGIES, DEFINITIONS, AND HYPOTHESES

INTRODUCTION TO THE MODEL

As reviewed in the previous chapter, there are many conceivable institutional modes available for market entries. Following the classification scheme developed by Anderson and Gatignon (1986), three generic institutional modes are employed in this study: high control modes, medium control modes, and low control modes.

The model proposed here, representing the decision-making environment of multinational managers, intends to integrate key elements found in the economics and business strategy literature that influence the institutional mode choice. Nine variables thought to affect the decision about institutional mode are grouped into five elements: location, market, nature of the transaction, strategic business unit (SBU), and firm. It is important to note that the final choice of institutional mode is conceptualized as the result of these variables operating together. The framework is presented in Figure 4. The theoretical relevance of each variable is reported in Table 5. The definition and effect of each variable on the final choice are reported in the following.

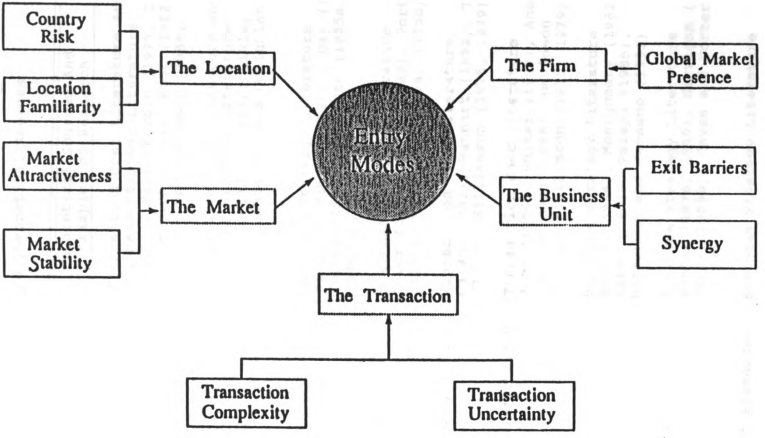

Figure 4

An Integrated Model for Entry Mode Choice

Table 5

Key Variables and Theoretical Sources

Key Variables	Theoretical Sources And Examples of Research
Country Risk	Transaction Cost Literature And Business Strategy Literature Vernon (1983), Korbin (1979, 1983), Fitzpatrick (1983), Root (1982), Anderson and Gatignon (1986)
Location Familiarity	Transaction Cost Literature and Business Strategy Literature Davidson (1980, 1982), Bikley (1978), Anderson and Coulghlan (1987)
Market Attractiveness	Business Strategy Literature Wind and Mahajan (1981), Day (1977), Porter (1980), Harrigan (1985a, 1985b)
Market Stability	Business Strategy Literature Caves (1974), Lall (1980), Porter (1980), Harrigan (1985a, 1985b)
Transaction Complexity	Transaction Cost Literature Caves (1982), Hennart (1982), Teece (1983), Williamson (1975, 1979)
Transaction Uncertainty	Transaction Cost Literature John (1984), Bulter (1983), Anderson and Gatignon (1986), Davidson (1982), Williamson (1975, 1979)
Synergy	Business Strategy Literature Rumelt (1974), Montgomery (1982), Aaker (1984), Palepu (1985), Nathanson and Cassano (1982)
Exit Barriers	Business Strategy Literature Porter (1976, 1980), Harrigan (1983, 1985a, 1985b), Caves and Porter (1977)
Global Market Presence	Business Strategy Literature Hamel and Prahalad (1985), Hout, Porter, and Rudden (1982)

DEFINITIONS OF VARIABLES

COUNTRY RISK (CR)

Country risk is defined as the possibility that a sovereign power will interfere with the operations, policies, and strategies of MNCs.

International corporate executives face a variety of risks that distinguish their tasks from those of their domestic counterparts. Constraints on the firm typically encompass expropriation, restrictions on remittance of profits, discriminatory taxation, and public sector competition (Fitzpartrick, 1983; Korbin, 1979).

Transaction cost analysis suggests that low control modes are appropriate when MNCs face high country risks. This mode would free MNCs from heavy commitments to an operation and allow them to adjust quickly as circumstances develop and change (Anderson and Gatignon, 1986: Williamson, 1979). The main hazard facing MNCs engaging in high control modes in the face of high country risk is information impactedness. A wholly owned subsidiary, for example, would be in a weak position to collect environmental information in a foreign country since environmental scanning often requires deep understanding about local culture, social system, and public opinion. Furthermore, inside information is often necessary to detect local government intentions. Therefore, an MNC, facing high host country risk, may be isolated in the foreign environment if it chooses a wholly owned subsidiary at the entry.

Vernon (1983) argues that the choice among alternatives in foreign involvement (e.g., go alone or invest in partnership with others) is commonly affected by the question of country risk. He advises MNCs to form joint ventures with either local partners or foreign investors from several countries to reduce risk by blurring the home country identify of the subsidiary. Korbin (1983) also empirically finds that vulnerability to expropriation varies by ownership structures. He posited that wholly owned subsidiaries are considerably more vulnerable to expropriation on the average than are joint ventures. Overall, the above points suggest that, other things being equal, on average the higher the host country risk, the lower is the level of control MNCs will demand in the foreign operation.

LOCATION FAMILIARITY (LF)

> Location familiarity is defined as the distance perceived by multinational managers between home and host countries in terms of culture, political system, social conditions, economic conditions, and business practices.

The perceived distance between home and host country in terms of socioculture, language, legal structure, and business practices has a major effect on foreign investment decisions (see Green and Cunningham, 1975; Korbin, 1983; Davidson, 1982). Location familiarity is a function of the perceived distance, and when firms accumulate knowledge and experience about the host country, location familiarity increases.

Information about a new product is disseminated more effectively in a similar cultural setting. Davidson (1980) reports that cultural similarity encourages foreign direct investment, which is shown consistently in several other studies. Anderson and Coughlan (1987) provided empirical evidence that firms are reluctant to manage integrated operations in cultures that are very foreign to the managers of MNCs. Goodnow and Hnasz (1972) also found that MNCs tend to reduce their control and investment as they move away from socioculturally similar countries.

The need to exchange information between an MNC and local legal, social, and economic institutions becomes crucial especially when it lacks knowledge about the host country environment. Under the circumstance, information is asymmetrically distributed in disfavor of the MNC. To reduce information impactedness, an MNC needs to relinquish some control to local partners. Thus, other things being equal, on average the lower the location familiarity, the lower is the level of control MNCs will demand in the foreign operation.

MARKET ATTRACTIVENESS (MA)

> Market attractiveness is defined as the potential growth and profitability of the final product involved in the investment project.

A prime determinant of market attractiveness is the market's size and growth rate. The significance of market attractiveness in affecting the entry mode decision has been

noted in two research areas. First, recent literature on vertical integration highlights the importance of industry evolution in making integration decisions which determine the degree of control (Porter, 1980; Harrigan, 1985a). The key message is that the phase of industry development should coincide with the integration strategy a firm pursues. Four stages of industry evolution are generally accepted: the embryonic, growing, maturing, and declining stages. It has been found that a firm would be reluctant to integrate into adjacent industries when in the embryonic or declining stage with inadequate demand (Harrigan, 1985a, 1985b). International product life cycle theory (Vernon, 1966, 1979) posits that foreign direct investment often occurs when local demand is well established. Therefore, we expect the degree of foreign market integration to follow the dynamic demand pattern of an industry's evolution stage, which usually exhibits an invested U-shaped curve over time.

Second, the importance of market attractiveness to a firm's resource allocation decisions has been recognized in many popular product portfolio models (Wind and Mahajan, 1981; Day, 1977). Although an attractive market alone may not justify long-term investment, which also hinges on the relative competitiveness of the firm, a promising market is at least a necessary condition for long-term resource commitment. Viewed in the aggregate, the above points suggest the proposition that, other things being equal, on

average the more attractive the market, the higher is the level of control MNCs will demand in the foreign operation.

MARKET STABILITY (MS)

> Market stability is defined as the stability of sales, market share, and profitability of the final products involved in the investment project.

Highly fluctuating demand hinders a firm's capacity planning in the different stages of the value-added chain and in its horizontal expansion. Since an excess or shortage of capacity will vary with demand fluctuation, fewer internal transfers among business units are expected.

Studies in industrial organization have documented that industries with high R&D expenditure and product differentiation tend to be positively correlated with high foreign investment (Caves, 1974; Lall, 1980). Thus, to the extent that product differentiation and technology know-how could be viewed as buffers for demand variation, firms tend to be more willing to commit long-term resources. Harrigan (1985a) and Porter (1980) argue that few internal transfers are likely in embryonic industries as a means of sharing risk, not only because the market size is small but also because there is uncertainty about future demand. Hence, these points suggest that, other things being equal, on average the lower the market stability, the lower the level of control MNCs will demand in foreign operations.

TRANSACTION COMPLEXITY (TC)

Transaction complexity is defined as the difficulty of finding a local party(ies) in terms of transferring, appreciating, assigning, and agreeing upon the due value of the necessary proprietary know how in foreign operations.

It is a widely accepted view that the MNCs possess rent-yielding assets which give them the edge in competing with firms abroad (e.g., Hennart, 1982; Dunning, 1979). The competitive advantage a firm may possess for foreign entry includes brand names, trade secrets, patents, marketing skills, special access to markets, management expertise, and a source of cheap financing (see Root, 1982; Hymer, 1960; Caves, 1974; Calvet, 1981). To operate successfully in a foreign market, these rent-yielding assets, often intangible, transaction specific, and highly idiosyncratic in nature, need to be fully exploited.

However, the economics of knowledge argues that there are many types of market failure associated with the transfer of these rent-yielding assets. First, buyers may not recognize the existence of this know-how. Second, it may be hard to assess the appropriate price for know-how. Third, there may be prohibitive transfer costs from one party to the other. In the case of technology transfer, for example, Teece (1983) finds it is inefficient to use the market mechanism when it is difficult to communicate the production processes and product quality requirements to the transferee. Williamson (1975) theorizes that highly idiosyncratic transactions are likely to result in high transaction costs when adaptability and contractual expenses are considered. Overall, other

things being equal, when transactions are complex to execute, complete, or transfer, MNCs would demand more control in the foreign operation.

TRANSACTION UNCERTAINTY (TU)

> Transaction uncertainty is defined as the unpredictability of the outcome of a foreign operation project due to opportunistic behavior of local party(ies).

Unless an MNC operates a wholly owned subsidiary, a local party(ies) will be involved in the operation. As a result, a small numbers condition exists. Even when an MNC has the option to choose from among many partners, an ex-post small numbers exchange relationship still persists once a local party is chosen. The existence of small number condition tends to enhance the possibility of opportunitistic behavior and costly haggling since it in the interest of each party to seek terms most favorable to him.

Williamson (1975) asserts that serious transactional contingencies arise when a small number situation is combined with opportunism. The joint effect of these two conditions will consequently lead to transaction uncertainty, or a lack of predictability as to the outcome of a project (Bulter, 1983). Examples of opportunistic behavior are such acts as withholding or misinterpreting information and shirking or failing to fulfill promises or obligations (Williamson, 1975; John, 1984). One possible cause of opportunistic behavior is the free rider problem, which occurs when a local party uses an MNC's proprietary know-how in an inappropriate manner.

Specifically, a local party may use the knowledge acquired from an MNC to establish a competing firm or to serve a market (local or foreign) through its own organization (Beamish and Banks, 1987). In addition, goal conflict may occur when a local party is involved in the operations.

Williamson (1975) argues that internal organization provides a means of developing congruence of aims and the right atmosphere to overcome opportunism. Holton (1971) and Davidson (1980) also posit that MNCs would take control to protect the reputation of their brand name from free-riders. Thus, other things being equal, on average the higher the transaction uncertainty, the higher is the level of control MNCs will demand in the foreign operation.

SYNERGY (SYN)

> Synergy is defined as combined actions by a group of strategic business units (SBUs) whose total outcome is greater than the sum of the outcome of individual units.

The concept of synergy has been traditionally considered in relation to growth and investment strategies. Synergy is created when a firm makes an investment which can utilize and build on its existing core factors such as R&D, know-how, management skills and experiences). The existence of synergy between a subsidiary and other sister subsidiaries should increase the organization's commitment to that subsidiary, inducing it to exercise high control over the subsidiary. Synergy, then, can be a useful construct in determining the institutional mode of the would-be foreign business unit.

Several studies on corporate diversification (e.g., Rumelt, 1974; Palepu, 1985, Jacquemin and Berry, 1979; Montgomery, 1982; Nathanson and Cassano, 1982) have provided empirical justifications for synergy. They argue that firms pursuing related diversification can effectively utilize core factors across businesses and that this cross-utilization generates synergy within an organization, which in turn produces a positive effect on profitability.

Studies on vertical integration (e.g., Porter, 1980; Harrigan, 1985a, 1985b) have also argued that a firm can enhance its innovative capability and achieve economies of scope by sharing and transferring technological information, entrepreneurial ability, and marketing know-how among business units. They have further suggested that this synergy can be effectively captured through hierarchical control. For full integration, allowing transaction internalization, ensures that the business unit has higher levels of synergy with the other business units of the organization. Overall, other things being equal, on average the greater the extent of synergy between the entrant and other SBUs, the higher is the level of control MNCs will demand in the foreign operation.

EXIT BARRIERS (Exit)

Exit barriers are those factors which influence a firm to continue participating in its investment even though the business earns a subnormal rate of return.

High exit barriers trap firms in an industry, and the result is destructive competition and reduced profits (Caves and Porter, 1977; Porter, 1976). In addition to economic exit barriers, which refer to cost associated with eliminating physical assets or the deterrent effect caused by the absence of a resale market, the concept of strategic exit barriers suggests that firms tend also to be reluctant to give up the benefits of cumulative, intangible assets created through previous investments. Harrigan (1985b) empirically supports the relationship between the heights of exit barriers and the degree of in-house transfer from SBUs. It is concluded that firms can act early and purposely to lower exit barriers by limiting the degree, stages, and percentage of ownership components of the vertical relationship.

