An Eclectic Theory Model Of International Wholly-owned Entry Mode Selection And Performance

Charles Patrick Woodcock

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AN ECLECTIC THEORY MODEL OF INTERNATIONAL WHOLLY-OWNED ENTRY MODE SELECTION AND PERFORMANCE

by
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The Western Business School

Submitted in partial fulfillment
of the requirements for the degree of
Doctor of Philosophy

Faculty of Graduate Studies
The University of Western Ontario
London, Ontario
May 1994

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ABSTRACT

One of the largest decisions faced by top managers is the selection of an appropriate wholly-owned entry mode when entering a new international market. The decision involves considerable costs and uncertain returns. Yet, it is also the most frequently used mode, a point illustrated by the fact that over 75 percent of all foreign investments utilize a wholly-owned mode. Despite this importance, few researchers have examined this selection decision.

This study uses a multi-method approach to examine the reasons why manufacturing firms select either the acquisition or the build mode when entering an international market, and the performance implications of such a decision. A few prior studies, which have examined these issues using secondary data and inductive approaches, have not been theoretically well developed and provide mixed results. This is the first study that considers the relationship between both selection and performance simultaneously using firm-specific variables controllable by managers in a deductive manner.

An eclectic theory model develops two overarching relationships. The first relates international bounded rationality and international competitive advantage to the selection of either wholly-owned entry mode. The second then relates the entry modes to different performance levels using transaction cost theory and information asymmetry arguments. The theoretical arguments result in a causal model relating various aspects of locational, ownership, and internalization advantages.

The study uses two methodologies. The first examines a Japanese Foreign Direct Investment (FDI) data-set describing Japanese investments into North America. The information is used to test the hypotheses relating international bounded rationality and entry mode selection, as well as evaluating the entry mode selected and performance, while controlling for locational competitive advantages.
The second methodology uses a survey questionnaire approach to develop measures for the hypothesized constructs. A Partial Least Squares (PLS) causal modeling analytical approach examines the interrelationship between the described hypotheses or relationships.

The results of these tests support the postulations that international competitive advantage and international bounded rationality influence the selection of wholly-owned entry modes, and that the build entry mode outperforms the acquisition mode.
ACKNOWLEDGMENTS

I would like to acknowledge the help and support provided by my advisor, Paul Beamish, through the enduring process of developing and implementing this thesis. He provided this support both as a colleague and a friend, and without it the study would not be what it is today.

I would also like to thank my wonderful wife, Trish Roche, who braved a marriage to a Ph.D. student, completed a Masters degree, and raised a son during this time.

To these two people I express my deepest gratitude. Thank you.

Finally, I would like to acknowledge my parents, Phyllis and Bill Woodcock, for their life long-support and encouragement.
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CHAPTER 1 - INTRODUCTION

During the last two decades, the proliferation of papers written about foreign-market entry modes demonstrates the importance of this topic in international business research. Yet, most of this work has either examined entry modes having different ownership levels, or examined a single entry mode on a non-comparative basis. Very little research has been completed on wholly-owned plant entry modes (i.e., the decision to either acquire or build a manufacturing facility in a new international market
d), and no study has looked at both the selection and performance of wholly-owned entry modes simultaneously. Therefore, the objective of this study is to examine the factors that influence the selection and performance of wholly-owned entry modes.

The overarching framework used to investigate these issues is the eclectic theory which has evolved considerably at a theoretical level. A number of empirical studies have already tested the concepts using either macro-level economic data or qualitative industry methodologies (Dunning, 1993). This study, however, takes a more rigorous approach to testing eclectic theory at the firm-level. First, the study develops an eclectic model specifically explaining wholly-owned entry mode selection and performance. Then it tests the model using two different methodologies: a secondary data-set and a questionnaire-survey.

Within this context, this study considers two overarching postulations. First, does competitive advantage, in particular locational competitive advantage, influence entry mode selection and performance? Second, does international bounded rationality influence entry mode selection and performance? In this study international bounded rationality is defined as the lack of knowledge possessed

---

1 A variety of names have been used in prior literature to describe the build mode, including greenfield, organic, and new venture. Build was used most frequently in this study because the responding executives understood the plant build mode more readily than the other terms, particularly if English was their second language.
by a firm's top managers regarding the fundamental functional and market-based competitive advantages and skills that are relevant for it to compete successful in any new international market. This concept is defined more fully in Chapter 4.

IMPORTANCE OF TOPIC
The wholly-owned entry mode is important for a variety of reasons. First, managers are confronted with the wholly-owned entry decision much more often than with other entry mode decisions. In fact, the wholly-owned mode represents the majority of all modes used internationally by firms. Studies have shown that the wholly-owned modes represent in excess of three-quarters of all foreign modes employed (Agarwal & Ramaswami, 1992; Gatignon & Anderson, 1988; Stopford & Wells, 1972). Other studies have indicated that wholly-owned entry modes are the ultimate goal of most firms that enter new international markets. Stopford and Wells (1972, pg. 107-124) found this drive for eventual control present in the majority of companies they studied. Similarly, incremental internationalization theory illustrates that firms tend to move through the various non-wholly-owned modes, and that they eventually adopt the wholly-owned mode when they have developed sufficient knowledge and competitive capabilities. Luostarinen, the architect of incremental internationalization theory, suggests that the wholly-owned subsidiary is the final step in this incremental process (Luostarinen, 1970; Luostarinen & Welch, 1990). In conclusion, the wholly-owned entry mode decision appears to be made much more frequently than other types of entry-mode decisions.

Second, the capital, and therefore, resources expended on the wholly-owned modes are enormous. Between 1968 and 1988, the annual investment by U.S. companies for acquisitions grew from $43.6 billion to $246.9 billion, and this 1988 investment represented approximately 40 percent of all U.S. corporations' capital expenditures during that year² (Weiner, 1989; Weston & Chung, 1990).

² These figures include both foreign and domestic acquisitions.
Between the years 1979 and 1982 no less than 77 percent of all investments by foreign direct investors into the U.S. were for acquisitions (Belli, 1983). Furthermore, relative to other types of entry modes the wholly-owned mode represents a far greater commitment of resources by the company. Therefore, the fact that managers facing this decision are leveraging a greater portion of their firm’s resources relative to other entry mode decisions makes the magnitude of the wholly-owned entry decision very large relative to these other decisions.

Finally, despite the overwhelming importance of this decision, little empirical research has compared the two wholly-owned entry modes and none has simultaneously examined both the selection and performance issues. Therefore, empirically-based practical advice for managers making this decision is limited or nonexistent. Many articles have been written prescriptively about either entering a new foreign market or acquiring a new company or advising managers implementing build growth strategies. However, there is very little advice for the manager contemplating the selection decision of wholly-owned entry modes when the firm is entering a new foreign market. Furthermore, research specific to the acquisition mode of entry has broadly concluded that acquirers, in general, do not benefit financially from acquisitions. Yet despite the poor financial returns, acquisitions continue to be one of the most frequently utilized modes for international diversification and growth. The question then becomes: How does the financial performance of the build mode compare to that of the acquisition mode? Clearly, managers, owners and other stakeholders would benefit from research that explores the broad range of factors affecting mode selection and performance.

THE TOPIC OF RESEARCH
The topic under investigation, the acquisition versus the build decision, is more graphically illustrated in Figure 1.1 as the shaded area (see page 4). This figure illustrates the economically rational decision-making process that managers
contemplate when entering a foreign market. In theoretical terms this process has been discussed relatively widely as the internationalization stages approach to international investment and the wholly-owned selection process is the final stage in this incremental process (Luostarinen, 1970; Luostarinen & Welch, 1990).

FIGURE 1.1

PROPOSED THEORETICAL REGION OF INVESTIGATION

The Foreign Direct Investment Decision  The Ownership Decision  The Wholly-Owned Mode Decision

Foreign Market Entry

No Direct Investment  Non-Wholly-Owned Investment  Internal Development (BUILD)

Direct Investment  Wholly-Owned Investment  External Development (ACQUISITION)

The question investigated in this study is as follows:

Why do firms select either of the wholly-owned entry mode (i.e., buy versus build) when entering a new international market on a manufacturing plant basis, and what are the performance implications?

This question examines two relationships. First, it examines the relationship between environmental and organizational factors and the entry mode selected; and second, it examines the relationship between the entry mode selected and performance. These relationships are illustrated in Figure 1.2.
Several prior studies have examined these relationships, but none has looked at both relationships simultaneously. Conceptually, this creates a variety of problems. The first relationship between the influences and the mode selected does not consider mode performance, but it assumes that performance has been maximized by the managers. The second relationship between entry mode selected and performance neglects to investigate the conditions under which such the selection took place. Thus, neither relationship, when examined individually, provides academics or managers with a complete representation of what is occurring in this decision making process.

This study attempts to rectify this oversight by examining these relationships simultaneously so that these contingent relationships can be defined and managers can be guided appropriately with respect to selecting the higher performing entry mode given their firm's situation.
SUMMARY OF PROPOSED THEORY AND METHODOLOGY
This study focuses on two theoretical notions to explain wholly-owned entry mode selection. First, bounded rationality influences the mode selected by a manager and, ultimately, the performance of the mode. Second, a firm’s locational competitive advantage influences its selection of an entry mode, which in turn influences the performance.

These notions are theoretically developed in several ways. The overarching theoretical concept used is Dunning’s eclectic theory (Dunning, 1993). Several other micro-level theories (i.e., at the firm-level and below) are used to characterize causality within the eclectic theory model. The three primary micro-level theories are Porter’s (1990) theory of national competitive advantage, Simon’s (1957) theory of bounded rationality, and Williamson’s (1970; 1990) transaction cost theory.

This study tests the developed theoretical model in two ways. A secondary dataset test using Japanese wholly-owned investments into North America initially tests the relationship between ownership and internalization advantage while controlling for locational advantage. Then a questionnaire-survey methodology looks at the causal relationships between both locational and ownership advantages and internalization advantage. This latter method improves on many of the internal validity and reliability concerns that are present in the initial test. In addition, the multi-method approach improves the overall validity and generalizability of the results.
OUTLINE OF STUDY

The research program carried out in this study is described in the subsequent nine chapters. Outlines of these chapters are as follows:

Chapter 2: This chapter reviews studies that previously examined the theoretical relationships considered in the research question: the influences on wholly-owned entry mode selection, and the relationship between the entry mode selected and performance.

Chapter 3: This chapter reviews several general theories of the international firm. It concludes by selecting the eclectic theory as the overarching framework in which to study the wholly-owned entry mode.