MNCs are likely to experience higher exit barriers both economically and strategically than do domestic firms for several reasons. Transportation and tariff costs will aggravate the difficulties of absorbing physical assets. Language barriers, cultural differences, and the usually low human capital mobility across nations will pose difficulties in absorbing foreign R&D personnel. Moreover, since foreign market entry is usually part of an overall strategic plan, exit from a foreign market could hamper the attainment of a planned global strategic position.

An international expansion requiring a significant corporate resource commitment generally can be characterized as an irreversible commitment. In light of the exit barriers

to the entrant, the choice of institutional mode in foreign entry can be viewed as a decision optimizing trade between control flexibility. When exit barriers are high, MNCs tend to avoid engaging in large-scale resource commitment by adopting low control entry modes.

The preceding discussion leads to the proposition that, other things being equal, on average the higher the exit barriers faced by MNCs, the lower is the level of control they will demand in its foreign operation.

GLOBAL MARKET PRESENCE (GMP)

Global market presence is defined as the physical presence of a firm in a foreign market.

Recent studies on global strategy (e.g., Hamel and Prahalad, 1985; Porter, 1986) have pointed out that global coordination is an integral part of multinational strategy. They have argued that multinationals should be able to generate competitive advantages through appropriate strategic coordination among their subsidiaries, which enable them to channel strategic resources accumulated in one subsidiary to another. When MNCs enter foreign markets, especially a global contender's home market, they may aim to achieve other strategic objectives than the economic efficiency maximization of the entrant (e.g., Watson, 1982; Hout, Porter, and Rudden 1982).

The strategic objectives of the foreign market presence can be several: identify the strategic intentions of global competitors; detect inside information on the contender's new

R&D and product developments in their profit sanctuaries; and launch attacks or counterattacks in global battles. For instance, through market presence in Japan, NCR was able to detect the product innovation of its Japanese contender (TOKYO Electronic), and to switch from electromechanical to electronic technology, proactively responding in the early stage. Goodyear and Kodak also provide good examples. They effectively responded to Michelin's and Fuji's intrusions into their home market in the United States by launching counterattacks from their European and Japanese operations, thus reducing the strategic resources allowed for their global contenders to push ahead in the United States.

Evidently, to effectively achieve these strategic objective, MNCs need to exercise a high level of control over their global operations. Therefore, other things being equal, the more the importance of global market presence, the higher is the control the MNC will demand in its foreign operations.

RESEARCH HYPOTHESES

While each construct discussed above contributes to the choice of institutional mode in the foreign market, it is their joint which determines the ultimate outcome. In line with the first objective and research question set forth in Chapter 1, the first hypothesis is proposed:

H1: There will be a significant difference among high, medium, and low control modes of foreign market entry strategy with respect to the nine key variables as a group identified in this study.

One major thrust of this research is to extend the current transaction cost paradigm for studying the modes of foreign market entry by incorporating strategic factors into considerations. Hence, the second hypothesis is proposed to test the classification accuracy of the three models (the transaction cost, the strategic, and the integrated models) in terms of the choice of the three market entry modes (high, medium, and low). This hypothesis corresponds to the second objective and research question outlined in Chapter 1.

H2: There will be a significant difference in classification accuracy (1) between the integrated and transaction cost model and (2) between the integrated and strategic model, with respect to the choice among high, medium, and low control modes of foreign market entry strategy.

A set of hypotheses, corresponding to the third objective and research question listed in Chapter 1, deals with each of the nine variables, with the remaining variables held constant.

H3a: The higher the host country risk, the lower is the level of control MNCs will demand in the foreign operation.

H3b: The more familiar MNCs are with the host country, the higher is the level of control MNCs will demand in the foreign operation.

H3c: The more attractive the market is, the higher is the level of control MNCs will demand in the foreign operation.

H3d: The higher the market stability, the higher is the level of control MNCs will demand in the foreign operation.

H3e: The higher the transaction complexity, the higher is the level of control MNCs will demand in the foreign operation.

H3f: The higher the transaction uncertainty, the higher is the level of control MNCs will demand in the foreign operation.

H3g: The greater the synergy between the entrant and other sister business units, the higher is the level of control MNCs will demand in the foreign operation.

H3h: The higher the exit barriers, the lower is the level of control MNCs will demand in the foreign operation.

H3i: The greater the importance of global market presence, the higher is the level of control MNCs will demand in the foreign operation.

The hypothesized profiles of modes of institutional form are summarized in Table 6.

Table 6

Hypothesized Profiles of Entry Modes

	Strategic Choices		
Key Variables	Low-Control Modes	Medium-Control Modes	High-Control Modes
Country risk	+	+/-	-
Location familiarity	-	+/-	+
Market attractiveness	-	+/-	+
Market stability	-	+/-	+
Transaction complexity	-	+/-	+
Transaction uncertainty	-	+/-	+
Exit barriers	+	+/-	-
Synergy	-	+/-	+
Global market presence	-	+/-	+

\+ Indicate high score

+/- Indicate average score

\- Indicate low score

CHAPTER FOUR

METHODOLOGY

The preceding hypotheses were tested using data collected via a survey sent by mail to U.S. multinational corporations in the manufacturing industries (SIC 20 to SIC 39). The rationale for the sampling frame and data collection method, along with a description of the procedure used in developing operational measures for each of the constructs are presented in the following discussion.

SAMPLE

The U.S. multinational corporations listed in THE INTERNATIONAL DIRECTORY OF CORPORATE AFFILIATIONS 1987/1988 (IDCA, hereafter) was used as a sampling frame for this study. The IDCA is an extensive directory of multinational corporations with various sizes ranging from small (less than 1,000 employees) to large (more than 100,000 employees). It includes U.S. family members of foreign ultimate parent companies as well as foreign subsidiaries of U.S. ultimates. Approximately 1,800 U.S. MNCs were included. The IDCA lists the names of parent firms and their affiliates, the percentage of their ownership participation in the foreign

operations, their approximate annual sales, size of employment, and SIC lines of businesses in which they operate. Based on the information, a number of criteria were established to select a sample of firms used in this study.

1. The parent firm is headquartered in the United States. It is noted that the listing of the U.S. multinationals in the IDCA is limited to only those multinational corporate families having at least one U.S. family member and at least one member elsewhere. Corporations with international operations through exporting are not included. Although this population may not include all U.S. multinationals with investment abroad, it is one of the most comprehensive and recent directories available.

2. The parent firm's major line of business is in manufacturing. The manufacturing sector is selected for two reasons. First, although foreign investment in the service industry is growing, the manufacturing sector represents the majority of the corporations operating abroad (41%) (Survey of current business, August, 1987). Second, manufacturing provides a relative homogeneous sample, thus reducing the likelihood of Type II errors occurring due to sample heterogeneity (Cook and Campbell, 1979; see also Calder, Phillips, and Tybout, 1981). For example, it is not inconceivable that the service industry differs from the

manufacturing industry in terms of foreign market entry strategies just by convention.

3. The multinationals had extensive experience in foreign operations. From time to time, it can be found that a sales office was established with very few employees. In these cases, it is judged that the MNC is in the introductory stage of international business, not in the stage of a fully blown foreign investment.

4. Multinational corporations experienced with different degree of ownership participation in their foreign ventures were included. Since the main theoretical thrust of this dissertation is to investigate factors influencing the degree of ownership/control in foreign market entry, it is judged that these corporations are in a good position in responding to the questionnaires.

5. The 1987/1988 version of IDCA was carefully compared with the 1982/1983 version. The corporations experiencing international expansion during this period were included since this research focuses on foreign investment in the 1980's.

Based on these criteria, 640 multinational corporations were selected for mailing. To ensure that all respondents were upper level managers, vice presidents of international operations or presidents and CEOs were selected as the

respondents. The position of vice president of international operations, in general, is generally found in medium to large corporations (more than 10,000 employees). It is believed that people in these positions are most knowledgeable about the foreign investment projects.

THE SURVEY INSTRUMENT

The research instrument consisted of a cover letter and a questionnaire, shown in Appendices A and B. The cover letter stated the purpose of the study. To encourage participation, it was promised both in the cover letter and at the end of the questionnaire that a summary of the research results would be sent to the participants upon completion.

Other efforts were employed to increase the response rate. The cover letter and the questionnaire were enclosed unfolded in a 9′ by 12′ Manila envelope. Along with the research instrument, a preaddressed, stamped reply envelope was enclosed as a matter of courtesy.

Profile of the Respondents

Initially, 118 completed questionnaires were received. Three and a half weeks later, a telephone follow up reminder was conducted to 25 firms in the sample who had not responded, eight of these firms responded within the next two weeks, resulting in 126 responses. Thirteen of these returns

were later deemed unusable, due to incomplete responses in 3 cases, the investment projects conducted prior to 1980 in 6 cases, and company's policy not to respond in 4 cases. Therefore, 113 returns were deemed usable. After deducting 15 undeliverable questionnaires from the 640 mailed, the effective response rate was 18.08%.

Tables 7 through 10 present a profile of the firms participating in the study. As Table 7 shows, 89% of the respondents are senior management, including presidents, vice presidents, and directors. Table 8 reveals the industry participation of the sample firms. Except for the chemical and machinery industries, the sample is quite evenly distributed across the manufacturing sector. This sample distribution generally reflects the population distribution of the U.S. investment abroad. Data obtained from the Survey of Current Business (August, 1987) show that, within the manufacturing industry, the Chemicals (22.36%) and Machinery (17.25%) are the leading sectors investing abroad, followed by the transportation equipment (12.42%), electronic and electronic equipment (9.54%), food and kindred products (9.5%), and primary and fabricated metals (6.12%). Note that other manufacturing accounts for 22.80%. Table 9 reports the location of foreign operations of the sample firms. No special concentration of country/region was found, rather, the geographic coverage of the locations is widely but evenly distributed among major continents. Table 10 lists firm

Table 7

Title of Respondents Representing the Firms

Title	Number of Respondents
Chairman	6
President	16
President-Division	1
Vice President	12
Vice President-Marketing, Sales	4
Vice President-International Operations	6
Vice President-Planning	2
Vice President-Manufacturing	2
Vice President-Licensing	1
Vice President-Area	2
Director-Business Strategy	2
Director-International Marketing	5
Director-International Planning	3
Director-International Licensing	1
Director-Corporate Planning	1
Executive Staff	1
Manager-International Development	3
Manager-Business Planning	2
Manager-International Finance	2
Not Identified	41
TOTAL	113

Table 8

Industry Classification of the Participating Firms

Industry	Number of Firms	%
Metal Products	4	3.5
Electronics	8	7.1
Motor Vehicles & Parts	4	3.5
Computer & Office Equipment	8	7.1
Chemicals	16	14.2
Cosmetics	3	2.7
Food Processing	11	9.7
Machinery	14	12.4
Petroleum	3	2.7
Publishing	2	1.8
Textiles	2	1.8
Fasteners	1	0.9
Precision Instruments	5	4.4
Pharmaceuticals	3	2.7
Electrical Equipment	1	0.9
Not Identified	28	24.8
TOTAL	113	100.0

NOTE: Individual percentage figures may not sum to 100 due to rounding.

Table 9

Location of Foreign Operation

Country/Region	Number of Firms	%
Australia	2	1.8
Brazil	5	4.4
Belgium	3	2.7
Canada	2	1.8
Chile	2	1.8
Colombia	1	0.9
EEC	3	2.7
Egypt	2	1.8
France	5	4.4
West Germany	7	6.2
Hong Kong	3	2.7
India	8	7.1
Indonesia	2	1.8
Ireland	1	0.9
Italy	2	1.8
Japan	7	6.2
Korea (South)	6	5.3
Malaysia	2	1.8
Mexico	3	2.7
Netherlands	1	0.9
People's Republic of China	8	7.1
Portugal	2	1.8
Saudi Arabia	2	1.8
Singapore	1	0.9
Spain	3	2.7
Switzerland	4	3.5
Thailand	3	2.7
Taiwan	4	3.5
Turkey	4	3.5
United Kingdom	8	7.0
Not Identified	7	6.2
TOTAL	113	100.0

NOTE: Individual percentage figures may not sum to 100 due to rounding.

Table 10

Size of the Participating Firms

Number of Firms	Employees
12	1,000 or less
41	1,001 to 5,000
15	5,001 to 10,000
23	10,001 to 50,000
6	50,001 to 100,000
7	100,001 or more
10	Not Identified
TOTAL 113	

sizes in terms of employees. Since the majority of the firms are small to medium sizes, the homogeneity of sample firms regarding their size is not seriously violated.

DEVELOPING OPERATIONAL MEASURES

The dependent variable is the institutional form of market entry, including direct investment, licensing, franchising, and strategic collaboration. Respondents were asked to identify the modes of market entry. In the cases of ownership participation, respondents were further asked to indicate the number of partners and the percentage of their ownership participation.

In addition to the types of entry modes, managers involved in the foreign ventures were also asked to indicate the extent to which their views would prevail over their partners in the event of disagreements about major business functions, including marketing, manufacturing, finance, R&D, and general management. This view of control as perception of potency that multinationals possess over their subsidiaries in key decision areas is common in the channel literature (Phillips, 1981; Lusch and Brown, 1982).

A composite of the five measures was used to measure the extent of control. This index was divided into high, medium, and low control groups. Using direct control measures rather than entry modes as proxies for control should alleviate the problem that there are many ways to gain control besides

ownership participation and many variations within any one form of entry mode (Kindleberger, 1984; Hayashi, 1978).

The nine key constructs identified in the models (see chapter 3) are continuous variables measured by a 7-point Likert-type scale. Anderson and Gatignon (1986) commented that the measurement strategy used by most researchers collecting international data has consisted largely of single-item measures. These authors believe that hypothesis testing would be stronger if psychometric methods were used to develop composite measures of each construct, thereby reducing reliance on single-item measures of complex constructs.

Following their advice, each independent construct is measured by multiple items. As there are no established scales to measure the nine key constructs, it was necessary to develop scales to measure each construct. Samples of items representing the domains of each construct were generated through a review of relevant literature (see Chapter 2 for detailed discussion) and interviews with firms operating abroad. Each construct is defined conceptually (see chapter three) and a poll of items consistent with the definition was generated.

Because they are linked to the empirical world via indicators, abstract constructs cannot, by definition, be directly observed. Before discussing the operationalization of each construct, therefore, it is necessary to examine the

nature of the epistemic relationships between constructs and their associated indicators.

The epistemic relationships between indicators and the nine constructs identified in the model fall into two categories, reflective and formative. The indicators measuring four of the nine constructs (market attractiveness, market stability, transaction complexity, and transaction uncertainty) are reflective, since these unobserved constructs are thought to give rise to the indicators that we observe (Fornell, 1982). The remaining five constructs (synergy, exit barriers, global market presence, country risk, and location familiarity) are formative, since their empirical indicators produce or contribute to the constructs (Fornell, 1982).

An iterative procedure was employed to refine the items of the first four constructs. Item-total correlation was then examined. As suggested by Nunnally (1978), those with low correlation with total score (i.e., $r < .25$) or those below a sudden drop off in the item total correlation were dropped. A Cronbach's coefficient alpha will be calculated for the remaining set of items. Then an R-type principal components factor analysis will be used to gain additional insight into the meaningfulness of the scale for each construct.

Once the indicators associated with each construct were reduced to a reliable set, a score for each construct was derived using a unit weighting scheme. Einhorn and Hogarth

(1975) compared unit weighting of components to composites formed by a linear regression and found that the degree of similarity is fairly high in most applied situations. Unit weighting has the advantages of (1) using no degrees of freedom, since weights are not estimated from the data; (2) being estimated without error; and (3) not reversing the "true" relative weights of the variables. They recommended unit weighting in the situation encountered in this dissertation, that is, a moderate sample size ($50 < n < 200$), and a vague or nonexistent criterion variable. The remaining five constructs are operationalized through the summation of their associated indicators. Each of these nine constructs and its associated indicators are discussed in the following pages.

Country Risk

The current methodology employed to measure country risk can be considered as existing along a spectrum, ranging from quantitative at one extreme to qualitative at the other. The qualitative approach usually uses the Delphi technique to poll a panel of experts in assessing the general investment climate. The best known examples of this approach are the "Business Environmental Risk Index" and the "Business International Index of Environmental Risk." This approach, however, is very subjective in that it relies on a panel who

may differ widely in conceptualizing the phenomena being evaluated.

The quantitative approach consists of many models that quantify country risk. For example, Truitt (1974) and Knudsen (1974) developed frameworks of host country and investor characteristics to explain and predict those conditions of the host environment and foreign investment that would be conducive to expropriation.

Most of these methods, either qualitative or quantitative, provide holistic assessment of a host country which is inherently independent of firm factors. As Korbin (1979) pointed out, however, the concept of the investment environment in a given country has limited utility because most potential managerial contingencies are micro rather than macro in nature. In other words, most risks pertain specifically to an industry, a firm, or even a project. Country risks that influence all firms in a host country are generally exceptions rather than rules. For this reason, and given the nature of this study, it is appropriate to assess country risks that affect a specific investment project.

Root (1982) provided a conceptual framework for assessing different types of risks that have potential impact on an investment entry project. Four types are identified: general instability risk, ownership/control risk, operation risk, and transfer risk. The following four items represent these risks.

Indicators of country risk

1. Uncertainty about the future variability of the host country's political system
2. Uncertainty about host government actions that would destroy or limit your ownership or effective control of the affiliate
3. Uncertainty about host government policies that would constrain operations
4. Uncertainty about the risk of inconvertibility of the host country's currency

Location Familiarity

Although many environmental variables can be constructed to measure the perceived differences between home and host countries, it is generally agreed that economic, political, and cultural variables constitute the major building blocks (Goodnow and Hanz, 1972; Green and Cunningham, 1975; Korbin, 1976). Except for these general dimensions, differences as regards the way in which business is conducted also influence location familiarity (Root, 1982; Davidson, 1982). In addition, an MNC's prior experiences and knowledge about the host country's business environment would undoubtedly contribute to the location familiarity (Anderson and Gatignon, 1986; Davidson, 1980).

Indicators of location familiarity

1. Company's prior experience

2. Company's level of knowledge about the business environment

3. Perceived distance between host and home countries in terms of:

- culture
- political system
- business customs
- legal system
- economic conditions

Market Attractiveness

Market attractiveness has been measured in various ways in the popular product portfolio models (Wind and Mahajan, 1981). For example, the Boston Consulting Group (BCG) model uses market growth rate to indicate the attractiveness of the market. The midpoint of the growth dimension is somewhat arbitrary but is usually set at a 10 percent annual growth rate (Aaker, 1984). This model has been criticized as too rigid, partly due to this unidimension and unique operational definition (Wind and Mahajan, 1981; Day, 1977). The subsequent development of product portfolio models generally used composite dimensions to measure market attractiveness. For example, in 1980 General Electrics used six factors to define industry attractiveness in the business assessment array model: market size, growth, profitability, cyclicality, ability to recover from inflation, and world scope (Wind and Mahajan, 1981). These dimensions are, however, arbitrarily

selected subject to managerial judgment without conducting a reliability test.

Recently, Burke (1984) successfully developed a five-item scale to measure market attractiveness with a reliability of .92. It shows that short-term market growth rate, the stage of product life cycle, prospects for future profits, average industry gross margin, and profits are reliable item. Therefore, the following items were developed based on the definition of market attractiveness presented in chapter 3 and on Burke's conceptualizations.

Indicators of market attractiveness

1. Projected short-term (3 years) sales growth
2. Projected long-term (10 years) sales growth
3. Prospects for future profits
4. Projected average industry sales growth
5. Industry profit margin
6. Average industry pretax profits

Market Attractiveness

Based on the PIMS data base, Harrigan (1985b) used changes in sales growth, particularly those associated with obsolescence from rapid technological change, as a proxy for demand uncertainty. Three proxies were used as indicators for competitive volatility by the same author: the presence

of high exit barriers, market share instability, and percentage of continuous technology employed by the SBU.

In this dissertation, market stability manifested by the stability of sales, market share, and profits may stem from many factors. Key factors include the attributes of products, customers, manufacturing technologies, and competitors (Porter, 1980). Thus, it is believed that these factors need to be addressed in order to cover the domain of this construct. Accordingly, the following operationalization incorporates these possible causes of market stability. Note that high exit barriers may also cause the market to be unstable, due to its significance in determining the entry mode choice, however, it was treated as a separate construct and will be addressed later.

Indicators of market stability

1. Profit stability
2. Market share stability
3. Predictability of future demand
4. Stability of demand
5. Intensity of competition
6. Intensity of technological changes

Transaction Cost: Transaction Uncertainty and Complexity

The operationalization of transaction cost in the previous literature has mainly focused on one or a few

specific dimensions and has been tailored to the purposes of the studies. John (1984), for instance, operationalized the concept of opportunism in a setting of dealer relationship to a major oil company. Example of items constituting opportunism include: "Sometimes, I have to alter the facts slightly in order to get what I want, and I have sometimes promised to do things without actually doing them later." Anderson and Coughlan (1987) operationalized transaction-specific assets through five items involved in distributing high technology products in foreign countries. Walker and Weber (1984) operationalized volume uncertainty and technological uncertainty in make-buy decisions made in a component division of a large U.S. automobile manufacturer. Bulter (1983) operationalized transaction variability and uncertainty in a study of control of workflow in organizations. Here, variability refers to difficulty in understanding the operation of the equipment and facilities, and uncertainty refers to a lack of predictability as to the outcomes of a project.

Other writers prefer to operationalize transaction cost through product characteristics (Davidson and McFetridge, 1984, 1985; Caves, 1974). For example, products with high technology, valuable brand name, and high innovativeness are thought to give rise to high transaction cost. In this dissertation, transaction cost was operationalized through transaction uncertainty and complexity (see the definitions in Chapter 3). This is consistent with the literature on

transaction cost applied to the theory of the MNC, that is the internalization theory, which mainly concerns the economics of proprietary know-how of MNCs (see the detailed discussion in Hennart 1982 and the literature review in chapter 2). It is believed that these two dimensions represent the comprehensive picture of the internalization theory. Transaction uncertainty refers to the uncertainty of the outcomes of the investment project due to opportunistic behavior. Transaction complexity refers to the difficulties of completing transactions of proprietary know-how.

Indicators of transaction uncertainty

1. Ease with which know-how can be legally protected
2. Ease with which other parties might copy know-how without permission
3. Ease with which the unauthorized use of know-how can be detected
4. Ability to punish the unauthorized use of know-how
5. Extent to which foreign operation could be run independently of parent company
6. Extent to which the continued success of the foreign operation depended on future inputs from the parent company
7. Ease with which the proper functioning of the foreign operation can be monitored

Indicators of transaction complexity

1. Difficulty of communicating know-how to other parties

2. Uniqueness of know-how relative to other firms in the industry

3. Difficulty in pricing the know-how to sell to other parties

4. Difficulty for others to appreciate the value of the know-how before they use it

5. Ease with which the know-how can be transferred to other parties

6. Degree to which the know-how is intangible, that is, not directly perceivable

Exit Barriers

Harrigan (1985a) used scale diseconomies to measure economic exit barriers, specifically the magnitude of diseconomies incurred by operating 25 percent below engineered capacity. The rationale is that the earning power of plants with high diseconomies will seem particularly poor if they are offered for sale during industry downturns. Consequently, a firm's economic exit barriers will seem especially high when demand is declining. The same study used an estimate of relative product differentiation to represent strategic exit barriers because it is an example of the benefits created by past image-building efforts that firms are often unwilling to abandon.

Caves and Porter (1977) found the presence of durable and specific assets to be a strong determinant of exit behavior.

The influence of facilities of one SBU used jointly with others is also supported as determining a firm's persistence in an industry. The influence of intangible durable and specific assets also receives partial support.

Burke (1984) treated exit barriers as a latent variable and used multiple items to measure this construct with a reliability of .92. Rather than using econometric measurement, as did Harrigan (1985a), this dissertation opts for a psychometric method to measure exit barriers. This is employed because it is believed that the existence of measurement errors in multiple items needs to be explicitly recognized (Nunnally, 1978). The items listed below were adapted from Burke's scale of barriers to exit.

Indicators of exit barriers

Please evaluate to what extent loss of investments would occur in any of the following areas if business conditions changed so that you needed to liquidate the foreign venture.

1. Market development
2. Human resources
3. Production facilities
4. R&D

If you were to liquidate the foreign operation, please evaluate the...

1. Size of immediate loss to your company

2. Impact of liquidation on the profitability of other businesses in your company

Synergy

As with exit barriers, synergy also has been operationalized by econometric and psychometric methods. Based on the PIMS data base, Harrigan (1985b) operationalized synergy through a single item measuring percentage of facilities shared with upstream and downstream SBUs in a vertical integration setting. Burke (1984) used multiple items covering shared plant and equipment, production personnel, sale force, distribution channels, management services, R&D facilities, and R&D personnel between one SBU and others. It is believed the latter approach better captures the meaning of synergy since it incorporates more than just shared facilities as measured by Harrigan (1985b).

Indicators of synergy

Please indicate the degree of synergy, that is, the expected mutual benefits shared between your company and the foreign operation in any of the following areas:

1. Management expertise
2. Marketing expertise
3. Manufacturing technology
4. R&D
5. Cost sharing

6. Risk sharing

Global Market Presence

Previous studies on global strategy indicate that physical presence in a foreign country may be due to reasons other than economic efficiency (Hout, Porter, and Rudden, 1982; Hamel and Prahalad, 1985; Watson, 1982). The following items were developed to measure strategic motives of MNCs in making foreign investment decisions.

Indicators of global market presence

1. To attack global competitors
2. To monitor global competitors
3. To expand globally
4. To exploit competitive advantages
5. To build global business experience
6. To defend market abroad

ANALYSIS PLAN

Multivariate Analysis of Variance (MANOVA)

To examine the overall profile differences of the nine independent variables influencing the choice of market entry modes, a one-way Multivariate Analysis of Variance (MANOVA) is performed to test the first hypothesis. MANOVA is

appropriate in a research design with a set of dummy variables and a set of interval-scaled variables (Pedhazur, 1982). One-way MANOVA is employed since there is only one trichotomized variable (high, medium, and low control modes) involved in the research design.

MANOVA is considered appropriate since it was hypothesized that the final choice of market entry mode hinges not on each of the nine constructs working independently but on all of them functioning together. Thus, the interrelationships among the nine variables need to be considered (Pedhazur, 1982). An overall significant MANOVA result will indicate that the mean vectors of the three control modes are statistically different.

Multiple Discriminant Analysis (MDA)

Whereas one-way MANOVA is used to investigate the overall differences among the choice of control mode, Multiple Discriminant Analysis (MDA) is employed to provide information on how well each of the nine variables is able to discriminate among the three modes and on the relative contribution of each variable. This further analysis provides specific information on how the decision is made as regards each variable.

A multiple discriminant functions was established for the integrated model with a trichotomized variable representing three control modes as the dependent variable and the nine

variables influencing the mode chosen as the independent variables. Furthermore, two additional multiple discriminant functions representing the transaction cost model and the strategic model, using transaction cost and strategic variables as independent variables, respectively, are constructed. The classification accuracy performance of the transaction cost, the strategic, and the integrated model via MDA are then compared using nonparametric sign test to examine Hypothesis 3.