Chapter 4: This chapter develops hypotheses specific to the individual theoretical relationships in the eclectic theoretical framework. Several sub-theories develop theoretical arguments within the eclectic theoretical framework and provide arguments supporting the general postulations that competitive advantage and international bounded rationality influence entry mode selection and performance.

Chapter 5: This chapter describes the first of the two methodologies used in this study. A Japanese Foreign Direct Investment data-set tests the generalized postulations that international bounded rationality influences entry mode selection and that entry mode selection influences performance.

Chapter 6: This chapter examines the results from the first methodology which considers two initial postulations and uses the Japanese Foreign Direct Investment data-set.
Chapter 7: This chapter describes the second methodology, a questionnaire-survey approach which considers all of the hypothesized relationships using multi-item measurement techniques.

Chapter 8: This chapter examines the results from the second methodology by looking at all of the hypothesized relationships in an empirically derived causal model.

Chapter 9: This chapter discusses the results of both methodologies as they relate to the theoretical model developed in Chapters 3 and 4.

Chapter 10: This chapter considers the theoretical and practical implications of this study and outlines possible future research that could evolve from this stream of research.
CHAPTER 2 - LITERATURE REVIEW

Prior wholly-owned entry mode research can be broken into two streams. The first and most important is the comparative wholly-owned entry mode research stream because it allows the reader to compare two different entry modes and evaluate which is the more appropriate given a specific situation. The second research stream simply examines an entry mode independently from all other entry modes. Clearly, this second stream is not as valuable as a comparative guide, but it does provide some insight into the success and nature entry modes on an individual basis. This chapter will initially look at the comparative research stream, and then it will attempt to summarize the vast amount of pertinent research in the non-comparative research stream.

COMPARATIVE WHOLLY-OWNED ENTRY MODE RESEARCH

There is a distinct paucity of comparative wholly-owned entry mode research, particularly in relation to the extensive amount of research on international entry modes in general. The few studies that do exist fall into two categories which relate to the two previously-defined relationships in wholly-owned research: those that consider influences on entry mode selection and those that consider entry mode performance. The author is aware of no research study, prior to this one, that has simultaneously investigated both of these relationships.

The Relationship Between the Influences on Entry Mode Selection and Mode Selected

The two contexts under which the relationships have been studied are the international and the domestic. The international context will be considered first because it is more relevant to this internationally-based study. Then research using the domestic context will be examined to determine if the inferences made in the international context are supported in the domestic context.
**International Research**

Four studies, three published empirical studies and one unpublished thesis, have considered the question of international wholly-owned entry mode selection. A fifth study, included in this section, implicitly compares the acquisition mode to the build mode. These studies are summarized in Table 2.1.

**TABLE 2.1**

INTERNATIONAL MODE SELECTION RESEARCH ON WHOLLY-OWNED MODES:

<table>
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<th>Methodology</th>
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<tr>
<td>Yeung (1986)</td>
<td>Foreign market entry by Swedish MNEs into 32 countries, modes A &amp; B</td>
<td>- empirical - using economic data from 1969 to 1978, 77 parent firm 325 entries</td>
<td>Environment</td>
<td>-</td>
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| Rogers & Singh (1986) | Foreign market entry into the U.S. by JV A & B | - empirical - large secondary data set - large data set 275 entries, 175 from 1981 to 1985, used same dataset as before but more recent, multivariate & multifractal data from firms, all types & sizes of firms, large service sector firms, etc. | Environment | | **<sup>**</sup> | **<sup>**</sup> | 1. - used multiple measures to delineate cultural distance |
| | | | 1. Cultural distance(1) | | | | | 2. - everything is relative to A |
| | | | 2. Uncertainty avoidance(1) | | | | | 3. When Japanese data are taken out, these two variables become non-significant |
| | | | 3. Industry | | | | | 4. Diversification is not clearly defined in article, it is defined as company-wide strategy |
| | | | 4. Research & Development | | | | | |
| | | | 5. Advertising | | | | | |
| | | | 6. Multinational experience | | | | | |
| | | | 7. Parent diversification | | | | | |
| | | | 8. Joint venture ownership for new sub | | | | | |
| | | | 9. Subsidiary’s size | | | | | |
| | | | 10. Subsidiary’s size | | | | | |

| Caves & Markus (1986) | Foreign market entry by MNEs into the US, modes tested are A & B | - empirical - large secondary data set - large database size from 1975 to 1981, 153 entries & 6,600 observations, all types & sizes of firms (e.g., service manufacture) | Industry | | | | 1. Used investment amount in the country |
| | | | 1. Availability of candidates (e.g., in na) | | | | | 2. Subsidiaries in other countries |
| | | | 2. Minimum entry size (5) | | | | | 3. Multinational firms |
| | | | 3. Industry concentration (6) | | | | | 4. % increase in MNEs |
| | | | 4. Industry growth (inflation adjusted) | | | | | 5. Entry in diversified, high-growth |
| | | | 5. R&D expenditures (7) | | | | | |
| | | | 6. Advertising expenditures (7) | | | | | |
| | | | 7. Durability goods (dummy variable) | | | | | |
| | | | 8. Subsidiary’s size relative to parent size (10) | | | | | |
| | | | 9. Multinational experience | | | | | |
| | | | 10. Specialization strategy of entry (3) | | | | | |
| | | | 11. Parent diversification strategy | | | | | |
| | | | 12. Joint venture ownership for new sub | | | | | |
| | | | 13. Subsidiary’s size | | | | | |
| | | | 14. Joint venture ownership for new sub | | | | | |
| | | | 15. Subsidiary’s size | | | | | |

| | | | 16. Subsidiary’s size | | | | | |

<p>| Rogers &amp; Singh (1986) | Foreign market entry into the U.S. by JV A &amp; B | - empirical - large secondary data set - large data set 275 entries, 175 from 1981 to 1985, used same dataset as before but more recent, multivariate &amp; multifractal data from firms, all types &amp; sizes of firms, large service sector firms, etc. | Environment | | | | |
| Rogers &amp; Singh (1986) | Foreign market entry into the U.S. by JV A &amp; B | - empirical - large secondary data set - large data set 275 entries, 175 from 1981 to 1985, used same dataset as before but more recent, multivariate &amp; multifractal data from firms, all types &amp; sizes of firms, large service sector firms, etc. | Environment | | | | |
| Rogers &amp; Singh (1986) | Foreign market entry into the U.S. by JV A &amp; B | - empirical - large secondary data set - large data set 275 entries, 175 from 1981 to 1985, used same dataset as before but more recent, multivariate &amp; multifractal data from firms, all types &amp; sizes of firms, large service sector firms, etc. | Environment | | | | |
| Rogers &amp; Singh (1986) | Foreign market entry into the U.S. by JV A &amp; B | - empirical - large secondary data set - large data set 275 entries, 175 from 1981 to 1985, used same dataset as before but more recent, multivariate &amp; multifractal data from firms, all types &amp; sizes of firms, large service sector firms, etc. | Environment | | | | |
| Rogers &amp; Singh (1986) | Foreign market entry into the U.S. by JV A &amp; B | - empirical - large secondary data set - large data set 275 entries, 175 from 1981 to 1985, used same dataset as before but more recent, multivariate &amp; multifractal data from firms, all types &amp; sizes of firms, large service sector firms, etc. | Environment | | | | |
| Rogers &amp; Singh (1986) | Foreign market entry into the U.S. by JV A &amp; B | - empirical - large secondary data set - large data set 275 entries, 175 from 1981 to 1985, used same dataset as before but more recent, multivariate &amp; multifractal data from firms, all types &amp; sizes of firms, large service sector firms, etc. | Environment | | | | |
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<table>
<thead>
<tr>
<th>Article</th>
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<th>Methodology</th>
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<th>A</th>
<th>ID</th>
<th>JV</th>
<th>Notes</th>
</tr>
</thead>
</table>

| Dubin (1975) | Foreign market investment by U.S. MNEs | Surname analysis of large U.S. MNEs entering other countries (1, 2, 3) data 1968 to 1992 | Size: 1, Diversification strategy, 2: Firm size | + (2) | - (2) | - (2) | Significant but not statistically significant. |

Notes on Abbreviations:

Entry Modes:
- A: indicates acquisition
- ID: indicates internal development
- JV: indicates joint venture.

Hypotheses:
- + indicates that as this influence increases in magnitude the factor is positively favored or impacted.
- - indicates that as this influence increases in magnitude the factor is negatively favored or impacted.
- np indicates that no prediction was made, either due to lack of information or conflicting hypotheses.
- A sign (e.g., + or -) indicates that the analysis subsequently delineated this direction.
- na not applicable because the mode was not involved in this hypothetical analysis.

Significance:
- * p < 0.10
- ** p < 0.05
- *** p < 0.01
- [] indicates that the findings were not in the predicted direction but were significant.

The earliest study was Dubin’s unpublished thesis (1975) which looked at the reasons why large U.S. multinational enterprises (MNEs) selected either the acquisition or build mode when investing in foreign markets. His thesis looked exclusively at the investment decision and did not consider an investment context such as the initial market entry versus a secondary market entry. Therefore, initial entry was not differentiated from ongoing investments. International research has confirmed the importance of considering the
investment timing context. In particular, internationalization stages research has shown the importance of differentiating between the initial entry involving geographic diversification, and subsequent investment decisions involving no geographic diversification (Luostarinen, 1970; Luostarinen & Welch, 1990).

Dubin's thesis, which used government economic data from 1948 to 1967, found that a parent firm's product diversification strategy positively influenced, and organizational size negatively influenced, the selection of the acquisition mode. Dubin also considered different economic time periods in this study. His analysis over different time periods indicated that the above relationships were unstable or dependent upon time-related factors (Dubin, 1975). A major weakness of this study was its lack of control variables, a weakness which may partially account for the instability of the results over time.

Further support for Dubin's findings appears in Wilson's study where he implicitly compared the acquisition mode to the build mode (Wilson, 1980). Wilson looked at the propensity of both U.S. and foreign MNEs to acquire in foreign markets during the 1967 to 1971 period. This analysis, which included 389 cases in the Harvard Multinational Database, assessed only a firm's propensity to acquire and did not explicitly consider the build mode. Furthermore, similar to Dubin's work, this study did not control for the investment context or geographic diversification.

The results indicated that prior product diversification positively influenced, and the time spent in the host-country prior to the investment negatively influenced, the number of acquisitions. In addition, dummy variables controlling for both the home and host countries were significant, but no logic provided for their significance or direction of influence. The results also found that the degree of foreign experience measured by the number of foreign subsidiaries a firm had worldwide was not significant. The lack of comparison to the build mode and the
missing control variables, however, limit one's ability to explain the mode choice decision. The study did not consider performance.

Both Wilson's (1980) and Dubin's works were based on the notion of aggressive and defensive strategic models. The aggressive model was based on Vernon's (1971) product life cycle model which hypothesized that multinationals invest in order to capitalize on some competitive advantage. The defensive model was based on Knickerbocker's (1973) follow-the-leader concept and Graham's (1975) exchange-of-threat model. These last two notions are models applicable to oligopolistic competitive situations and involve risk reduction behavior due to information uncertainty. The results of these studies provide some support for the application of both organizational characteristics and competitive position models to acquisition or build mode selection decisions.

The first and most notable study to date on foreign, wholly-owned entry modes was completed by Caves and Mehra (1986). Their research used U.S. Bureau of Census data to look at foreign-market entry into the U.S. during the 1975 to 1981 period. A major portion of this study assessed the entry mode selection decision of 138 foreign firms investing in the U.S. market. In addition to developing a variety of new hypotheses and conclusions based on relationships specific to the industry- and firm-level of analysis, they presented results which supported some prior findings from the above research. The underlying theoretical model in this study is implicitly a Bain IO type economic model based on the industry structure-behavior-performance paradigm. However, the specific hypotheses are extracted from a diverse set of notions, many of which are more pragmatic in nature, as is described below.

Caves and Mehra divided their research into two separate analyses. The first analysis considered first order (i.e., direct) effects. In this section, their first hypothesis suggested that as the size of parent increases the firm has a greater propensity to select the acquisition mode. Their reasoning was that a large firm
has the financial resources to acquire another firm, while a small firm may not have the required financial resources. In addition, larger firms tend to be more risk averse relative to smaller entrepreneurial firms, and therefore, these larger firms have a propensity to reduce the uncertainty by acquiring a firm that has a known market presence and financial history. Firm size was measured using the overall annual sales of the multinational firm.

Their second hypothesis related low multinational experience to a preference for the acquisition mode because a firm lacking foreign experience would want to purchase this experience if possible. Multinational experience was operationalized as the number of countries the firm had previously entered.

Caves and Mehra developed two other hypotheses relating strategic diversification to the acquisition mode. The first hypothesis related product specialization to the build entry mode. The reasoning here was that a specialized firm would have specialized skills and resources that could not be found in most other firms. Therefore, such a firm would be forced to build, or develop its specialized abilities, in a new market. The second hypothesis related a firm’s product diversification to the acquisition mode. The reasoning was essentially the converse of that provided in the prior hypothesis: that a firm managing a diversified set of resources would have a broad selection of firms from which to acquire in a new market.

The measurement proxy for product specialization was a dummy variable set to one if the entry involved a product diversification or if the firm’s production was limited to a three-digit SIC (Standard Industry Code); otherwise the variable was set to zero. This operationalization is somewhat ambiguous because it is suggesting that both past parent product diversification and entry diversification are the same thing. However, past diversification is a good reasoning for the

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3 The increased risk of the build mode compared to the acquisition mode has never been empirically validated, to this author's knowledge.
present entry mode selection, but diversification at the entry mode stage is not a good measure for influences that may have affected the selection of the entry mode. The operationalization of diversification was the number of two-digit industries within which the firm operated. A variety of researchers have indicated that the three-digit SIC measurement best approximates a related versus unrelated product industry differentiation, and that a two-digit SIC measurement has produced problems (Bettis, 1981; Christensen, de Rocha, & Gertner, 1987; Christensen & Montgomery, 1981; Grant & Jammie, 1988; Grant, Jammie, & Thomas, 1988; Rumelt, 1982). It should be noted that the variables and hypotheses throughout Caves and Mehra’s study used two, three, and four digit SICs without any consistency or explanation. This problem of consistency of industry definition is present in a number of other operationalized variables in this study.

Caves and Mehra also developed two home-country oligopolistic game-type hypotheses. The first hypothesis suggested that the first foreign firm entering from a specific industry and country would tend to use the acquisition mode. This argument suggested that the first firm would have an information disadvantage and therefore would be inclined to acquire information through an acquisition. In other words, it would attempt to reduce any information uncertainty by using the acquisition mode. Subsequent investors would prefer the build mode because they would have greater information available to them due to information leakage from the first firm. The measurement proxies used for the first firm from a specific industry were based on the earliest entrant from a four-digit industry, and the measurement of the number of firms coming from a home-country was based on the percentage increase in the number of firms in a two-digit industry.

The two researchers also developed a variety of hypotheses relating industry structure to entry mode. The minimum efficient scale of production size was positively related to the acquisition mode because oligopolistic game theory suggests that a build entry will increase production capacity and drive the price
of goods down. Therefore, an entrant will tend to select the acquisition mode. This same reasoning was used to relate industry concentration will to the acquisition mode. They operationalized the minimum efficient scale of production using subsidiary employee numbers divided by total employees in the industry, and industry concentration using the percentage of shipments in the U.S. market controlled by the largest four sellers. The minimum efficient scale of production operationalization was a poor proxy for the theoretical concept, a concern admitted by Caves and Mehra. However, a better variable was unavailable in the secondary database.

The industry growth rate hypothesis had a nonlinear conceptual prediction. On the one hand, the relationship between low industry growth and low acquisition prices tends to induce acquisitions; whereas a high growth rate may demand a fast entry strategy requiring a firm to acquire rather than build in a new market. They made no prediction for a medium growth industry, although they implied by the nonlinear description of the growth-to-entry relationship that such an industry would at least not favor the acquisition mode. Industry growth was measured by the inflation-adjusted growth of industry sales in the U.S.

A final hypothesis, relating to the number of firms in the host-country industry, predicted that the greater the number of firms in an industry the greater the probability a firm would acquire. They based their reasoning on the fact that there would be an increased probability of an acquisition candidate existing if there were more firms in the industry. The number of firms in an industry was operationalized using the number of firms in a four-digit industry code.

Finally, they used control variables to define industries having high barriers to entry: high research and development expenditures, high media advertising expenditures, and durable goods industries. The two expenditure variables were operationalized as a percentage of sales, and durable goods industries were treated as a dummy variable based on industry type.
The results of this study suggest that a firm will preferentially select the acquisition mode if it has multinational experience and prior product diversification, and if the industry entered is highly concentrated\textsuperscript{4,5}. Two dummy variables, one indicating durable goods' industries and the other indicating joint venture control mode, were associated with the selection of the build mode. Additionally, extremely high and low industry growth was found to be positively related to the selection of an acquisition. The remaining hypotheses and control variables were non-significant.

It is noteworthy that the hypothesis for multinational experience predicted a negative association between prior international experience and the acquisition mode, but the results actually contradicted this hypothesis. Caves and Mehra cited support for the initial hypothesis from Wilson's study (1980), which found that the amount of time spent internationally was negatively correlated with the acquisition mode. However, Wilson's study did not explicitly consider build modes, and his results showed that the number of international subsidiaries was unrelated to entry mode. Caves and Mehra explained this contradictory result by suggesting that a firm having international experience may have routinized specific skills for searching and making acquisitions in new markets. Therefore, they tended to prefer the acquisition mode.

Caves and Mehra also assessed whether the size of the initial market share captured by the firm in the new market was associated with entry mode. They hypothesized that the acquisition mode captured a larger market share because the firm was in fact immediately buying market share. The build mode, on the other hand, would require some time to develop an equivalent market presence.

\textsuperscript{4} Industry concentration was a bimodal measurement which was 1 (one) if the top four firms in the industry represented 45 percent or more of the shipments in the industry; otherwise it was 0 (zero).
\textsuperscript{5} All relationships detailed in this literature review are significant ($p < 0.10$) unless otherwise stated.
The results indicated that the acquisition mode was associated with a higher initial market share.

A second set of analyses attempted to examine second order (i.e., indirect) effects on entry mode selection. In this set of analyses the researchers wanted to see if industry type moderated the influence of any of the previously-defined hypotheses. To assess the moderating effect of industry, they used three industry variables to classify the industries. These variables were research and development expenditures, advertising expenditures, and durable versus non-durable goods. They split the analyses into two mathematical models, those having high values and those having low values of the industry characteristics\(^6\). They then compared these dichotomous industry models to determine if industry type moderated the hypotheses developed for entry mode selection and market presence.

Unfortunately, the statistical results of this second analysis show some indications of industry influences on entry mode selection, but the analysis deviates from commonly accepted statistical practices because one can not assess the statistical significance of one set of relationships to another set of relationships which have been independently derived. The significance of each relationship has been developed independently and therefore, can only be compared in that particular mathematical statistical test. Two independent statistical tests can not be compared unless it is under very specific considerations\(^7\).

Despite its theoretical and analytical imperfections, this research is the most comprehensive to date on this subject. There are a variety of interesting

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\(^6\) These split samples were created based on whether the case's variable in question was above or below the sample mean.

\(^7\) Two statistical problems are present in the comparison and analysis provided by Caves and Mehra (1988). First, there is a difference in statistical powers between the two derived models. In one of the models the power to find significance may be greater than in the other model, because none of the compared models had similar sample sizes. Second, the significance of the relationship is relative to the null hypothesis, not each other as the analysis of the results implies.
conclusions delineated, as well as some additional inferences made regarding the relationship between acquisition propensity and industry market structure. However, in order to the consistency and clarity of the hypotheses under consideration, future analyses should attempt to use an overarching theoretical approach to explain the diverse elements of entry mode selection. Furthermore, the methodology must move beyond a secondary data analysis because it limits the reliability and validity of the measures of the theoretical concepts being considered. It is also interesting to note that, although much of their logic and the variables studied were at the industry-level of analysis due to the availability of secondary data, the majority of the significant hypotheses were at the organizational-level of analysis.

Kogut and Singh’s study (1988), using the same database as Caves and Mehra (1986) but over a different time period (i.e., 1981 to 1985), examined many of the same variables as Caves and Mehra, as well as the influence of national culture on entry mode selection. They considered three modes: the acquisition, build, and joint venture modes.

Kogut and Singh’s theoretical development does not use an overarching theoretical paradigm; rather it develops hypotheses from a variety of different theoretical and non-theoretical arguments. The first hypothesis is a restatement of a finding in Dubin’s (1975), Wilson’s (1980), and Caves and Mehra’s (1986) studies. The hypothesis is that diversified firms tend to select the acquisition mode over the build mode. However, Kogut and Singh provide an interesting logic for this hypothesis. They suggest that diversified firms select the acquisition mode over the build mode because these firms are competing on a basis of superior management and production efficiencies. In other words, because in a diversified company overarching financial, administrative, and organizational integrating skills are strong, the firm can compete on economies of scale and scope. Therefore, it can effectively integrate acquired firms more
readily into its competitive strategy than can non-diversified firms that rely more on functional level skills.