Analysis of Covariance (ANCOVA) and Multiple Comparisons

An Analysis of Covariance (ANCOVA) is performed to explore further the impact of each independent variable on the choice of the three control modes. ANCOVA rather than univariate Analysis of Variance (ANOVA) is used because the other confounding variables need to be controlled when the focused variable is examined. Thus, each independent variable is examined in turn, and the remaining variables are controlled as covariates.

The adjusted means after controlling the confounding variables are calculated for each of the variables with respect to the three control modes; a partial F-statistic is calculated to indicate the significance level. A significant F-statistic for any independent variable, however, does not necessarily mean that all the means are significantly different from one another in the three control modes

(Perreault, Behrman, and Armstrong, 1979). For further detection, planned comparisons among means derived from ANCOVA are performed. The results of ANCOVA are used to test the validity of Hypothesis 3.

CHAPTER FIVE

ANALYSIS AND RESULTS

This chapter presents the results of the analysis of the MNC's choice of market entry strategies and discusses the implications of those results.

The first section presents the results of the classification scheme that groups the sample firms into high, medium, and low control modes. The scale development procedure used to measure the four reflective constructs (market attractiveness, market stability, transaction complexity, transaction uncertainty) is discussed in the second section. The third section reports the findings of the tests of the hypotheses.

THE CLASSIFICATION OF SAMPLE FIRMS

A total of 113 sample firms were classified into high, medium, and low control groups. The taxonomy was based on the extent of control that the respondents reportedly possess over their foreign operations in key decision areas, including marketing, manufacturing, finance, R&D, and general administration, measured on a 7-point Likert-type scales. Thus, the total possible scores range from 5 to 35. Note that firms with 100% control over their subsidiaries (wholly

owned) were asked to skip the control measures in the questionnaire and were assigned a total of 35 points. This merely reflects the fact that control was not shared with outsiders.

Because the level of control is a relative construct, the 40 firms with total control (35 points) were classified into the high control group. The remaining 73 firms with less than total control was classified into the medium and low control group since they exhibit a wide range with respect to the control measures (from 5 points to 33 points). Accordingly, the mean score (21.7) was used to divide the remaining 73 firms. Overall, this led to the classification of 40 MNCs in the high control group, 41 firms in the medium control group, and 32 firms in the low control group.

Although the arithmetic mean score has often been used as a means of central tendency to break cases into groups (see Varadarajan, 1986; Zeithaml and Fry, 1984), certain checks were performed to ensure the appropriateness of this classification scheme. First, the ranking results (high, medium, low) produced by this scheme were correlated with managers' perception of the overall degree of control. Note that in addition to the degree of control in each individual key business function, respondents were also asked to indicate the overall degree of managerial influence or control (high, medium, low) over their foreign operations. To the extent that these two methods provide the same or very similar results, the construct has convergent validity

(Churchill, 1979; Bohrnstedt, 1983). A Spearman rank correlation coefficient (.718) was calculated, and it indicated that the ranking results obtained from these two methods are highly correlated ($p<.001$).

Second, the classification results were compared with the conceptual taxonomy of control modes based on entry modes proposed by Anderson and Gatignon (1986, P.5). This conceptual taxonomy has its own limitations, however, it has been pointed out that there are many ways to gain control and many variations within any one form of entry mode (Kindleberger, 1984; Hayashi, 1978). For example, a majority partner actually could exercise less control, or vice versa, when factors such as special contractual arrangement, expertise, and status as a government body are considered. Although several attempts have been made to cluster entry modes (e.g., Root, 1982; Calvet, 1981; Caves, 1982; Davidson and McFetridge, 1984, 1985), there is unfortunately no tested, accepted theory as to how much control each entry mode affords (Anderson and Gatignon, 1986). Over a broad range of considerations, however, it is reasonable to expect that an entrant's control increases with the proportion of ownership and, given that proportion, with the number of partners (Anderson and Gatignon, 1987). The entry modes for each control group are reported in Table 11. Dominant (small) shareholder was defined as MNCs holding stocks more (less) than any other partner. This information was available since respondents were asked to indicate the number

Table 11

Classification of Firms

Entry Modes	Control Group		
	High	Medium	Low
Wholly owned	40	--	--
Dominant shareholder	--	8	2
Equal partner	--	13	7
Small shareholder	--	15	12
Licensing	--	1	9
Strategic alliance	--	2	-
Unspecified	--	2	2
Total	40	41	32

of partners in the foreign operations. Although our classification results confirm that there is no clear cut association between entry modes and control, some relationships seem to exist. For example, most dominant shareholders and equal partners were classified into the medium control mode, and most licensing cases were grouped into the low control mode (See Table 11). This, in general, agrees with the conceptual taxonomy proposed by Anderson and Gatignon (1986, p.5).

INITIAL MEASURE PURIFICATION

Each reflective construct was subjected to a reliability analysis following Churchill's advice that " coefficient alpha absolutely should be the first measure one calculates to assess the quality of the instrument" (1979, p. 68). This task was performed using a computer routine developed for the Statistical Package for the Social Sciences (SPSSX, Version 3.0). In addition to coefficient alpha, this routine provides corrected item-to-total correlations and an indication of what coefficient alpha would be if each item were deleted, both of which are useful in identifying items which should be eliminated from their indices to improve the reliability of the measure.

In interpreting the results generated by these analyses, Churchill suggests that one first determine the desired magnitude of coefficient alpha and then take steps to improve

it, if necessary. Drawing on Nunnally (1978), Churchill (1979, p. 68) suggests that in the early stages of basic research reliabilities of .50 or .60 suffice. Because this research represents the first attempt at developing measures of the constructs in the context of market entry, it was decided that a minimum level of .60 would be the target for coefficient alpha.

Following Nunnally (1978), those with low correlation with the total score or those below a sudden drop-off in the item-total correlation coefficient were dropped. The remaining items were those having more variance relating to the common factor among the items. A Cronbach's coefficient alpha was derived for that set of variables.

Table 12 presents both the initial reliability and revised reliability for market attractiveness. The initial reliability results in alpha = .7476. The item on projected short-term (3 years) sales was subsequently excluded from the second analysis both because the corrected item-to-total correlation for this variable (.2427) is below .30 and it deviates from the next lowest value (.4351). The revised reliability has been improved from .7476 to .7890 due to this action. The resulting corrected item-to-total correlations all exhibit values > .30.

Table 13 reports the results of reliability analysis for market stability. The initial run yielded alpha = .5695. Intensity of competition and of technological change were deleted in the second run due to the low corrected item-to-

Table 12

Reliability Analysis of Market Attractiveness

Items	Initial Reliability		Revised Reliability	
	Corrected Item-to-total Correlation	Alpha If Item Deleted	Corrected Item-to-total Correlation	Alpha If Item Deleted
1.	.2427	.7890	----	----
2.	.4351	.7251	.4149	.7931
3.	.4461	.7233	.4666	.7790
4.	.5385	.6962	.4848	.7793
5.	.6770	.6539	.7564	.6797
6.	.6510	.6634	.7352	.6892
Alpha		.7476		.7890

Note: see "indicators of market attractiveness" in Chapter 4 for the meaning of items 1-6.

Table 13

Reliability Analysis of Market Stability

Items	Initial Reliability		Revised Reliability	
	Corrected Item-to-total Correlation	Alpha If Item Deleted	Corrected Item-to-total Correlation	Alpha If Item Deleted
1.	.2448	.5497	.3495	.8019
2.	.3698	.5028	.5596	.7016
3.	.5347	.4268	.6282	.6617
4.	.5047	.4405	.7096	.6117
5.	.1780	.5924	----	----
6.	.1559	.6142	----	----
Alpha		.5695		.7593

Note: see "indicators of market stability" in Chapter 4 for the meaning of items 1-6.

total correlation (.1780 and .1559, respectively) and the sudden drop off they represent. The revised reliability yielded a satisfactory alpha = .7593.

The reliability for transaction complexity is reported in Table 14. For the same reason stated in the case of market stability (low corrected item-to-total correlation and sudden drop-off), uniqueness of know-how and ease with which know-how can be transferred were dropped from the revised analysis. The resulting reliability improved from the initial run (alpha=.6113) to the second run (alpha=.6681).

Three runs of reliability for transaction uncertainty were conducted to achieve the targeted goal of alpha > .60. The first analysis showed alpha = .4667. This low reliability was due apparently to several low corrected item-to-total correlations. Subsequently, the variable (extent to which the foreign operation could be run independently of parent company) with extremely low corrected item-to-total correlation (.0575) was first deleted. The result was still unsatisfactory (alpha = .5210). Therefore, three more variables were further deleted due to their low corrected item-to-total correlations (ease with which other parties might copy know-how, extent to which the continued success of the foreign operation depends on future inputs from parent company, and ease with which the proper functioning of the foreign operation can be monitored). The third reliability analysis showed alpha = .6096, which met the target. Since the remaining variables exhibited satisfactory corrected

Table 14

Reliability Analysis of Transaction Complexity

Items	Initial Reliability		Revised Reliability	
	Corrected Item-to-total Correlation	Alpha If Item Deleted	Corrected Item-to-total Correlation	Alpha If Item Deleted
1.	.4139	.5366	.3732	.6521
2.	.2185	.6140	----	----
3.	.3843	.5500	.4039	.6309
4.	.5100	.4947	.5431	.5373
5.	.1151	.6467	----	----
6.	.4279	.5311	.4834	.5782
Alpha		.6113		.6681

Note: see "indicators of transaction complexity" in Chapter 4 for the meaning of items 1-6.

item-to-total correlations, these were retained for further analysis. The results of the three reliability runs are presented in Table 15.

In summary, except for transaction uncertainty, the remaining three constructs showed satisfactory Cronbach's coefficient alpha (>.60) in the second analysis. A third analysis has been conducted for transaction uncertainty in order to achieve the preset target.

Even though the internal consistency was deemed adequate, an R-type principal components factor analysis with varimax rotation was used to verify that the items used in a scale were tapping the same construct and to gain additional insight into the meaningfulness of the scale. This is addressed in the next section.

UNDERLYING DIMENSIONS OF THE DATA STRUCTURE

Motivation for an R-type principal component factor analysis is derived, primarily, from considering the multidimensionality of the constructs of interest (Bohrnstedt, 1983; Nunnally, 1978). Factor analysis was performed for both the indicators of the individual construct and all indicators taken together. We use several criteria to judge how many factors should be retained. First, factors with eigenvalue > 1.0 were retained, and orthogonal rotations of the axes were performed using the varimax method (Kaiser, 1958; Green, 1976, 1978). This decision rule is based on the

Table 15

Reliability Analysis of Transaction Uncertainty

Items	Initial Reliability		Revised Reliability	
	Corrected Item-to-total Correlation	Alpha If Item Deleted	Corrected Item-to-total Correlation	Alpha If Item Deleted
1.	.2515	.4129	.2921 (.3574)	.4642 (.5965)
2.	.2306	.4274	.1656 (----)	.5189 (----)
3.	.2771	.4000	.3645 (.3757)	.4243 (.5723)
4.	.3098	.3870	.3246 (.5322)	.4482 (.3453)
5.	.0575	.5210	---- (----)	---- (----)
6.	.1801	.4502	.2048 (----)	.5170 (----)
7.	.3052	.3956	.2851 (----)	.4704 (----)
Alpha		.4667		.5210 (.6096)

Note: Coefficients in parentheses are third revised reliability. See "indicators of transaction uncertainty" in Chapter 4 for the meaning of items 1-7.2

rationale that any principal component factor, being a measure of common variance, should account for more variance than any single variable in the standardized score space (Green, 1976, 1978). Orthogonal rather than oblique rotation was performed because our interest lies in the independent dimensions underlying the data structure. Note that factors resulting from the orthogonal rotation of principal components will remain statistically uncorrelated (Green, 1976, 1978). Second, since factors with eigenvalue greater than one do not mean statistical significance, a scree test was performed to facilitate the decision of retaining the substantial factors (Cattell, 1966). Finally, each factor's capability of explaining the amount of variation was also considered in determining the number of factors to be retained (Green, 1976, 1978).

First, principal component factor analysis for the indicators of each individual construct yielded a one-factor solution (eigenvalue > 1.0) for each construct. Examination of the factor structure matrices and loadings showed that the solution was satisfactory. No indicator was dropped since all the loadings were greater than .35 (Kerlinger and Pedhazur, 1973). The results are reported in Tables 16 to 19. The column headed by h^2 contains the sum of the squares of the loadings of each of the variables across all of the factors, or the commonalities. They represent the percentage of the common variance of a given variable accounted for by

each factor. Since only one factor was extracted from each construct, no scree test was performed.

Second, an R-type principal factor analysis of all indicators taken together was performed. Again, factors with eigenvalue greater than one were retained and rotated using the varimax method. As the factors were rotated orthogonally, the loadings define the major clusters of interrelationships among the variables, and the factors are independent. The factor structure matrix showed five factors underlying the data structure. Table 20 presents the results.