They also developed and tested other organizational-level hypotheses relating to country experience, multinational experience, and parent asset size. Country experience, although tested, was not hypothetically linked to either the acquisition or build mode, presumably because no logic could be deductively advanced for such a relationship. The hypothesis for multinational experience suggested that it should be correlated with an acquisition mode because of the firm's ability to bear the risks of an acquisition. However, this reasoning suggested without providing evidence that acquisitions are more risky than build developments - a proposition which is contradicted in Wilson's (1980) theoretical development. The hypothesis for asset size suggested that it should be correlated with acquisition because of the financial resources available to the firm for acquiring a firm in a new market. However, the requirement for resources may be industry-dependent rather than mode-dependent; for example entering some industries that have high barriers to entry such as the automotive industry, using a build entry may be as onerous as selecting an acquisition entry. Furthermore, there is the implicit assumption that the resources required are mode-dependent. This relationship would appear to be also influenced by type of resources required and the industry and market being entered as well as by a variety of other considerations.

Industry-level hypotheses include tests for industries having high research and development expenditures, and high advertising expenditures. However, Kogut and Singh tested these relationships inductively, because no deductive logic was provided. In addition, they used a dummy variable to both test and control for the influences of the manufacturing and service sectors; again, they did not offer any predictions.
They presented country-level hypotheses for cultural distance and uncertainty avoidance. These hypotheses did not predict a direction, but they discussed discussions of information availability and risk to justify a possible relationship.

The results indicate that cultural distance, cultural uncertainty avoidance, and non-U.S. asset size are all associated with the selection of the build entry mode, while U.S. subsidiary asset size is associated with the acquisition mode. This latter conclusion supports Caves and Mehra’s (1986) findings. It is interesting to note that both asset-size hypotheses were significant, yet opposite.

Variables that were not significantly related to selection included the amount of advertising, amount of research and development, prior diversification, country experience, multinational experience, and a dummy variable differentiating service from manufacturing firms (Kogut & Singh, 1988).

This research program used the same methodological approach to that of Caves and Mehra, and therefore was constrained in many of the same ways. A particular concern for the researchers was their use of proxy variables for theoretical concepts and they particularly expressed concerns with the cultural variables. They stated that the results should be interpreted with care because abstracting values from a data-set that has conveniently and obtusely operationalized those values for other purposes clearly creates reliability and validity concerns (Kogut & Singh, 1988).

More recently, Zejan (1990) repeated parts of Caves and Mehra’s (1986) research, but looked at Swedish firms entering foreign markets. Zejan’s theoretical approach was IO economic in nature, stressing information and risk avoidance. However, individual hypotheses and theoretical arguments were only cursorily developed based on these notions.

Zejan was concerned with the generalizability of Caves and Mehra’s research, particularly as it applies to other nationalities. In addition, Zejan was interested
in two macro-economic variables and country-level variables: the country's economic size, and the country's stage of economic development. The results of this study indicate that economic development and entry mode timing, as well as prior diversification, are positively associated with the selection of the acquisition mode; whereas industry growth is positively associated with the selection of the build mode. Non-significant hypotheses included the influence of economic size and multinational experience. Methodologically, this research was constrained by the same economic, secondary data base approach taken by prior studies.

The above research studies examined a variety of hypotheses, some of which were tested and received support in more than one study. The relationships receiving such support associated parent size and diversification strategy to mode selection. It is interesting to note that, although these studies used secondary data-sets having more country- and industry-level variables than organizational- and management-level variables, the hypothetical relationships showing the strongest support were from the organizational- and managerial-level of analysis.

In spite of the above described duplications, there are many inconsistent results across these studies. In fact, for every hypothetical relationship that was duplicated, there was at least one result that challenged it by either a contrary or non-significant outcome. These inconsistencies are probably due to methodological reliability and validity problems.

For example, the parent's prior diversification strategy is supported in all but one study, Kogut and Singh's (1988). The influence of firm size is significantly supported in all studies except that of Wilson (1980). However, Wilson's research is constrained by a sample that includes only very large MNEs. Caves and Mehra (1986) found multinational experience was significant and substantive, yet Kogut and Singh (1988) and Zejan (1990) discovered this variable was non-significant. Wilson (1980) determined multinational experience
was significant but opposite in direction to the outcome of Caves and Mehra. Finally, Zejan (1990) found that the timing of entry relative to that of competitors and a firm’s home-country environment was supported and significant; but Caves and Mehra (1986) and Kogut and Singh (1988) found these two variables were non-significant. Thus, there is considerable ambiguity amongst these studies.

The major constraint of this research stream, to date, has been its reliance on a mosaic of theoretical notions, and its use of methodologies employing secondary data. The diverse theoretical notions taken by all of these studies both between and within them is unproductive. The ultimate goal of research is to develop a consistent and parsimonious logical model to explain a phenomena’s - none of these studies have taken such an approach. From this perspective these studies are more inductive than deductive in nature which is consistent with their inceptive nature. Clearly, future research must attempt to develop a more overarching approach.

The historical methodologies are also limiting because they consistently use secondary data, an approach referred to herein as an economic approach. Such an economic approach has several implications. First, hypothetical or theoretical developments are explored at a high level of aggregation compared to the organizational and intra-organizational perspectives taken by strategic research. As a result, the amount of nomological or causal validity is often limited. Causality is much easier to confirm if the variables are not just related through individual hypotheses that associate pairs of variables, but are also causally related in an overarching model (Cook & Campbell, 1979). An example would be the influence of host nationality on the mode selection preference, which is the relationship that Wilson used (Wilson, 1980). Thus, all of the above research has ignored potentially significant explanatory variables at the organizational- and managerial-level. Clearly, more complex models that include managerial- and organizational-level variables would be helpful in explaining causality more
thoroughly, and would provide managers with greater insight as to how they could manage the business decision.

A secondary consideration that evolves from the economic theory approach is the methodology used in the above research. Consistent use of economic methodologies tends to produce research low on internal validity because of the correlative analyses taken, the non-causal theoretical models developed, and the use of proxy variables. Although all of these problems relate to the above studies, the two most detrimental to internal validity are the lack of causal deductiveness and the use of the single measure proxy measures.

Economic studies use secondarily-sourced data collection because it provides the only way of collecting often difficult to obtain information, and it represents a non-biased source of information which improves the measurement reliability. The reasoning for reliability improvement is that the researcher, who is completely divorced from the data collection, can not bias the information collected. However, this approach creates other internally-related reliability and validity problems. Reliability concerns arise simply because the researcher is unaware of collection problems and cannot control for known sampling problems (Cook & Campbell, 1979). The most severe validity problem is related to construct validity, which is impaired because the researcher has no control over the operationalization of the variable. Therefore, the researcher often uses an operationalized variable that does not clearly and fully characterize the theoretical concept being studied. An example of this weakness occurred when Caves and Mehra used the operationalized variable of subsidiary employment divided by total industry employment as a substitute for the minimum economic plant size (Caves & Mehra, 1986). Another example is the absence of performance as a dependent variable in all of these selection decision studies. Performance has been omitted in the above research because it was not available in the secondary databases. Thus, many of the above results could differ simply because of their operationalized definitions.
A final observation about the above research studies is that they have not used an overarching paradigmatic approach, but rather have at times developed the causal relationships in a selective manner.

Clearly, it would be beneficial from both a theoretical and a methodological perspective if the researcher adopted an overarching theoretical model that included organizational- and managerial-level hypotheses and variables. Theoretically, this would improve the ability of the model to provide greater explanatory powers; and methodologically, it would improve the reliability and validity of the research. A final concern with this literature is the implicit assumption that profitability is the motive for strategy selection; yet none of the studies explicitly used performance indicators as a dependent variable.

**Domestic Research**

Domestic, wholly-owned entry mode research has taken a similar approach to that of international, wholly-owned entry mode research, although the domestic research has employed more organizational-level theory constructs to elucidate organizational- and managerial-level relationships. The studies on domestic wholly-owned entry mode selection are summarized in Table 2.2.

**TABLE 2.2**

**DOMESTIC MODE SELECTION RESEARCH ON WHOLLY-OWNED MODES:**

<table>
<thead>
<tr>
<th>Article</th>
<th>Modes Investigated</th>
<th>Methodology</th>
<th>Concepts Investigated</th>
<th>A</th>
<th>ID</th>
<th>JY</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chatterjee (1990)</td>
<td>Selection of A versus ID</td>
<td>- empirical using 47 randomly selected Fortune 500 companies between 1991 and 1996 - used data bases</td>
<td>Industry 1. Concentration ratio 2. Sales growth 3. Ratio of active to sales growth</td>
<td>***</td>
<td>***</td>
<td>na</td>
<td>1. This is an interaction term consisting of the first two variables. Note: sales growth was not significant. 2. Predicted that growth would not have a bearing on selection outcomes if not significant. 3. Theory predicting that other interactions would be present (resources and diversification), but they were not present.</td>
</tr>
<tr>
<td>Anis, Lu, and Zentov (1995)</td>
<td>Choice of A versus ID</td>
<td>- empirical using Complutal data from 1977 to 1984 - selected the largest 500 firms which contained enough data</td>
<td>Firms 1. Parent diversification strategy 2. Manager controlled 3. Owner controlled 3. Manager experience (parent predominate investment mode based on assets &amp; capital exp.)</td>
<td>***</td>
<td>***</td>
<td>na</td>
<td>1. This opposite hypothesis is not stated, but is the reverse 2. Reverses the prior hypothesis 3. Depends upon predominate mode 4. This study contrasts 2 theories</td>
</tr>
</tbody>
</table>
### Table 2.2 (continued)