Interpretation of a factor in terms of its meaning or conceptual content is necessarily subjective. The meaning of a factor, however, is generally inferred from those variables with higher loadings on it (Green, 1976, 1978). The indicators loaded most highly on the first factor include long-term sales growth, prospects for future profits, average industry sales growth, and industry profit margin. This factor then is named market attractiveness. The indicators with higher loadings on the second factor: profit stability, market share stability, predictability of demand, and stability of demand. The second factor, therefore, represent market stability. Four indicators loaded highly on factor three are: difficulty of communicating know-how, difficulty of pricing know-how, difficulty of appreciating the value of know-how, and degree to which know-how is intangible. Together they represent transaction complexity. The legal

Table 16

Factor Loadings for Market Attractiveness

Variable	Varimax Factor Pattern Factor 1	h^2
Long-term sales growth	.5771	.3331
Prospects for future profits	.6526	.4259
Average industry sales growth	.6510	.4237
Industry profit margin	.8915	.7948
Industry pretax profits	.8764	.7681
Eigenvalue	2.7457	
% common variance explained	54.9%	

Table 17

Factor Loadings for Market Stability

Variable	Varimax Factor Pattern Factor 1	h^2
Profit stability	.5457	.2978
Market share stability	.7632	.5825
Predictability of demand	.8349	.6970
Stability of demand	.8763	.7680
Eigenvalue	2.3453	
% common variance explained	58.6%	

Table 18

Factor Loadings for Transaction Complexity

Variable	Varimax Factor Pattern Factor 1	h^2
Difficulty of communicating know-how	.6263	.3922
Difficulty of pricing know-how	.6698	.4486
Difficulty of appreciating the value of know-how	.7923	.6277
Degree to which know-how is intangible	.7413	.5496
Eigenvalue	2.0180	
% common variance explained	50.5%	

Table 19

Factor Loadings for Transaction Uncertainty

Variable	Varimax Factor Pattern Factor 1	h^2
Know-how is legally protectable	.6952	.4832
Ability to detect the unauthorized use of know-how	.7178	.5152
Ability to punish the unauthorized use of know-how	.8368	.7003
Eigenvalue	1.6987	
% common variance explained	56.6%	

Table 20

Factor Analysis of All Indicators

	Factor				
	1	2	3	4	5
Long-term sales growth	.5137	.0727	-.1983	.1525	.3918
Prospects for future profits	.6366	.1313	.2837	.1605	-.1763
Average industry sales growth	.6738	-.1005	-.1172	-.0732	.1048
Industry profit margin	.8725	.1763	.0442	.0733	.0395
Industry pretax profits	.8597	.1653	-.0122	.0481	.0467
Profit stability	.2494	.4194	.0180	-.1087	.5326
Market share stability	.0691	.7604	.0551	-.0724	.0670
Predictability of demand	.1351	.8519	-.0251	.1332	-.0706
Stability of demand	.0363	.8725	-.0396	.0134	.1092
Difficulty of communicating know-how	.0348	.0031	.3200	-.0207	.6663
Difficulty of pricing know-how	-.0442	.0165	.8001	.0086	.0024
Difficulty of appreciating the value of know-how	.0146	-.0373	.7645	.1236	.2113
Degree to which know-how is intangible	.0250	.0262	.5320	.1445	.5155
Know-how is legally protectable	-.2110	-.0628	-.0362	.6674	.4325
Ability to detect the unauthorized use of know-how	.2344	-.0056	.0204	.7310	-.2556
Ability to punish the unauthorized use of know-how	.1035	.0734	.2064	.8017	.0557
Eigenvalue	3.5018	2.2584	1.9253	1.4751	1.0734
% common variance explained	21.9%	14.1%	12.0%	9.2%	6.7%

protectability of know-how, the ability to detect the unauthorized use of know-how, and the ability to punish the unauthorized use of know-how are highly loaded on factor four. Clearly, they represent transaction uncertainty. The meaning of factor five is not clear since its higher loadings contain indicators from the previous four constructs. However, note that the fifth factor explains the least amount of variance (6.7%) among the five factors. As stated above, a scree test was performed to facilitate the decision about retaining factors. As can be seen in Figure 5, a scree test showed that a four-factor solution is satisfactory. As discussed in detail in Chapter 4, once the indicators associated with each construct were reduced to a reliable set, a score for each construct was derived using a unit weighting scheme (Einhorn and Hogarth, 1975). Since the remaining five constructs are formative in nature, they are operationalized through the summation of their associated indicators. The means and standard deviations of the nine constructs used in subsequent analysis and the correlations among them are reported in Table 21.

In summary, a considerable gain in simplicity was reached using factor analysis. Fortunately, the pattern of loadings is relatively clear and unambiguous. There is no indication to drop indicators since all the higher loadings associated with each factor are greater than .35 (Kerlinger and Pedhazur, 1973). Consistently, principal component factor

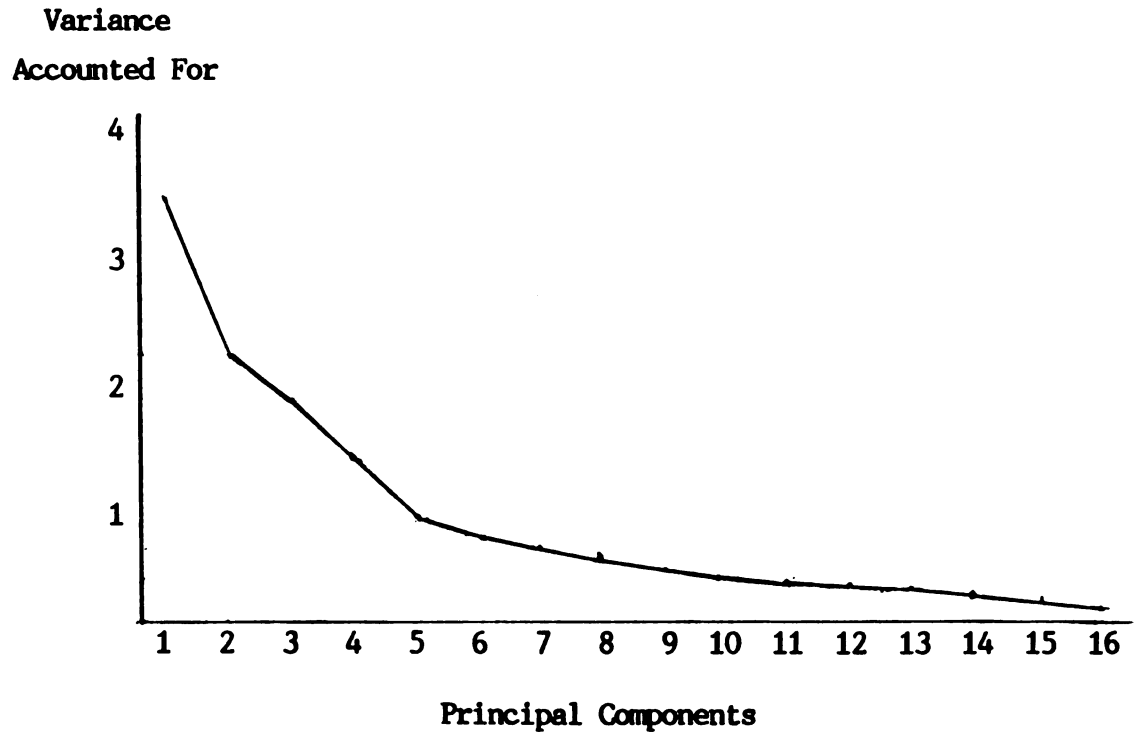

Figure 5

Scree Test

Table 21

Means, Standard Deviations, and Correlations

Variables	Mean	Std. Dev.	Min.	Max.
Country risk (CR)	13.85	6.33	4	28
Location familiarity (LF)	24.80	8.47	7	50
Market attractiveness (MA)	24.70	3.94	14	35
Market stability (MS)	18.85	3.55	10	26
Transaction complexity (TC)	16.88	4.49	4	26
Transaction uncertainty (TU)	13.27	3.93	4	21
Exit barriers (EXIT)	20.31	7.43	6	37
Synergy (SYN)	23.09	7.58	6	42
Global market presence (GMP)	25.39	5.87	12	40

Pearson Product-Moment Correlation

	CR	LF	MA	MS	TC	TU	EXIT	SYN	GMP
CR	1.000								
LF	-.644[a]	1.000							
MA	.079	-.002	1.000						
MS	-.092	-.005	.279[b]	1.000					
TC	-.096	.083	.064	.096	1.000				
TU	.117	.026	.147	.034	.199[c]	1.000			
EXIT	-.031	.150	.154	-.053	.182	.152	1.000		
SYN	-.368[a]	.275[b]	-.064	.016	.030	.014	-.024	1.000	
GMP	.013	-.067	-.127	-.086	.005	.050	.080	-.100	1.000

Note: [a]$p<.001$ [b]$p<.005$ [c]$p<.05$

analysis together with reliability analysis strongly indicate that there are four factors underlying the retained indicators: market attractiveness, market stability, transaction complexity, and transaction uncertainty.

TEST OF HYPOTHESES

This section describes the results of the test of the hypotheses set forth in chapter 3. In the following, each hypothesis was stated, the homogeneity of covariance structure among three control groups was tested using Box's M statistic for hypothesis 1 and 2, and the statistical methods and results for each hypothesis testing were reported.

Hypothesis 1 - The Overall Model

Hypothesis 1: There will be a significant difference among high, medium, and low control modes of foreign market entry strategy with respect to the nine key variables: country risk, location familiarity, market attractiveness, market stability, transaction complexity, transaction uncertainty, exit barriers, synergy, and global market presence, taken as a whole.

Hypothesis 1 explores the relationship of the set of key decision-making variables and the control mode choice. It was expected that MNCs with different foreign market entry strategies would exhibit different profiles of the key

decision variables. Therefore, the existence of an overall difference is the interest of hypothesis 1.

The analysis of the relationship between modes of foreign market entry strategy and profiles of the decision-making elements consisted of a multivariate analysis of variance (MANOVA), with the former serving as the grouping variable and the latter being the variables that presumable differentiate the three control modes. It is worth noting that MANOVA has strength in that it takes the interrelationships among the constructs into account.

Before MANOVA was performed, the homogeneity of covariance structures for the groups was tested. Box's M statistic was used to do this test. The result of the homogeneity test showed that there is no significant differences among covariance structures of the three control groups (Box's M=121.33, F= 1.18, df=90, 25667, p< .118).

The MANOVA results indicate that there are significant overall differences in the profiles of MNCs' decision making elements based on their choice of foreign market entry modes. Wilks' lambda = .63156 for the overall model; F = 2.81291, df = 18, 196, $p < 0.001$. Thus, the profiles do vary, and Hypothesis 1 is not rejected.

Statistically, this means that the mean vectors of the three control groups are not all equal. Substantively, the significant MANOVA result indicates that there are overall differences in the profiles of distinct control modes with respect to market attractiveness, market stability,

transaction complexity, transaction uncertainty, country risk, location familiarity, global market presence, exit barriers, and synergy. Put differently, this would mean that the proposed framework presents a reasonable way to explain firms' decision making behavior on the entry mode choice.

Although a significant result from MANOVA was obtained, it is not clear which of the multiple dependent variables contribute most to the difference among the groups that are being compared. To understand the relative importance of each variable, we now turn to the Multiple Discriminant Analysis (MDA).

Hypothesis 2 - The Comparison of Models

Hypothesis 2: There will be a significant difference in classification accuracy (1) between the integrated and transaction cost model and (2) between the integrated and strategic model, with respect to the choice among high, medium, and low control modes of foreign market entry strategy.

To achieve the test of Hypothesis 2 three discriminant analyses were performed, representing the strategic model, the transaction cost model, and the integrated model, respectively.

Before these discriminant analyses were performed, the homogeneity of covariance structures with respect to the three control modes was tested using Box's M statistic. Box's M was not significant in all three models ($p > .05$).

For the strategic model, Box's M=79.598; F=1.2839, df=56, 26879; p <.075. For the transaction cost model, Box's M=14.737; F= .6966; df=20, 36964; p < .8338. For the integrated model, Box's M=121.32; F=1.1794; df=50, 25668; p< .1180. This means that the homogeneity of covariance structures among three control groups with respect to each model was not rejected.

The first discriminant analysis with strategic variables as the independent variables yielded two canonical discriminant functions. The tests of significance of the discriminant functions are reported in Table 22. As can be seen, the first and the second discriminant function explains 84.98% and 15.02% of the variance, respectively. Since function two is not statistically significant (p < .3991), only function one was retained. In order to give substantive meaning to the discriminant functions, structure coefficients rather than standardized coefficients were chosen for the interpretations. This is due to the fact that standardized coefficients lack stability since they are affected by the variability of the variables with which they are associated and by the intercorrelations among the variables (Perrault et al., 1979; Pedhazur, 1982; Tatsuoka, 1971).

As a rule of thumb, it is suggested that structure coefficients >.30 be treated as meaningful (Pedhazur, 1982). According to this criterion, the meaningful coefficients on function one are those for country risk, location familiarity, market attractiveness, synergy, and exit

Table 22

Discriminant Analysis for the Strategic Model

	Standardized Coefficient		Structure Coefficient	
Variable	Function 1	Function 2	Function 1	Function 2
Country risk	-.6335	.0107	-.6655	.0792
Location familiarity	.1638	-.4473	.5417	-.3763
Market attractiveness	.5388	-.2033	.3788	-.3026
Market stability	-.0146	.1185	.1187	.0295
Synergy	.2152	.5782	.3933	.5242
Exit barrier	.3414	-.1544	.3292	-.3265
Global market presence	.3941	.5933	.2289	.6950
Eigenvalue	.3486	.0616		
Wilks' lambda	.6985	.9420		
% of variance	84.98	15.02		
Canonical correlation	.5084	.2409		
Chi square	37.323	6.2193		
Degree of freedom	14	6		
Significance, P<	.0007	.3991		

barriers, in descending order of importance. The positive signs of location familiarity, market attractiveness, and synergy are expected. This means that higher control modes would have greater scores on these variables than would the medium and lower control modes. The negative sign of country risk is also expected. It indicates that higher control modes show a lower score on country risk than do the lower control modes. Although marginally larger than .30, the positive sign of exit barriers is not expected. This is counter to our expectation that MNCs with higher exit barriers would adopt high control modes.