<table>
<thead>
<tr>
<th>Article</th>
<th>Modes Investigated</th>
<th>Methodology</th>
<th>Concepts Investigated</th>
<th>A</th>
<th>ID</th>
<th>JV</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>No. 1982</td>
<td>- Market entry by A or ID</td>
<td>- Empirical PIMS data base from 1972 to 1979 for 50 entrees into 31 new markets</td>
<td>- Large firms of all types</td>
<td>Environment</td>
<td>1. Acquisition year (B of timing)</td>
<td>*</td>
<td>-</td>
</tr>
<tr>
<td>Pits (1977a)</td>
<td>- Considered A &amp; ID modes (1)</td>
<td>- A qualitative study of 17 large, protean &amp; diversified firms</td>
<td>Conclusions</td>
<td>1. Found that these firms clearly had a propensity to enter diversify through the use of A &amp; ID. There were no firms that existed in the 60 to 60% range of sales diversification, which had occurred by 1977.</td>
<td>*</td>
<td>**</td>
<td>-</td>
</tr>
<tr>
<td>Pits (1977b)</td>
<td>- Considered A &amp; ID modes (1)</td>
<td>- A qualitative study of 21 large diversified firms</td>
<td>Conclusions</td>
<td>1. Found that there was a broad distribution of diversified firms, one having lots of technical (i.e., R&amp;D) corporate staff and the other having very little, with no firms existing between the two modalities.</td>
<td>*</td>
<td>**</td>
<td>-</td>
</tr>
<tr>
<td>Pits (1978)</td>
<td>- Considered A &amp; ID modes with respect to starting</td>
<td>- A qualitative study of 21 diversified firms</td>
<td>Firm</td>
<td>1. Size of corporate staff</td>
<td>- (2)</td>
<td>+ (2)</td>
<td>- (2)</td>
</tr>
<tr>
<td>Pits (1975)</td>
<td>- Considered A &amp; ID modes with respect to starting</td>
<td>- A qualitative study of 21 diversified firms</td>
<td>Firm</td>
<td>1. Corporate functional staff</td>
<td>- (2)</td>
<td>- (2)</td>
<td>na</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>2. Corporate non-functional staff</td>
<td>- (2)</td>
<td>- (2)</td>
<td>na</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>3. Total corporate staff levels</td>
<td>- (2)</td>
<td>- (2)</td>
<td>na</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>4. Management transfers between divs (1)</td>
<td>- (2)</td>
<td>- (2)</td>
<td>na</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>5. Management tenure in divisions (1)</td>
<td>- (2)</td>
<td>- (2)</td>
<td>na</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>6. Managers replaced by outsider (1)</td>
<td>- (2)</td>
<td>- (2)</td>
<td>na</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>7. Subsidiary per # measurement (1)</td>
<td>- (2)</td>
<td>- (2)</td>
<td>na</td>
</tr>
</tbody>
</table>

**Notes on Abbreviations:**

- **Entry Modes:**
  - A - indicates acquisition.
  - ID - indicates internal development.
  - JV - indicates joint venture.

- **Hypotheses:**
  - * indicates that as this influence increases in magnitude this factor is positively favored or impacted.
  - _ indicates that as this influence increases in magnitude this factor is negatively favored or impacted.
  - np indicates that no prediction was made either due to the lack of information or conflicting hypotheses. A sign (e.g., + or -) indicates that the analysis subsequently delineated this direction.
  - na indicates not applicable because the mode was not involved in this hypothetical analysis.

- **Significance:**
  - * p < 0.10
  - ** p < 0.05
  - *** p < 0.01

[ ] indicates that the findings were not in the predicted direction, but were significant.
During the 1970s, Pitts completed a series of qualitative studies that assessed a firm's preference for either the buy or build mode (Pitts, 1975; 1976; 1977a; 1977b). These studies of large multi-product firms concluded that firms which had a propensity to select an acquisition were organizationally different than those that selected a build mode. The studies discovered that acquisition-oriented firms tend to have small non-functionally oriented corporate staff, divisional general managers having long tenure, and objective performance and evaluation systems. In addition, they found that divisional general managers tended to be replaced by insiders. Corporations which were build-oriented had the opposite organizational characteristics.

The above set of studies is notable because it is the first comparative wholly-owned mode research to take an intra-organizational theoretical and methodological approach. Unfortunately, Pitts' qualitative approach had some concerns regarding methodological validity and reliability. All of the studies employed very low sample sizes, and all of the cases tended to represent ideal cases of the two dichotomous organizational/strategic types under study. Although this approach is acceptable for an initial exploratory analysis, consistent use of favorable theoretical sampling techniques in a research stream clearly constrains both the reliability and validity of the studies.

Yip (1982) provided the most comprehensive domestic study on wholly-owned entry mode choice. This study used the PIMS data base to analyze 59 entrants into 31 product markets over a period from 1972 to 1978. Yip was particularly interested in the effects of barriers to entry and managerial motivations on entry choice. He postulated that barriers to entry would provide some companies with an information asymmetry advantage. The study reasoned that entry over such barriers would produce an asymmetric information situation because in the case

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6 The sample sizes ranged from two to nine cases.
of the build mode the firm does not have the appropriate knowledge, while in the acquisition mode the firm is purchasing the appropriate knowledge. He also argued that managerial career motives were influenced by the perceived career risk and return, and thus, the selection of the mode of entry.

The results of this study provide mixed support for a barrier to entry argument. Several barrier to entry variables were positively associated with the acquisition mode choice. These were investment intensity, incumbent parent size, and parent diversification. However, several other barriers to entry such as advertising intensity and market concentration were not supported. Furthermore, the results did not logically support the information asymmetry hypothesis in its direct link to entry mode diversification.

Factors which negatively influenced the selection of the acquisition mode were market segment growth, managerial motivation for growth, and competitive position. Unrelated hypotheses involved the association of diversification timing, industry concentration, advertising intensity, firm size, entry diversification, the number of shared activities, the number of customers, and managerial motives to entry mode selection. The managerial motives were related to market profitability, access to suppliers, access to outlets, counter cyclical strategy, a cash generating strategy, a cash utilizing strategy, an offensive diversification strategy, a defensive diversification strategy, and sharing of costs strategy.

Yip’s study represents the first study which used both an economic and organizational theory approach to explain entry mode selection. Although his theoretical reasoning is not fully supported by his results, they provide some of the more interesting empirical findings in this stream to date.

Amit, Livnat, and Zarowin (1989), used the Compustat data base to study managerial aspects of mode selection. This study revealed that management
experience influences the diversification mode selected. It also looked at the influence of owner and management control by taking a Berle and Means (1932) agency theory approach suggesting that when managers control the firm they favor the acquisition mode and when owners control the firm they tend to favor the build mode. Although these hypothesized relationships were in the appropriate direction, they but were not significant.

Chatterjee (1990) combined resource theory and transaction cost theory to examine wholly-owned entry mode selection. The ensuing analysis did not fully support their developed logic. However, some support for a resource theory perspective was provided. The analysis indicated that concentrated markets and high stock prices do tend to lead to acquisitions, whereas the availability of internal funds or funds from low-risk debt tended to favor the build mode. The analysis illustrated that the rate of market growth was not a significant influence on entry mode, that as Yip demonstrated, the diversification relatedness of entry was not significantly related to entry mode.

Chatterjee argued that the relationship between market concentration and the acquisition mode was related to oligopolistic game theory. The theoretical reasoning was that firms entering mature concentrated markets are concerned primarily with competitive retaliation, and tend to acquire firms in the market which have a known oligopolistic competitive position.

Chatterjee's study provides support for most of the previous work that has been completed in comparative wholly-owned entry mode research and the model is better integrated than most previous models. This integration provides evidence of oligopolistic game-playing tactics during entry mode selection. The study, however, is limited by the secondary data-set research methodology which did

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5 Managerial experience was operationalized by assessing the amount of capital used for either of the two diversification modes historically.
not include more detailed behavioral- and organizational-level causal relationships.

The above four domestically-based research studies provide support for many of the relationships simultaneously developed in the international wholly-owned entry mode research stream previously described. This is not surprising given that all but one of them used the same economic and structural methodological approach. However, because of the similarity in theoretical and methodological origins, these domestic-based studies incur the same constraints that were present in the international entry mode studies. Therefore, future research must focus on integrating the managerial- and organizational-levels of analysis into these structural and economic models.

The Relationship Between Mode Selected and Performance
Two studies have examined the second relationship delineated in the research question: What is the relationship between entry mode selected and performance? The first examines this issue in an international context and the second in a domestic context. These two studies are summarized in Table 2.3.

TABLE 2.3

<table>
<thead>
<tr>
<th>Article</th>
<th>Modes Investigated</th>
<th>Methodology</th>
<th>Concepts Investigated</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Li &amp; Glaister (1991)</td>
<td>considered A &amp; ID modes with respect to performance</td>
<td>a quantitative study using a Dept of Commerce data</td>
<td>Firm 1 Entry Mode to performance</td>
<td><em><strong>(1)</strong></em> <em><strong>(1)</strong></em> +[2]</td>
</tr>
</tbody>
</table>

Notes:
1: The performance measure proxy was bankruptcy.  
2: The JV performance was not significantly different from either of the two other modes although it was in the middle.
TABLE 2.3 (continued)

<table>
<thead>
<tr>
<th>Article</th>
<th>Modes investigated</th>
<th>Methodology</th>
<th>Concepts investigated</th>
<th>A</th>
<th>JQ</th>
<th>JV</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Simmons (1992)</td>
<td>- the profitability of A versus ID and diversification type</td>
<td>- the CompaStat database of firms that were Fortune 500 from 1975 through 1994 and maintained the same diversification strategy over this time. - 73 cases looked at in sample</td>
<td>1 Related &amp; RCE 2 Related &amp; ROA 3 Related &amp; ROIC 4 Related &amp; CSG 5 Unrelated &amp; ROA 6 Unrelated &amp; RCE 7 Unrelated &amp; ROIC 8 Unrelated &amp; CSG</td>
<td>B</td>
<td>A</td>
<td>na</td>
<td>ROE Return on equity</td>
</tr>
</tbody>
</table>

Notes on Abbreviations:

Entry Modes:
A - indicates acquisition.
ID - indicates internal development.
JV - indicates joint venture.

Hypotheses:
* indicates that as this influence increases in magnitude this factor is positively favored or impacted.
- indicates that as this influence increases in magnitude this factor is negatively favored or impacted.
np indicates that no prediction was made either due to lack of information or conflicting hypotheses.
A sign (e.g., + or -) indicates that the analysis subsequently delineated this direction.
na not applicable because the mode was not involved in this hypothetrical analysis.

Significance:
* p < 0.10
** p < 0.05
*** p < 0.01
[] indicates that the findings were not in the predicted direction, but were significant.