The classification accuracy of the resulting discriminant function performed better than would a chance model. The overall hit ratio is 52.73%; 51.7% of the low control group, 36.60% of the medium control group, and 70.0% of the high control group are correctly classified. While the hit ratio of the low and the high group meets the criterion that a rough estimate of the acceptable level of predictive accuracy should be at least 25% greater than by chance (that is, 28%, 36%, and 36% for the low, medium, and high control group, respectively), the classifying accuracy of the medium control group does not perform well. This may be due to the sensitivity of the classification method in breaking firms into medium and low control groups. It does show, however, that the discrimination function performed well in classifying the more extreme groups.

The second discriminant analysis also showed two canonical discriminant functions. This discriminant model represents the transaction cost model, with transaction cost variables serving as the independent variables. Only the first discrimination function was retained for interpretation due to the insignificance of the second function ($p < .5709$). Table 23 exhibits the result of the analysis. As can be seen, the first function explains 93.14% of variance, and the second function explains 5.87% of variance. Note that country risk and location familiarity are again incorporated into this model due to their dual role as both strategic and transaction cost variables (see Chapter 3 for discussion).

The importance of the coefficients in descending order are country risk, location familiarity, and transaction complexity. The signs of the coefficient are expected, with country risk being negative and others positive. The only variable in this function with loading < .30 is transaction uncertainty. A positive sign for transaction complexity, showed that the higher the transaction complexity the more likely are MNCs to choose high control modes. The meaning of the signs of location familiarity and country risk are the same as explained in the strategic discriminant model.

The overall hit ratio of 55.86%, is slightly improved relative to the strategic discriminant model. The hit ratios for each individual group are: 51.6% for low control, 41.5% for medium control, and 74.4% for high control. Again, these ratios come very close to that of the strategic model. The

Table 23

Discriminant Analysis for the Transaction Cost Model

	Standardized coefficient		Structure Coefficient	
Variable	Function 1	Function 2	Function 1	Function 2
Country risk	-.6682	.1840	-.7336	-.0971
Location familiarity	.2088	.6521	.5927	.5361
Transaction complexity	.5445	-.6757	.5867	-.5658
Transaction uncertainty	.2716	.5918	.2449	.4833
Eigenvalue	.3051	.0190		
Wilks' lambda	.7519	.9813		
% of variance	93.14	5.87		
Canonical correlation	.4835	.1367		
Chi square	30.366	2.0075		
Degree of freedom	8	3		
Significance, P<	.0002	.5709		

transaction cost model, like the strategic model, performs better in the high and low control modes than in the medium control modes.

The third discriminant analysis deals with the integrated model, with all key decision elements identified in the model (see chapter 3) as independent variables. The results of statistical analysis are shown in Table 24. The first function again explains much more variance relative to the second function (84.38% compared with 15.62%). As in the previous two models, due to the insignificance of the second function, it is left uninterpreted ($p < .3991$). The meaningful coefficients in an order of descending importance are country risk, transaction complexity, location familiarity, synergy, and market attractiveness. Except for country risk, all variables showed positive signs. Note that exit barriers do not show an effect in the integrated model as it does in the strategic model. The meaning of signs are the same as reported before.

The overall hit ratio (60.55%) shows some improvement over the previous two models. The individual hit ratio for the three control modes are: 55.2% for low control, 48.8% for medium control, and 76.9% for high control. These ratios show some marginal improvements relative to the previous two models. As with the strategic and transaction cost model, the integrated model again performs better in the high and low control modes than in the medium control mode.

Table 24

Discriminant Analysis for the Integrated Model

	Standardized Coefficient		Structure Coefficient	
Variable	Function 1	Function 2	Function 1	Function 2
Country risk	-.5734	.2345	-.5567	.1762
Location familiarity	.0853	-.3304	.4321	-.3968
Market attractiveness	.4931	-.2443	.3380	-.3547
Market stability	-.0670	.0953	.0994	.0068
Transaction complexity	.4891	.4144	.5021	.2614
Transaction uncertainty	.0932	-.3869	.1782	-.2784
Exit barrier	.2209	-.2298	.2867	-.3567
Synergy	.2124	.4774	.3490	.3801
Global market presence	.3790	.4789	.2225	.5446
Eigenvalue	.4593	.0850		
Wilks' lambda	.6316	.9216		
% of variance	84.38	15.62		
Canonical correlation	.5610	.2799		
Chi square	46.876	8.3244		
Degree of freedom	18	8		
Significance, P<	.0007	.3991		

In summary, the three discriminant models exhibit quite close results in many aspects. All models yield similar hit ratios both individually and overall. While two cannoncial discriminant functions were extracted in all three models, only the first discriminant function turned out to be significant and explained a substantial amount of variance. Except for exit barriers with factor loading marginally higher than .30 in the strategic model, all three models consistently revealed that country risk, transaction complexity, location familiarity, synergy, and market attractiveness are the relative important discriminators. One important implication that can be drawn from the discriminant analysis is that both strategic and transaction cost variables possess discriminant power in differentiating the three control modes.

While the accuracy of classifications in all models is very close, as indicated by the hit ratios, it is of interest to compare their classification performance. The rationale for the accuracy comparisons run as follows. If the performance of two models do not differ significantly from each other, the probability that the cases are correctly classified by one model over the other, or vice versa, should not significantly differ from p=.5.

A nonparametric sign test was conducted to test the accuracy performance of the integrated model relative to the strategic and the transaction model, respectively. When both models exhibited the same classification performance (that

is, either correctly or incorrectly) to a specific case, it was considered a tie. In comparing the integrated and the strategic model, the former performed better than the latter in 15 cases, while the opposite was true in 6 cases. There are 88 ties. The resulting probability of this comparison is p=.0784. The comparison between the integrated and the transaction cost model showed that the former performed better in 13 cases, and the latter performed better in 8 cases. There are again 88 ties. The probability is P=.3833. Hence, it was concluded that there are no differences as regards the accuracy performance of the integrated model relative to the other two models. This outcome may be due to the effect that location familiarity and country risk both possess high discriminant power in all three models.

Hypothesis 3 - The Nature of the Differences

Hypotheses 3a through 3i specified the nature of the expected differences in the high, medium, and low control profiles.

Subsequent to the MANOVA findings of overall differences in the profiles and the MDA results indicating the discriminatory power of the profile variables, Analysis of Covariance (ANCOVA) was performed to identify the sources(s) of the overall effects. ANCOVA was used rather than univariate ANOVA because the interest was in the way the set of variables operate together rather than the independent influence of each variable. The covariance-controlled

partial F-ratio for each variable was computed to determine whether significant group differences remained after accounting for the impact of the other variables. Planned comparison, on an a priori basis, was then used to examine the source of differences for three control groups with respect to each of the significant independent variables.

An a priori test rather than a post hoc test was used for two reasons. First, an a priori test is more powerful than a post hoc test. This advantage stems from the researcher's willingness to hypothesize the differences priori to the analysis (Pedhazur, 1982). An a priori test is appropriate here since the nature of the differences regarding the three control groups with respect to the nine independent variables was hypothesized on an a priori basis (see Table 6 in chapter 3). Second, while a post hoc comparison is performed only when the overall F ratio is significant, this need not be the case in an a priori test. Put differently, some of the a priori tests may have significant F ratios even when the overall F ratio is not significant (Pedhazur, 1982). Therefore, in order not to lose sight of the nature of the differences among three control groups due to an insignificant overall F ratio, an a priori comparison is considered appropriate to this study.

Nine ANCOVAs were performed, with each key decision variable serving as the dependent variable and the remaining variables as covariates. Before discussing the ANCOVA tests it is necessary to examine the hypothesis of homogeneity of

slopes among three control groups with respect to each key decision variable (Pedhazur, 1982; Green, 1978). This amounts to testing the interaction effects between covariates and the factor (that is, the three control modes). It was determined that any interaction term with $p < .05$ is considered significant.

The covariates with significant interaction effect were identified, and adjustments were made. Instead of using common slopes for the covariate with significant interaction effects in the ANCOVA analysis, different slopes within each group were used for partialing out the covariate impact on the key decision variable (Wildt and Ahtola, 1978; Kleinbaum and Kupper, 1978). The unadjusted means, adjusted means, and the partial F ratios are listed in Table 25. As stated above, planned comparisons among the three control groups were further performed to detect the pairwise differences, the results are summarized in Table 26. Hypothesis 3a stated that the higher the country risk, the lower is the level of control MNCs will demand in the foreign operation. Specifically, it was expected that the high control group would score lower on country risk than would the medium or low control group and that the medium group would score lower than would the low control group. The results indicate that the adjusted mean of country risk in the high control group has a significantly lower mean score than in the low control group. Other comparisons, however, did not show significant results. Therefore, H3a is partially supported.

Table 25

Analysis of Covariance Results

Variable	Unadjusted Means			Covariate Adjusted Means			Partial
	High	Medium	Low	High	Medium	Low	F
CR	10.97	14.61	16.41	12.45	14.27	15.36	3.94[a]
LF	28.18	23.29	22.76	27.05	24.40	25.06	2.19
MA	26.00	24.02	23.93	26.20	24.23	23.52	3.65[a]
MS	19.12	18.80	18.52	18.59	18.95	18.91	.09
TC	18.46	17.05	14.69	18.21	17.27	14.72	4.41[a]
TU	14.03	12.78	12.97	13.73	12.70	13.34	.64
EXIT	22.51	19.12	19.24	21.83	19.58	19.47	.90
SYN	24.56	23.66	19.86	24.54	24.15	20.88	2.74
GMP	25.92	26.41	23.38	26.68	26.15	22.89	3.09

Note: [a]$p<.05$

Table 26

Comparison of Control Groups Profiles

	Hypothesized Profiles		
	Hypothesis	Sample Findings	F
Country risk	H < M	Not significant	1.07
	M < L	Not significant	3.48
	H < L	H < L	7.43[b]
Location familiarity	H > M	H > M	4.14[c]
	M > L	Not significant	.22
	H > L	Not significant	1.95
Market attractiveness	H > M	H > M	4.76[c]
	M > L	Not significant	.53
	H > L	H > L	6.24[c]
Market stability	H > M	Not significant	.17
	M > L	Not significant	.00
	H > L	Not significant	.10
Transaction complexity	H > M	Not Significant	.78
	M > L	M > L	5.44[c]
	H > L	H > L	8.17[a]
Transaction uncertainty	H > M	Not significant	1.19
	M > L	Not significant	.40
	H > L	Not significant	.12
Exit barrier	H < M	Not significant	1.56
	M < L	Not significant	.00
	H < L	Not significant	1.19
Synergy	H > M	Not significant	.06
	M > L	Not significant	3.87
	H > L	H > L	4.74[c]
Global market presence	H > M	Not significant	.13
	M > L	M > L	4.78[c]
	H > L	H > L	5.06[c]

Note: [a]$p<.005$ [b]$p<.01$ [c]$p<.05$

Hypothesis 3b stated that the more familiar with the host country, the higher is the level of control MNCs will demand in the foreign operation. Specifically, it was expected that the high control group would score higher on location familiarity than would the medium or low control groups and that the medium group would score higher than would the low control group. The partial F ratio of location familiarity was not significant. This may be due to the effect that location familiarity is highly correlated with country risk, and the mean scores of the latter did vary among control groups. Examining the group differences after adjusting for the covariates, however, the test of Hypothesis 3b revealed that the high control group has a higher mean score than does the medium group, while the other two comparisons do not show significant results. Although significant differences were not found in all three pairs with respect to the two location variables, in general, evidence suggests that MNCs tend to demand higher control when country risk is low and location familiarity is high.

Hypothesis 3c stated that the more attractive the market is, the higher the level of control MNCs will demand in the foreign operation. Specifically, it was expected that the high control group would score higher on market attractiveness than would the medium or low control groups and that the medium group would score higher than would the low control group. The results only partially support H3c; the high control group has a significantly higher mean score

on market attractiveness than do the medium and low control groups. However, the medium control group does not show significant higher mean score than does the low control group.

Hypothesis 3d stated that the higher the market stability, the higher is the level of control MNCs will demand in foreign operation. Specifically, it was expected that the high control group would score higher on market stability than would the medium or the low control groups and that the medium group would score higher than would the low control group. This hypothesis was not supported. None of the hypothesized directions regarding market stability was significant. Taken together, these findings suggest that while MNCs may demand higher control in more attractive markets, they all tend to choose stable markets when they enter. Said differently, managers may take a risk-averse position when they evaluate the market entry decision. This conservative attitude is understandable since a foreign market entry is usually irreversible, and tremendous resources are involved. Therefore, MNCs would reject the idea of foreign operations in the presence of profit and market share volatility.

Hypothesis 3e stated that the higher the transaction complexity, the higher is the level of control MNCs will demand in the foreign operation. Specifically, it was expected that the high control group would score higher on transaction complexity than would the medium or low control

groups and that the medium group would score higher than would the low control group. Differences were found that partially support the hypothesis. While the high and medium control group showed higher mean score than did the low control group, there is no significant difference between the high and the medium control group. In general, findings about transaction complexity suggest that MNCs tend to exercise more control in situations in which know-how can be characterized as more intangible and more difficult to be communicated, priced, and appreciated.

Hypothesis 3f stated that the higher the transaction uncertainty, the higher is the level of control MNCs will demand in the foreign operation. Specifically, it was expected that the high control group would score higher on transaction uncertainty than would the medium or low control groups and that the medium group would score higher than would the low control group. In view of no significant differences among pairs of high, medium, and low control groups, hypothesis 3f was not supported. It is surprising that no significant pairwise difference among the three control modes was found regarding transaction uncertainty. One possible explanation could be that MNCs are very careful about choosing partners when entering foreign markets to minimize the danger of unauthorized use of their know-how. More important, both parties may view a joint venture as an opportunity for joint value creation rather than as a zero-sum game (that is, the success of one organization thus

depends on the other). Once this long-term outlook is adopted by both sides, potential opportunism can be reduced (Jarillo, 1988). A recent research stream on strategic network points to this possibility (Thorelli, 1986; Stevenson, 1983).

Hypothesis 3g stated that the greater the synergy between the entrant and other sister business units, the higher is the level of control MNCs will demand in the foreign operation. Specifically, it was expected that the high control group would score higher on synergy than would the medium or low control group and that the medium group would score higher than would the low control group. Group comparisons with respect to synergy showed only one significant difference; the high control group has a significant higher mean score than does the low control group. Thus, H3g is partially supported. The significant difference between the high and low control group regarding synergy indicates that synergistic effect does exert some influence on the control mode MNCs adopt.

Hypothesis 3h stated that the higher the exit barriers, the lower is the level of control MNCs will demand in the foreign operation. Specifically, it was expected that the high control group would score lower on exit barrier heights than would the medium or low control group and that the medium group would score lower than would the low control group. This hypothesis was not supported, as the comparisons revealed no significant differences. The lack of

significance of exit barriers is not immediately obvious. It may be that MNCs would experience difficulty finding partners to lower their resource commitment and relinquish control when exit barriers are high since the unwillingness to commit resources equally applies to all parties.

Hypothesis 3i stated that the greater the importance of global market presence, the higher is the level of control MNCs will demand in the foreign operation. Specifically, it was expected that the high control group would score higher on global market presence than would the medium or low control group and that the medium group would score higher than would the low control group. Although the partial F ratio did not show significance at $P < .05$ regarding global market presence, it was found that the low control group had a significant lower mean score than both the medium and high control groups. There is no significant difference between the high and medium control group. Thus, hypothesis 3i is partially supported. In general, therefore, there is some indication that MNCs would like to gain more control when global market presence is important.

Overall, none of the nine variables showed significant differences in all three pairs (high vs. low, high vs. medium, and medium vs. low). When differences were found, they existed for either one pair or two pairs. Three variables showed one pairwise difference: location familiarity, country risk, and synergy. Three variables showed two pairwise differences: market attractiveness,

transaction complexity, and global market presence. Finally, no pairwise difference was found in three variables: market stability, transaction uncertainty, and exit barriers.

SUMMARY OF TESTS OF HYPOTHESES

Hypothesis 1, that overall profile differences exist, is strongly supported. Hypothesis 2 is not supported in view of the insignificant results regarding the classification performance among the integrated, the strategic, and the transaction cost models. This could be attributed to the effect that location familiarity and country risk, playing the dual role of both strategic and transaction cost variables, are relatively important discriminator in all of the three models. Hypotheses 3a through 3i addressed the nature of the profiles; the results are summarized below.

- Hypothesis 3a - partially supported; the high control group has a significantly higher mean score on market attractiveness than do the medium and low control groups. The medium control group does not show a significantly higher mean score than does the low control group.
- Hypothesis 3b - not supported.
- Hypothesis 3c - partially supported; while the high and medium control groups showed higher mean scores than did the low control group, there is no

significant difference between the high and the medium control groups.

- Hypothesis 3d - not supported.
- Hypothesis 3e - partially supported; the high control group has a significantly lower mean score than does the low control group. Other comparisons, however, did not show significant results.
- Hypothesis 3f - partially supported; the high control group has a higher mean score than does the medium group, while the other comparisons did not show significant results.
- Hypothesis 3g - partially supported; the high and medium control groups revealed higher mean scores than did the low. However, no significance difference was found between the first two groups.
- Hypothesis 3h - not supported.
- Hypothesis 3i - partially supported; the high control group has a significantly higher mean score than does the low control group. No significant results were obtained from other comparisons.

CHAPTER SIX

CONCLUSION

The final chapter of this dissertation reviews the contributions of this research to the foreign market entry literature, addresses the limitations of the research in terms of theory and methodology, and suggests directions for future research.

MAJOR CONTRIBUTIONS

This research was designed to gain some understanding of the choice of foreign market entry strategies by MNCs. The major contributions of the research lie in the approach taken, the scales developed, and the major findings and implications regarding the validity of the decision model used by managers in this sample.

The Research Approach

Much of the literature on the entry mode decision has presented either a list of considerations without identifying key constructs or an efficiency based analysis (that is, transaction cost) which tells firms what they should do to

maximize the entrant's economic efficiency in a theoretical setting. While the latter is an improvement over the former, it still overlooks the importance of attaining a strategic fit between a firm and its competitive environment. Previous studies thus provide either piecemeal or partial analysis which does not fully reflect managerial reality and hence has limited practical application.

This study attempted to identify and integrate the key constructs involved in the entry mode decision by drawing not only on the transaction cost but also strategic management literature. This would advance us one step beyond previous work by offering an integrative view that is capable of incorporating the basic constructs from both disciplines. The aim is to provide multinational managers with a comprehensive and managerially meaningful decision-making framework for the foreign entry mode decision. Since no managerial reality demands either only efficiency or pure strategic fit but rather some combination, to examine the integrated model is crucial to our understanding of the decision making involved in foreign market entry.

The main interest in this study is the choice of foreign market entry mode. Various entry modes were classified into high, medium, and low control groups. The specific factors were explored in terms of their associations with particular generic strategies were market attractiveness, market stability, transaction complexity, transaction uncertainty, country risk, location familiarity, global market presence,

exit barriers, and synergy. The approach taken here demonstrates the potential insights that can be gained from broadening the focus of study to include several disciplines.

Scale Development

There are no generally accepted, scientifically developed, reliable, and valid scales to measure any of the nine key variables used in this study. Thus, while scale development was not a prime objective of this research, careful construction of indices was an important antecedent to the subsequent analysis.

Scales with fairly high coefficient alphas were developed for market attractiveness, market stability, transaction complexity, and transaction uncertainty. Principal factor analysis also lends support to these underlying dimensions of the data. Scale development should be of interest in itself, and future research could be extended to examine the unidimensionalilty of these constructs.

The Major Findings

The three major findings in this dissertation, corresponding to the three objectives and research questions reported in Chapter 1 and three hypotheses postulated in Chapter 3 respectively, are reported in the following.

Finding 1

Significant overall differences exist regarding the profiles of MNCs' decision-making elements with respect to the three control modes.

One important finding of this study is that there are significant overall differences in the profiles of MNCs' decision making elements (country risk, location familiarity, market attractiveness and stability, transaction complexity and uncertainty, exit barriers, synergy, and global market presence) regarding the choice of foreign market entry mode (high, medium, and low). This would mean that the proposed framework presents a reasonable way to explain firms' decision-making behavior as to entry mode choice. To the extent that competitive firms' prevalent practice reflects, in a social Darwinian sense, successful strategic behavior (Brown, 1963; Lilien, 1979), one may then conclude that the proposed framework provides managers with a systematic and winning way to organize the decision variables for the entry mode choice.

Finding 2

Although the classification accuracy of the integrated model does not differ significantly from that of the strategic or the transaction cost model, variables with discriminant power in differentiating the three control modes

come not only from the transaction cost set but also from the strategic set.

The variables that are best able to discriminate among the three control modes based on the integrated model are country risk (-), transaction complexity (+), location familiarity (+), synergy (+), and market attractiveness (+). Note that both the strategic and transaction cost variables play roles in discriminating among the three control modes. Specifically, firms with higher scores on location familiarity, market attractiveness, transaction complexity, and synergy would be more likely to choose a higher control mode. On the contrary, firms with a higher score on country risk are likely to choose a lower control mode. While the classification accuracy of the integrated model does not significantly differ from that of the transaction cost model and strategic model, the finding indicates that variables from both models provide discriminant power in the actual mode chosen.

Finding 3

In general, hypotheses of pairwise differences in profiles among all three control modes with respect to each variable were either only partially supported or not supported. When significant differences were found, they were between two of the control groups rather than among all three.

Consistent with the discriminant analyses, pairwise differences among control modes exist both in the case of transaction cost variables and strategic variables. Except for market stability, transaction uncertainty, and exit barriers, pairwise differences in the remaining variables have been found. The sources of difference, however, come from either one pair or two pairs but not all three. Three variables showed a one pairwise difference: location familiarity, country risk, and synergy. Three variables showed a two pairwise differences: transaction complexity, market attractiveness, and global market presence.

In sum, these findings indicate that: hypothesis one, corresponding to the first objective and research question, was supported; hypothesis two, related to the second objective and research question, was not supported; a set of hypotheses three, in connection with the third objective and research question, was partially supported.

IMPLICATIONS

The above findings suggest that an integrated view of economic efficiency and strategic forces is a useful perspective in explaining multinationals' choice of foreign market entry strategy. The implications of these findings are evaluated in the following.

Firms tend to evaluate carefully the host country conditions when choosing a market entry mode. Important

considerations include their perceptions of the country risk, their prior knowledge about and experience with the location, and sociocultural similarities. Firms tend to opt for low control modes when situations are unfavorable to them, that is, there is high country risk and/or low familiarity with the environment. Motivations of such a strategic move may stem from reducing the risk of host government intervention and expropriation, minimizing loss through less resource commitment, and maintaining strategic flexibility (Korbin, 1983; Vernon, 1983; Davidson, 1980). The importance of country factors is also documented in a recent study using secondary data (Gatignon and Anderson, 1987).

The market variables (market attractiveness and stability) exhibit mixed results. While MNCs are willing to commit resources and gain high control in an attractive market, they seem to view a stable market as a necessary condition to operate abroad. MNCs may abandon the entry project entirely once market volatility is detected. Presumably, MNCs are more risk averse in foreign countries than in domestic markets. Facing a volatile market, firms experience difficulty in forecasting demand and scheduling production runs, as well as in adjusting quickly as situations develop (Williamson, 1979; Harrigan, 1985a, 1985b; Porter, 1980).

In general, MNCs exhibit a strong tendency to take control in foreign operations when transactions are difficult to organize and execute. This is consistent with Teece's

(1977, 1983) assertion that the use of market institutions often is inefficient when the technology to be transferred has a high tacit nature, causing complex transactions and high transaction cost. Surprisingly, however, transaction uncertainty does not seem to influence the entry mode choice. A likely explanation might come from factors beyond our framework. In particular, MNCs may be very careful in selecting partners and relegating control. Through this process, multinationals may be able to build mutual trust with partners, both sides may adopt a long-term viewpoint, realizing that cooperation rather than opportunistic behavior is actually the best strategy (Jarillo, 1988; Stevenson, 1983). The idea that transaction uncertainty could be managed by successful entrepreneurs illustrates this point (Jarillo, 1988, Thorelli, 1986).

The results of the two variables related to business units also yielded mixed results. While MNCs are inclined to choose higher control modes when synergy exists, exit barriers do not seem to influence their entry mode decisions. One explanation may be that firms would be difficult to find partners to share resource outlays when exit barriers are high since the unwillingness to commit resources equally applied to all parties. Finally, when the preceding variables are held constant, MNCs tend to gain higher control in their foreign operations if physical presence abroad is important. Thus, in addition to business units, MNCs also

seem to pay attention to the whole corporate posture when making strategic decisions regarding foreign market entries.

LIMITATIONS

While this dissertation has made significant contributions to understanding entry mode decisions, it has limitations which restrict the generalizability of the findings. Limitations of the underlying theory and of the method used are addressed in this section.

Limitations - Theory

The decision model proposed is based on some implicit operational assumptions. First, it assumes a free choice of entry mode, ignoring restrictions of mode options due to government mandates and regulations. It is possible that MNCs would like to choose an alternative entry mode and gain more control without legal constraints. However, in view of the fact that MNCs must be willing to accept the legal boundaries set forth by host governments in order to operate, the mode chosen is at least satisfactory if not ideal to them. Otherwise, they could have invested in other places without such constraints. For this reason, it is reasonable to believe that to a large extent, the nine constructs would still exert impact on the mode chosen. Since it is a truism that the degree of control is constrained by legal

requirements, this statement is not set forth as a hypothesis to be tested.

Second, the decision model developed and tested in this dissertation is a positive rather than a normative model. It is assumed that the observed firms exhibit rational behavior when entering foreign markets.

Limitations - Methodology

The entry mode choice studied was examined after the choice had been made rather than during the decision process, so there may be some bias in the retrospective reporting. Had actual decisions been observed in process the sample size would have been severely reduced.

Clearly, a foreign market entry decision involves major business functions and has crucial strategic implications for MNCs. Hence, the decision is likely to be made by a group of top managers rather than any individual in the organization. It may be a questionable practice, therefore, to collect data from a single informant as a reflection of the organization's viewpoint (Philip, 1981; John and Reve, 1982). This problem is partially ameliorated by directing questionnaires to senior management who presumably play a key role in the decision (John, 1984).

Another methodological limitation concerns the measurement of the nine constructs. Since no generally accepted measures used in this study exist, conclusions can only apply to the constructs measured here. More thorough

measurement analysis and other replications need to be made in order to establish the psychometric properties of these constructs. For instance, a multitrait-multimethod matrix could be employed in further testing of the convergent and discriminant validity of these measures (Bohrnstedt, 1983; Campbell and Fisk, 1959).

DIRECTIONS FOR FUTURE RESEARCH

Since a positive model was developed and tested, the primary purpose was explanation rather than prescription. The study describes and explains how MNCs make foreign market entry decisions in the real world rather than what they should do in the future. Only to the extent that the observed behavior, in a social Darwinian sense, represents rational and successful practice does the model connote normative meaning. An interesting extension of this study would be to incorporate some performance measures as criteria. For example, performance could be compared between firms who select the entry mode describe by the model and those who are not. Caution is needed, however, as to the possible lag between the time the entry was implemented and when performance is assessed.