Li and Guisinger (1991), examined the relationship between international wholly-owned entry modes into the U.S. and their performance. This relatively uncomplicated study used secondary data to compare the success of international wholly-owned entry modes in the U.S. market. They calculated the

II The sample was split into 1975-79 and 1980-84 periods based on the different economic influences. During the 1975-79 period, related had significantly higher ROA than unrelated, and external had significantly higher CSG than internal modes. CSG during this time was highest for unrelated-external, second highest for related-external, third highest for related-internal, and fourth highest for unrelated-internal. This last result was significant (p<0.10). During the 1980-84 period, related had significantly higher ROA than unrelated, and internal had significantly higher ROA than external. An assessment of all four types and modes indicates that related-internal had the highest, unrelated-external had the lowest, and unrelated-internal and related-external were average in ROAs at a significant level (p<0.05).
proxy for performance, failure rate, using information delineating entities that "filed for bankruptcy protection, were involuntarily liquidated, or ceased operations mainly due to poor financial performance during the 1978 to 1988 period" in the U.S.\textsuperscript{10} The results of this study indicated that the build mode significantly outperformed the acquisition mode.

In another recent study, Simmonds (1990) investigated the relationships between diversification, profitability, and selection of wholly-owned modes in the domestic context. This research is unique because it is the first and only wholly-owned entry mode study that specifically considered financial performance. Methodologically, Simmonds investigated only firms that used either entry mode (i.e., either the acquisition or build mode) exclusively during the sample period from 1975 to 1984. The study, which also examined product diversification, predicted that the related and build mode would have the highest performance, while the unrelated and acquisition mode would have the lowest performance.

The results of this study provide only partial support of the hypotheses. All analyses used non-parametric approaches since several of the cell categories had small numbers. Furthermore, the performance measures were for the total firm rather than just the entry mode or subsidiary. Using four performance measures - return on assets, return on equity, return on invested capital, and compound sales growth - Simmonds discovered that unrelated and related product diversification were significantly different and that the build and acquisition entry modes were in the right direction but not significantly different in performance. When he divided the period of analysis into two periods, 1975-79 and 1980-84, which reflected two different economic periods, he discovered further significant results. For both the 1975-79 and 1980-84 periods, related diversification had a higher return on assets than unrelated diversification. For the 1975-79 period, acquisition had a higher compounded sales growth than build: compounded sales growth was highest for unrelated-acquisition, second

\textsuperscript{10} Li and Guisinger, 1991, pg. 209.
highest for related-acquisition, third highest for related-build, and fourth highest for unrelated-build. For the 1980-84 period, the build mode had higher return on assets than the acquisition mode. A comparison of all four diversification-entry modes for the 1980-84 period showed that related-build had the highest, unrelated-acquisition had the lowest, and unrelated-build and related-acquisition were in the middle based on return on assets.

These two studies are important because they are the only comparative wholly-owned entry mode studies which explicitly test the performance relationship. Combined, the studies provide some support for the hypothesis that the build mode outperforms the acquisition mode. However, neither study controlled for many of the variables defined in previous studies that might influence entry mode selection, and therefore performance. Again, because both studies used a secondary data-set, these ancillary variables were not available.

NON-COMPARATIVE ENTRY MODE RESEARCH

Non-comparative entry mode research examines only one entry mode. Although it does not explicitly compare the different entry modes, it does provide some insights into relationships that may be pertinent to comparative research. Therefore, the following section reviews and summarizes some of the more important streams of non-comparative entry mode research.

It should also be noted that there are very few studies that have examined the build mode in a non-comparative manner, but most are little more than descriptive or prescriptive essays. Acquisition entry mode research, on the other hand, represents a very strong research stream having considerable empirical breadth. Therefore, this section will examine only the acquisition entry mode research stream.
Acquisition Entry Mode Research

Non-comparative research that focuses exclusively on the acquisition mode is prolific, particularly when measured against the comparative entry mode research streams. There are two broad theoretical perspectives taken in the acquisition research. The first suggests that acquisitions are carried out based on the owner's desire for increased profit, while the second suggests that acquisitions are not motivated by profits, but by other managerial preferences. In fact, the management preference reasoning implies that acquisitions are not carried out for profits, but for management-specific motivations such as more power or higher pay. Although these two arguments are not mutually exclusive, they tend to be contrasted against one another, and it is the failure of the profit motivation logic that has led to the management preference argument. This section will first review the research surrounding the profit motive argument, and then review the less prolific management preference research stream.

The Profit Maximization Theoretical Perspective

Most acquisition research has focused on excess rents or profits to the firm as an explanation for why managers take part in acquisitions. The theoretical logic for excess rents in acquisitions is related to the potential synergies that are created when two firms merge. Theoretically, synergy has been related to operational, financial, administrative, or collusive synergies which have been defined in the economic literature as economies of scale, economies of scope, and economies of market power (Chatterjee, 1986; Lubatkin, 1983; Seth, 1990).

Collusive synergy has been found to exist only in vertically-integrated acquisitions specific to certain industries (e.g., the resource industry). Thus, this motive occurs in a very special acquisition situation, and it does not explain the general variance in performance seen in most acquisitions, particularly international acquisitions which tend to be horizontal in nature (Jensen, 1984; Walter & Barney, 1990).
An abundance of research has studied the creation of economies of scale and scope. In particular, it has focused on contingency relationships between synergy and the type of diversification, related versus unrelated. The results of these studies have been mixed. Some have concluded that related diversification provides the best performance, others have concluded that unrelated or conglomerate diversification provides the highest performance, but a preponderance have concluded that diversification strategies using the acquisition mode negatively influence future performance levels (Caves, 1989; Seth, 1990).

The results of the above studies, also, seem to be dependent upon the choice of methodology. Two types of methodologies have been used to study the acquisition performance question. The first and mostly widely used is the financial approach, called the ex-ante assessment or event study approach which examines the stock market’s reaction to an announced event (in this case it is the acquisition announcement). The technique assumes that stock markets are completely efficient, and thus, any new information as well as its future consequences are fully and immediately reflected in the stock price.

These ex-ante studies provide the most positive performance scenarios for acquisitions, and although conclusions have been highly variable, many studies have indicated that acquisitions are beneficial because, on average, the stockholders’ reactions are generally positive to acquisition announcements (Bradley, Desai, & Kim, 1988; Jensen & Ruback, 1983). However, more recent work on the ex-ante technique has indicated that most of these excess returns accrue to the sellers not to the buyers. The buyers, at best, break even (Caves, 1989).

The second approach, called ex-post analysis, considers the profitability of the acquisition or merger using data up to 10 years after the event. Ex-post researchers argue that the ex-ante assumption of stock market efficiency is
incorrect and that stock prices do not immediately reflect the future performance of the business acquisition decision. Thus, they have investigated long-term financial performance using stock market performance, bankruptcy or failure rates, and financially reported accounting figures. This research is not as prolific as the ex-ante research, although the most recent acquisition and merger studies are now using this technique.

Ex-post research first suggested that acquisitions were not as profitable as had been initially thought when conglomerates began to divest their acquisitions made during the 1960s' acquisition period. Moreover, a variety of studies have since concluded that acquisitions are poor performers (Trautwein, 1990). The initial ex-post studies were questioned because of the controversial operational definitions used for the dependent variable performance. For example, Porter (1987) used divestiture as a sign of poor performance in acquisitions when he was studying large U.S. companies, many of which were conglomerates. This operationalization was not justified either theoretically or empirically. Other studies have used internal company transfer-pricing accounting data. This controversial measurement technique is often affected by transfer pricing and internal accounting practices specific to the firm, which may differ widely depending upon the financial and tax advantages present to the firm.

Recently, ex-post studies have become more rigorous and abundant and they now consider the long-term performance trends of companies before and after acquisitions. These ex-post results have provided strong evidence that acquisitions are not particularly effective business decisions because they tend to lower the purchasing firm's profitability (Caves, 1989; Ravenscraft & Scherer, 1987; Ravenscraft & Scherer, 1989).

The synergy and diversification argument has also been tested in the international environment. Two studies have looked at the relationship between related and unrelated diversifying acquisitions and their associated performance
(Eddy & Seifert, 1984; Harris & Nicholls, 1988). The findings in both cases were that there was no significant difference in performance between related and unrelated acquisitions. The greatest methodological concern with these studies is that control variables which might provide alternative explanations were not used.

A more recent line of reasoning proposes that organizational factors are critical to the effective achievement of synergies in an acquisition. In particular, organizational control and integration are deemed essential for the achievement of such synergies. This organizational theory-based perspective has not been well developed. However, a large body of qualitative descriptive and prescriptive research has noted this phenomenon. In addition, several articles have theoretically delineated models relevant to this perspective (Hunt, 1990; Jamison & Sitkin, 1986). Recently, Datta (1991) empirically observed a positive relationship between firms that merge having managers with similar traits and a favorable acquisition performance. This relationship was present in situations of both high and low integration. The conclusions of other researchers, that firms with prior acquisition experience have a better performance record than those that don't suggest that the former group has developed the appropriate organizational mechanisms to manage the newly-acquired entity (Amit, et al., 1989; Kusewitt, 1985).

In conclusion, research has not supported the profit motive for acquisitions. In fact, there appears to be more contrary evidence suggesting that the acquisition decision is not a wise decision for a firm if its primary motivation is profitability.

The Managerial Preference Theoretical Perspective

The lack of empirical support for the profit maximization perspective has forced researchers to look for alternative explanations. One of the more popular, alternative theoretical perspectives is the managerial preference theory which suggests that managers are either acting non-rationally, or acting rationally but with self-interest. Preferences are considered to be motivated by self-interest
and may include such concerns as acquiring a larger power base, more recognition, more income, or pursuing other personal agendas that may not benefit the firm.

Several arguments have been put forth supporting this new perspective. Yet empirically, a test of the various non-profit maximizing arguments or hypotheses based on managerial preferences is difficult because all of these concepts are difficult to measure and managers are reluctant to admit motives based on self interest. The most universally-adopted argument is that the profit maximization theoretical viewpoint has not been supported; therefore, the null hypothesis which is the non-profit or the management preference theory perspective should be embraced. However, this reasoning is not entirely logical because the acceptance of the null hypothesis is not the same as proof for the non-profit perspective because many intervening and untested factors could improve the results of the profit maximization logic. Thus, the only conclusion is that the profit maximization logic has not been supported in prior empirical research.

The most prevalent non-profit-based argument has been agency theory which argues that managers tend to act on their self interests rather than the concerns of the owners. In contrast, the owners attempt to control this self-interest through various means, such as offering incentives or monitoring managers behaviors. However, because control mechanisms are costly to employ and are imperfect at best, managers sometimes act according to their own interests when they think the owners will not be able to detect such opportunistic behavior.

Empirical evidence does not support the non-profit or managerial preference line of reasoning. For example, Walter and Barney (1990) studied the motives behind acquisitions decisions. They sampled 20 investment bankers who provided the "real" managerial motives behind acquisitions. The research approach inquired as to both the profit and the non-profit or managerial preference motivations. The results only supported the profit motivations and
none of the managerial preference motives were supported. In addition, when Amit, Livnat, and Zarowin (1989) empirically tested whether agency theory predicted managers’ selection of acquisition or build modes, they concluded that the agency theory relationship was not significant.

The managerial preference theory has unfortunately been contrasted to the profit motive theory. However, these two perspectives are not necessarily mutually exclusive. For example, management preferences and experiences may lead to certain decisions being made in an emergent strategic manner rather than a deliberate or implicit strategic manner (Mintzberg & Waters, 1985). In addition, contingent organizational and strategic situations may limit the selection of entry mode selection while being somewhat independent of performance. Either of these explanations could account for the selection of the acquisition entry mode even though it does not appear to correlate with positive performance outcomes. In this regard, the management preference theory may benefit from a re-conceptualization as an emergent or contingent strategy based on organizational capacities and capabilities.

SYNOPSIS OF PAST RESEARCH.
A review of international wholly-owned entry literature indicates that a primary theoretical concern relates to the limited use of an overarching theoretical paradigm. Research streams, as they evolve, should seek to develop a paradigmatic core, as this method forces researchers to determine a logical link for their hypotheses and thus, to advance the scope of existing theory. Scientific discovery must take a developmental approach that either argues for, or falsifies, existing theoretical principles (Kuhn, 1962). The exploratory and methodologically convenient research which has prevailed in the international wholly-owned entry research can be justified considering the prior lack of knowledge. However, as the research stream matures, investigators must strive to develop an integrative core paradigm. The tangential research on the acquisition mode or in the domestic context provides some potential theories for
building such an integrative core. In addition, international researchers have advanced other well-developed "theories of the firm" which may be appropriate to this research stream.

International wholly-owned entry mode research has also tended to use diverse economic arguments, usually at the country- and industry-levels of analysis. Yet, the greatest empirical explanatory support appears to have come from variables at the organizational-level of analysis. This suggests that researchers should re-focus their theoretical inquiry to a lower level of analysis. This may not only improve the strength of the explanations, but it also re-focuses the discussion around variables and relationships that managers can actually control. Managers have limited ability to control country- and industry-level variables, but they have considerable leeway in controlling variables at the organizational-level and below.

The international entry mode inquiry must not only mature theoretically, but also methodologically. Prior work has been constrained by both reliability and validity concerns resulting from the economic, secondary data-set methodology. A more causally deductive and methodologically valid approach will aid in the evolution of this research stream as it moves beyond the inceptive stages. Such a methodological approach will also enhance the researcher's ability to detect causal relationships rather than just correlative relationships. Yip (1982), for example, found that barriers to entry were associated with the acquisition mode, yet he could not definitively link this discovery to a concept because he did not measure firm performance. Caves and Mehra (1986) postulated in their conclusion about the link between various industry- and firm-specific variables. Their research provided inconclusive support for these links, possibly because of the lack of organizational-level control variables. Thus, a more causally deductive approach and a methodology stressing internal validity will relate industry, firm and organizational specific attributes, and allow for better
operationalization of the variables to improve reliability and validity of the results.

A final concern with wholly-owned research literature is its neglect of the dependent variable, firm performance. The normative debate surrounding acquisition research has centered on the performance issue. The long-term goal of a firm is to increase its financial performance in most situations. Therefore, research on wholly-owned entry mode should consider firm performance as the dependent variable.

In summary, three theoretical and methodological considerations appear to have been inadequately addressed. The following changes are recommended:

i) International, wholly-owned mode research should be studied in a more deductive manner using overarching theoretical models or paradigms rather than an agglomeration of conveniently delineated hypotheses. Entry mode research provides two sets of competing theories, and international literature provides a variety of applicable theoretical models and sub-theories.

ii) International wholly-owned mode research should move away from the abstract and high-level structural methodological approach that has dominated the literature to a more organizationally relevant approach using an appropriate quantitative or qualitative methodology. Specifically, managerial- and organizational-level variables and hypotheses should be considered.

iii) Performance should be included as a dependent variable in order to improve the causal reasoning and the relevance to managers.

In addition, the above literature suggests a variety of relationships that must be considered in a wholly-owned entry mode. These are the following:
i) Organizational variables, specifically organizational size and product diversity, appear to influence the selection of wholly-owned entry modes. These very strong relationships may be associated with issues of information asymmetry, bounded rationality, or other transactional specific impediments that limit the choice of entry mode.

ii) Firm- and industry-specific competitive advantage considerations may influence wholly-owned entry mode selection.

iii) Country-specific competitive advantage characteristics appear to be related to wholly-owned entry mode selection.

iv) The build mode appears to outperform the acquisition mode.

This study will focus on developing and testing a theoretical model that relates these sets of issues to wholly-owned entry selection and performance. In conclusion, the two broad notions on which the subsequent chapters will concentrate are the manner in which bounded rationality and competitive advantage influence entry mode selection and performance. The logic of these relationships will be developed more fully in Chapter 4.
CHAPTER 3 - THE OVERARCHING ECLECTIC THEORY

The overarching theoretical paradigm used in this study is the eclectic theory, which was selected because it is one of the few theoretical models allowing for the integration of country-, industry-, and organizational-level theoretical relationships. The ensuing chapter discusses the eclectic theory in general, including some of its problems which are specific to this research question.

INTERNATIONAL THEORIES

International theory has historically used three overarching micro- or organizational-level economic models to describe why international expansion occurs. The two most prevalent are transaction cost theory, and eclectic theory (Dunning, 1980; Singh & Kogut, 1989). The third, internalization theory, is used less frequently, despite the fact that it provides the premise upon which the other two theories are partially rooted (Casson, 1982; Casson, 1986). The conceptual evolution of these micro theories is illustrated in Figure 3.1.

One of the first micro-based theories of the firm was Coase's internalization theory (Coase, 1937). Williamson (1991) details in the introductory chapter of his most recent book how Coase provided the fundamental notions for transaction costs by describing the economic system both internal and external to the firm as being coordinated by the price mechanism. Williamson then refined this transactional cost approach into a more organizationally-based concept, and delineated the causes and effects resulting from this theoretical approach. Parallel to this micro-theory development, macro-economic theory was being widely studied in the form of classical locational theory which seems to have been the first research stream in international business. The firstly noted theorists in this area were Ricardo, Heckscher, Ohlin, and Samuelson, who studied country-specific comparative advantage (Bano, 1991).

The eclectic theory attempts to bridge the various aspects of international theory by integrating the micro- and macro-theoretical notions as illustrated in Figure
3.1. This study uses the eclectic theory on account of its integrative nature and broad scope, characteristics which allow simultaneous examination of theoretical relationships at the country-, industry-, and organizational-levels.

FIGURE 3.1

THE RELATIONSHIPS AMONG INTERNATIONAL ECONOMIC THEORIES

THE ECLECTIC THEORY

The eclectic theory, which has evolved from the Reading Terminal Axis research work on internalization theory\(^{11}\), integrates are international locational, ownership, and internalization theories (Dunning, 1980). The theory, although criticized in several ways, provides several important attributes that are relevant for international entry mode theory development. First, because eclectic theory is an aggregation of several widely used international theories, it provides an appropriate multidimensional foundation for the inclusion of other theoretical concepts (Casson, 1992). Second, repeated empirical tests of the sub-theories

\(^{11}\) The Reading Terminal Axis refers to IO economists who are centered in Reading, England, and who have developed the international economic theory at the IO level. The principal theoretician behind this theory has been J. Dunning at the University of Reading.
have demonstrated their importance in explaining international business decisions. Finally, this theory considers both a structural and transactional perspective allowing a more complete investigation of the organizational- and managerial-levels of analysis, as specified earlier.

The three sub-theories are briefly discussed below.

**The Sub-Theories**

**Locational Advantage**
Locational theory has developed out of the classical economic theory originally postulated by Adam Smith, David Ricardo, and John Stuart Smith. More recently, Heckscher, Ohlin, and Samuelson (HOS theory), and a variety of other international trade theorists have developed it into a multi-faceted and complex theory that explains country-specific investments (Bano, 1991). The theory hypothesizes that certain advantages pertinent to a country, such as labor costs or other resource endowments, are fundamental to the economics and trade between that region and other regions.

Most international researchers consider locational advantage theory to be a fundamental, yet only partially explanation of the behavior of international firms. Dunning (1988b) considers it the "where" of international business research. A broader description of these locational-specific advantages includes: any type of government intervention which affects the costs or revenues of a product; spatial distribution of natural resource endowments and markets; input prices, supplier quality and productivity; international transportation and communication costs; psychic distance; and economies of centralization (Dunning, 1993; 1988b).

**Ownership Advantage**
Ownership-specific advantage theory has evolved from industrial organization research detailing how firms gain competitive advantages in an industry. Ownership advantage is described by Dunning (1988b) as the "why" and "how" of a company's international competitive approach. Recently, Dunning and Rugman divided ownership-specific advantage into two distinct, but clearly
related, concepts (Dunning, 1988b; Dunning & Rugman, 1985). The first, structural ownership advantage, is the property right or intangible asset advantage that a company has over its competition. The second, transactional ownership advantage, is the common governance advantage which allows companies to reduce their overall transaction costs relative to their competitions’.

It should be noted that ownership advantages are conceived as both industry- and firm-specific advantages. Therefore, barriers to entry and industry-specific attributes are also considered ownership advantages that produce firm-level competitive advantages.

**Internalization Advantage**

Calvet (1981) initially described internalization advantage theory as the “how” of international production. A variety of researchers have applied this theoretical notion to various forms of foreign direct investment, including Beamish and Banks (1987) who applied it to international joint venture selection.

Internalization theory suggests that efficiencies are created when a firm internalizes a transaction. In general, the basis for internalization theory is predicated on the assumption that, given a certain set of circumstances, an external market may become uneconomic and will ultimately fail. In this situation, managers tend to weigh the tradeoff arguments of contractual risk against potential economic returns for internalizing the market. An internalized market means that a firm has contractually transferred a market from outside its boundaries and control to within its boundaries and control. Some of the internalization-incentive advantages delineated by Dunning include the following: avoidance of search and negotiating costs, avoidance of property right enforcement costs, mitigation of buyer and seller uncertainty, exploitation of
market control and government invention, and cross subsidization practices\(^\text{12}\). These internalization advantages represent the motivations behind the decision to internalize intermediate goods and service markets into an international firm.