Another area of future research lies in using an experimental design that would examine managers' decisions under some hypothetical scenarios. While this approach would not rely on retrospective reporting, several compromises

would need to be made. First, in order to focus on treatment manipulations, fewer variables could be handled. Second, scenarios are not real, and the right subjects could be difficult to find. It is hoped, however, that the synthesis of the results obtained from both the survey methodology and experimental design used here would give a more clear picture of foreign market entry decisions.

Finally, the model studied in this dissertation is static rather than dynamic. It does not address the transition from one mode to the other. Some theoretical work has indicated that the transaction between licensing and wholly owned subsidiary hinges upon the cost of serving the foreign market, demand conditions in that market, and host market growth (Buckley and Casson, 1981). Thus, the optimal timing of the switch in entry modes could be a fruitful area for future research.

CONCLUSION

A decision model, drawn from both the transaction cost and strategic management literature, was developed to describe the influence of a number of key constructs on the choice of foreign market entry. This decision model was operationalized, and propositions concerning the effects of these constructs on the entry mode decision were tested. Data analysis was based on the foreign market entry decision of 113 MNCs. Managerial input rather than secondary

information was used. Key conclusions, limitations, and avenues for future research were discussed.

APPENDICIES

APPENDIX A-1

MICHIGAN STATE UNIVERSITY

GRADUATE SCHOOL OF BUSINESS ADMINISTRATION
DEPARTMENT OF MARKETING AND
TRANSPORTATION ADMINISTRATION

EAST LANSING · MICHIGAN · 48824-1121

MICHIGAN STATE UNIVERSITY
GRADUATE SCHOOL OF BUSINESS ADMINISTRATION
STUDY OF FOREIGN MARKET ENTRY STRATEGIES

Dear

I am doing my doctoral dissertation on multinational corporations' strategic choices regarding the degree of ownership and control when entering foreign markets. I need a good response rate to complete my study and your response to this survey would be greatly appreciated.

In return, I would like to send you a copy of the research findings summarizing important factors which could be of value to your company's future foreign market entry decisions.

Specifically, the summary would provide the following information:

1) key factors determine the appropriate amount of ownership and control in foreign operations.

2) A decision making framework which will assist managers in determining the most appropriate means of foreign market entry such as wholly owned subsidiary, joint venture, and strategic collaborations.

Please note that this questionnaire <u>does not</u> require disclosure of any proprietary information concerning your firm. Please be assured that your responses will be kept <u>strictly confidential</u>.

After you have completed the questionnaire, please return it in the enclosed envelope. It would be greatly appreciated if you could return it <u>as soon as possible</u> so that I can send you the results quickly. Thank your very much in advance for your help in this research.

Sincerely,

Peter Hwang

APPENDIX A-2

A STUDY OF

FOREIGN MARKET ENTRY STRATEGIES

CONDUCTED BY :

PETER HWANG
AS A REQUIREMENT FOR THE DEGREE
OF DOCTOR OF PHILOSOPHY IN THE
DEPARTMENT OF MARKETING AND TRANSPORTATION
MICHIGAN STATE UNIVERSITY

FEBRUARY 1988

APPENDIX A-2 (cont'd.)

WE NEED YOUR RESPONSE!

The purpose of this study is to explore how companies make strategic choices regarding ownership and control of foreign operations. Companies use various entry strategies to exploit global market opportunities. There are two broad categories of means of market entry: ownership participation and contractual arrangement. Examples of ownership participation include: a wholly owned subsidiary; a majority owned, a equally owned, or a minority owned joint venture. Examples of contractual arrangement include: Licensing, Franchising, and Strategic Collaboration. Strategic Collaboration refers to partners from distant markets entering into contractual relationships that tend to be project specific.

This research will address the above means of engaging in international business. However, it is not concerned with exporting operations.

Consider now a recent foreign market entry project of your company with which you are familiar and then answer the following questions in the context of this particular project. (Note: please limit your choice of project to one which was initiated in the last eight years.) If you were not involved in such a project, please pass this questionnaire on to a colleague who has been involved in a recent foreign market entry venture.

Please answer these questions based on the information available at the time your company committed itself to this project---not based on information you have available today. While we are interested in all of the above means of market entry, information regarding joint ventures and contract forms of market entry are of particular interest to us. Such data would be of great value to this study.

APPENDIX A-2 (cont'd.)

1. THE FOREIGN MARKET ENTRY PROJECT

Where is your company headquartered? _____

Which country was this project in? _____

Your company's entry into this country was in 19_____

What was the primary nature of this project?

_____ To obtain raw materials, parts, or components

_____ To set up manufacture and/or marketing operations overseas

_____ To engage in joint research and development

_____ Other (Please specify) _____

_____

2. WHAT MOTIVATED YOU?

For each of the following entry motivations, please indicate the extent they were relevant to this particular project.

	DEGREE OF RELEVANCE						
	NOT AT ALL RELEVANT						HIGHLY RELEVANT
To attack global competitors	1	2	3	4	5	6	7
To monitor global competitors	1	2	3	4	5	6	7
To expand globally	1	2	3	4	5	6	7
To exploit competitive advantages	1	2	3	4	5	6	7
To build global business experience	1	2	3	4	5	6	7
To defend market abroad	1	2	3	4	5	6	7

3. MEANS OF MARKET ENTRY

IF your company owned stock, that is, has an ownership participation on day 1 in this foreign operation, PLEASE GO TO QUESTION 3a.

IF your company involved in a contractual arrangement with this foreign operation instead of, owning stocks, PLEASE GO TO QUESTION 3b.

3a. Please indicate the degree of ownership your company had on day 1 in the foreign operation:

_____ Majority owned _____ Equal partnership _____ Minority owned

Did the host country specify the maximum allowable percentage of ownership participation on your part in this foreign operation on day 1?

_____ No

_____ Yes How much? _____ %

Please specify the percentage of stock owned by your company in this foreign operation on day 1:

_____%

Does your company have any partner(s) in this foreign operation?

_____ No (Please go to question 5)

_____ Yes How many? _____ (Please go to question 4)

APPENDIX A-2 (cont'd.)

3b. Please describe the nature of the contractual arrangement?

_____ Licensing _____ Strategic Collaboration

_____ Franchising _____ Other (Please Specify)

Please go to question 4.

4. DEGREE OF CONTROL

What degree of managerial influence or control did your company have in this foreign operation in making important decisions? Please check one response.

_____Low control, that is, your partner(s) held major decision making power in influencing the potential success of the foreign operation

_____Medium control, that is, your company shared decision making power with your partner(s) in influencing the potential success of the foreign operation

_____High control, that is, your company held major decision making power in influencing the potential success of the foreign operation

If your company and your partner(s) had different views on the way the foreign operation should be managed, how often did your company's views prevail as far as the following decisions are concerned?

	DISAGREEMENT SETTLEMENT						
	OUR VIEWS NEVER PREVAIL						OUR VIEWS ALWAYS PREVAIL
Marketing	1	2	3	4	5	6	7
Manufacturing	1	2	3	4	5	6	7
Finance	1	2	3	4	5	6	7
Research & Development	1	2	3	4	5	6	7
General Administrative issues	1	2	3	4	5	6	7

5. LOSS OF INVESTMENT

Suppose business conditions changed so that you needed to liquidate the foreign operation. To what extent would loss of investments occur in any of the following areas? In other words, to what extent can your company recoup the investments you have made in this project? If no loss would occur please circle "1". If the investment would be a total loss please circle "7".

	LOSS OF INVESTMENT						
	NO LOSS AT ALL						TOTAL LOSS
Market development	1	2	3	4	5	6	7
Human resources	1	2	3	4	5	6	7
Operation facilities	1	2	3	4	5	6	7
Research and development	1	2	3	4	5	6	7

If you were to liquidate the foreign operation, please evaluate the ...

	LOW						HIGH
Size of immediate loss to your company	1	2	3	4	5	6	7
Impact of liquidation on the profitability of other businesses in your company	1	2	3	4	5	6	7

APPENDIX A-2 (cont'd.)

6. LOCATION FAMILIARITY

We would like to know how familiar your firm was with the foreign country involved at the time your company made the commitment. For example, if your company had no experience at all in doing business in this foreign country please circle "1" in the first question. If your company had extensive experience in this foreign country please circle "7".

	FAMILIARITY WITH THE FOREIGN COUNTRY						
	LOW						HIGH
Your company's prior experience in doing business in this foreign country	1	2	3	4	5	6	7
Your company's prior level of knowledge about the business environment of this foreign country	1	2	3	4	5	6	7

	DISSIMILARITY/SIMILARITY OF MARKETS						
Perceived difference between the country where your company is headquartered and this foreign country	VERY DISSIMILAR						VERY SIMILAR
Culture	1	2	3	4	5	6	7
Business customs	1	2	3	4	5	6	7
Political system	1	2	3	4	5	6	7
Legal system	1	2	3	4	5	6	7
Economic conditions	1	2	3	4	5	6	7

7. YOUR PERCEPTIONS OF THE MARKET

Think back about your assessment of the primary market for your products of the foreign operation at the time your company made the commitment. Please indicate your evaluation of the market relative to the usual criteria your management employs.

	PERCEPTIONS OF MARKET						
	LOW						HIGH
Projected short-term (3 years) sales growth	1	2	3	4	5	6	7
Projected long-term (4-10 years) sales growth	1	2	3	4	5	6	7
Prospects for future profits	1	2	3	4	5	6	7
Projected average industry sales growth	1	2	3	4	5	6	7
Industry profit margins	1	2	3	4	5	6	7
Average industry pretax profits	1	2	3	4	5	6	7
Profit stability	1	2	3	4	5	6	7
Market share stability	1	2	3	4	5	6	7
Predictability of future demand	1	2	3	4	5	6	7
Stability of demand	1	2	3	4	5	6	7
Intensity of competition	1	2	3	4	5	6	7
Intensity of technological changes	1	2	3	4	5	6	7

APPENDIX A-2 (cont'd.)

8. POLITICAL RISK

Please indicate your perceptions of the political risk in the host country relative to your home country at the time your company made the investment.

	POLITICAL RISK						
	LOW						HIGH
Variability of the host country's political conditions	1	2	3	4	5	6	7
Uncertainty about host government actions that would limit your ownership or effective control of your interest	1	2	3	4	5	6	7
Uncertainty about host government policies that would constrain your operations	1	2	3	4	5	6	7
Possibility that host country's currency would not be convertible	1	2	3	4	5	6	7

9. THE RELATIONSHIP BETWEEN YOU AND YOUR FOREIGN OPERATION

Please rate the relationship between your company and the foreign operation at the time your company made the investment. For example, if the foreign operation needed crucial inputs from your company, please circle "1" in the first question. If the foreign operation could have been run totally independent of your company, please circle "7".

	RELATION BETWEEN YOUR COMPANY AND YOUR FOREIGN OPERATION						
	LOW						HIGH
Extent to which the foreign operation could be run independently of your company	1	2	3	4	5	6	7
Extent to which the continued success of the foreign operation depended on future inputs from your company	1	2	3	4	5	6	7
Ease with which you could monitor the proper functioning of your foreign operation	1	2	3	4	5	6	7

10. SYNERGY OF THE FOREIGN VENTURE

Please indicate the degree of synergy, that is, the expected mutual benefits your company could share with your foreign operation on day 1. If no synergy was expected, please circle "1". If very high synergy was expected, please circle "7".

	DEGREE OF SYNERGY						
	LOW SYNERGY						HIGH SYNERGY
Management expertise	1	2	3	4	5	6	7
Marketing expertise	1	2	3	4	5	6	7
Manufacturing technology	1	2	3	4	5	6	7
Research & Development	1	2	3	4	5	6	7

Please indicate the extent to which the foreign operation on day 1 was expected to help your company reduce cost and risk:

	LOW						HIGH
Cost reduction expected	1	2	3	4	5	6	7
Risk reduction expected	1	2	3	4	5	6	7

APPENDIX A-2 (cont'd.)

11. THE NATURE OF YOUR KNOW-HOW

The term "know-how" refers to your company's knowledge in doing business. It can be in the areas of management, marketing, production, or R&D. Please answer the following questions in terms of your company's most valuable know-how used in the foreign operation. For example, if there is no difficulty at all to communicate your company's know-how to other parties, please circle "1" in the first question. If it is extremely difficult, please circle "7".

	NATURE OF YOUR KNOW-HOW						
	LOW						HIGH
Difficulty of communicating "know-how" to others	1	2	3	4	5	6	7
Uniqueness of your "know-how" relative to other firms in the industry	1	2	3	4	5	6	7
Difficulty in pricing if you were to sell your "know-how" to other parties	1	2	3	4	5	6	7
Difficulty for others to appreciate the value before they use your "know-how"	1	2	3	4	5	6	7
Ease with which your "know-how" can be transferred to other parties	1	2	3	4	5	6	7
Degree to which your "know-how" is intangible; that is, not directly perceivable	1	2	3	4	5	6	7
Extent to which your "know-how" can be legally protected	1	2	3	4	5	6	7
Ease with which other parties might copy your "know-how" without your permission	1	2	3	4	5	6	7
Ease with which you are able to detect the unauthorized use of your "know-how"	1	2	3	4	5	6	7
Your ability to punish the unauthorized use of your "know-how"	1	2	3	4	5	6	7

12. POST EVALUATION OF YOUR COMPANY'S ENTRY DECISION

Please indicate how satisfied your company is regarding the original ownership/control decision as to this particular entry project?

	LOW						HIGH
Degree of satisfaction	1	2	3	4	5	6	7

Please explain _____

_____

Please identify the SIC code or give the name of the industry in which this project was operated

_____

OPTIONAL: Thank you very much for your time, cooperation, and prompt return of this survey. Your cooperation will be very instrumental to this study. If you would like a summary of the results, please fill out the following:

Name _____

Company _____

Telephone # _____

Your position _____

Address _____

_____

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REFERENCES

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