**Theoretical Problems and Concerns with Eclectic Theory**

The eclectic theory integrates these three sub-theories in a manner largely consistent with their prior independent contributions; the only arguable exception is internalization theory (Calvet, 1981; Dunning, 1980; 1988a; 1988b). Such an assimilation has evolved into what is essentially a categorical model which relies on definitional differentiation rather than causal relationships.

**FIGURE 3.2**

**DUNNING’S DESCRIPTION OF THE ECLECTIC THEORY MODEL**

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\(^{12}\) This list of internalization advantages is taken from Dunning (1988b; 1993). This list is not comprehensive, but provides some of the more frequently considered internalization advantages.
Dunning (1981; 1983; 1988a) who delineated the various notions of the eclectic theory in the complex conceptual manner shown in Figure 3.2 has described its three dimensions by using examples and by illustrating sub-dimensions that are suitable to the three sub-theories.

Rugman and Verbeke (1993) have attempted to define these three concepts. Their definitions are as follows:

*The, ownership (firm-specific) advantages include both proprietary know-how (unique assets) and transactional advantages. The latter reflect the MNE's capabilities of economizing on transaction costs as a result of the multinational coordination and control of assets. In this context, recent research efforts have focused on corporate capabilities to develop optimal internal coordination and control mechanisms, taking into account their costs and benefits.*

*Locational (country-specific) advantages,... state that some benefits are associated with locating certain activities in particular countries. These benefits may arise from (a) structural market imperfections such as government regulation and (b) the potential to economize on transaction costs by reducing risks and to benefit from local opportunities.*

*Internalization advantages... refer to the relative benefits associated with different entry modes (e.g., exports, licensing, joint ventures, FDI and other forms of investment) when serving foreign markets. Here, market failure is the crucial reason for internalization. It can be related to both natural market imperfections (e.g., the public goods nature of knowledge) and government-imposed market imperfections.*

These definitions do not provide much more than a categorical delineation of the theory. Theoretical definitions must also state how the various concepts are inter-related, and since these definitions fail to do so, they provide little

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additional information. On the other hand, Dunning's examples provide considerably more information on the relationships among the various dimensions in this theory, yet, because these examples are often situation-specific, they do not provide us with a generalizable rule for causality in all situations.

This lack of clarity regarding the relationships in eclectic theory has created some problems. The principal problem that has been argued in the literature is the repetition of theoretical notions among and between the three sub-theories. The problem of duplication is a concern because the three sub-theories were, during their inception, meant to be independent and generalized theories of international business. These redundancies have been detailed by a variety of researchers (Buckley & Casson, 1985; Buckley, 1988; Casson, 1986; 1990; Itaki, 1991). Dunning has attempted to re-conceptualize the eclectic theory to differentiate effectively among the three sub-theory notions; however, the abstract nature of the relationships as defined to date has continued to produce redundancy difficulties (Dunning, 1993; 1988a; 1988b).

Examples of redundancies have been documented in several papers, including Dunning's empirical work (1980) in which he operationally defines the same variable in more than one sub-theory context because that variable captures the notions of more than one sub-theory. Another example is recent work by Hill, Hwang, and Kim (1990) in which they developed a variation of the eclectic theory model to explain entry mode selection; yet, when they subsequently tested the model, they redefined the variables in a manner not congruent with the original theoretical concepts (Hill, et al., 1990; Kim & Hwang, 1992).

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14 The primary argument for redundancies is that locational, ownership, and internalization advantages often describe the same theoretical notions. This is particularly true for the abstract internalization advantages which can apply to any business decision which ultimately involves a balance between risk and return across a firm boundary. This notion applies to most business decisions made. More detailed discussions of these redundancies can be found in the associated references.
Another pragmatic example is encapsulated in the following illustration. Prior to a company’s investing in a foreign country, the location has a strong raw material supply advantage which at this point eclectic theory considers a locational advantage. However, when a company has actually invested in this country and internalizes the advantage, it becomes an ownership advantage. The dilemma becomes: How does one differentiate between advantages when temporal changes redefine the conceptual basis for the fundamental theoretical advantage definition? This example graphically illustrates the redundancy dilemma within the eclectic theory and its sub-theories, a dilemma that may have limited the number of empirical studies which have explicitly taken the eclectic theory approach.\(^{15}\)

Itaki (1991) has concluded that these theoretical dilemmas are caused by the lack of a causality in the eclectic theory model. This study attempts to eliminate this redundancy problem by developing and applying the theory to a specific situation where relationships can be more clearly defined. In addition, the specific sub-theoretical notions will be defined more specifically as they apply to the wholly-owned entry mode business decision. This constraint minimizes the complexity of the theory as it applies to the practical business decision (i.e., the wholly-owned entry mode selection decision).

### The Eclectic Theory Causal Model

The eclectic theory causal model used in this study is, in fact, a simplification of Dunning’s original conception as illustrated in Figure 3.2. To simplify the theoretical model one must consider the origins of the three sub-theories, because not only are they logically independent, but also they appear to have developed from different schools of economic thought. Internalization and transaction cost theories originated from the Chicago school of economic

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\(^{15}\) There are relatively few empirical studies that have specifically taken the eclectic theory approach. One of these was done by Dunning and the other used an eclectic approach to theoretical development, but the empirical results were conceptualized outside of eclectic theory (see Hill, Hwang, & Kim, 1990 and Kim & Hwang, 1992).
thought, which is based on the free market approach. However, ownership
structural advantages, however, were developed from the Harvard school of
economic thought, which argued that the free market contexts are not entirely
efficient. Such arguments include Bain’s barriers to entry theory, which suggests
that industries and firms may develop competitive advantages that give them an
unfair advantage in certain free market situations. Finally, there is locational
advantage, having its roots in the neoclassical school of economic thought,
which is logically related to the Harvard structural school of thought.
Unfortunately, these latter two philosophies are somewhat contradictory
(Conner, 1991). Yet these contradictions, as Dunning has delineated, can be
used to broaden the applicability of the theories when they are combined.

In constructing causality within these contradictions, one can assume that the
free market mechanism may attempt to function efficiently within a set of
contextual constraints. In this case the contextual constraints are delineated by
locational and ownership advantages. This provides us with an initial causal
model which suggests that the structural advantages (i.e., location and
ownership advantage) produce a context in which free market advantages (i.e.,
internalization advantage) attempt to operate.

Therefore, locational and ownership advantages now causally describe the
context in which internalization advantages are created for the multinational
enterprise. It must also be admitted that ownership structural and transactional
advantages are so interwoven logically that it is very difficult to conceptually
separate them. Conceptually, an example of this connected logic is Williamson’s
(1990) statement suggesting that a unique asset will influence the transactional
nature of a business deal. This reasoning immutably links the structure which is
the asset to the transactional efficiency. For this reason, this study does not
differentiate between ownership structural and transactional advantages\textsuperscript{16}.

Finally, a causal feedback from the internalization decision to the locational and
ownership advantages must be delineated. This feedback loop accounts for the
criticism of redundancies leveled by Itaki (1991), who suggested that
redundancies among theories occur over time as one advantage evolves into the
other. Clearly, internalization decisions influence the ownership and locational-
specific advantages after the decision has been taken\textsuperscript{17}.

The modified eclectic theory is shown in Figure 3.3. However, this study will not
specifically study these feedback loops, but rather will concentrate on the
forward-flowing causal relationship that influences entry mode selection and
performance. The implicit assumption is that these feedback loops have altered
locational and ownership advantages, but when one business decision is being
investigated in a static manner the feedback loops can be neglected because
they will influence the succeeding decision. Thus, the model can be looked at in
a static manner and the dotted feedback lines can be neglected in this particular
study.

It is important to note that in this model a firm or country can only benefit from a
locational advantage by internalizing it or associating it with an ownership
advantage. Otherwise it is an unproductive advantage that creates no efficiency
for the specific country because it is not being utilized. Porter (1990) makes this

\textsuperscript{16} This argument does not discount Dunning and Rugman’s argument that ownership transaction
and structural advantages are theoretically different. The argument made in this study is that the
two issues are so interlinked in reality that it makes them very difficult to study independently.
Therefore, the study acknowledges the differences, but then goes on to integrate them for
practical and methodological considerations (Dunning, 1988a).

\textsuperscript{17} It should be noted that internalization advantage represents cumulatively the most efficient
transaction accruing to both the firm (i.e., internal efficiencies) and society (i.e., external
efficiencies). This study will and can neglect external efficiencies because it is consistent with the
theory that the most internally efficient solution is always taken by a firm in a free market
situation.
argument quite vociferously in his recent book describing national competitive advantages.

FIGURE 3.3
THE ECLECTIC THEORY CAUSAL MODEL

An application of this model to the wholly-owned entry mode decision results in the model delineated in Figure 3.4. This model embodies the two relationships initially described in the introductory section delineating the wholly-owned entry mode question examined in this study. The relationship between influencing factors and entry mode selection is illustrated by the relationships that link the concepts of locational advantage and ownership advantage to internalization advantage. The relationship between entry mode selected and performance is delineated within the internalization advantage concept. These two internalization notions are, in fact, the internalization decision and outcomes respectively.
FIGURE 3.4

WHOLLY-OWNED ENTRY MODE ECLECTIC MODEL

Locational Advantage

Ownership Advantage

Mode Selection

Mode Performance

Internalization Advantage
CHAPTER 4 - THE RESEARCH MODEL

This chapter defines the sub-theory inter-relationships that were only alluded to in the overarching eclectic model outlined in the previous chapter (see Figure 3.4). The definitional task has two roles: first, it will consider specific sub-theories appropriate to the overarching model, and second, it will develop arguments that connect these sub-theories in a logical and causal manner.

The development of these various theoretical concepts and inter-relationships will be developed in the context of the general relationships depicted in the overarching model. These relationships are the following:

A) Locational advantage to internalization advantage.

B) Ownership advantage to internalization advantage.

C) Internalization advantages of entry mode to performance.

The first two of these relationships address the first research question: How various factors influence entry mode selection? The third relationship addresses the second part of the research question: Why certain entry modes outperform others?

In the first two relationships, two principal notions are developed. They are the entrant’s perceived competitive advantage in the new market, and the international bounded rationality that separates the decision-maker(s) from the information required to make an entry mode decision. It is argued, herein, that these two notions influence both the selection of the entry mode and the performance. The notion of competitive advantage is developed in the locational advantage section, while the notion of international bounded rationality is developed in the ownership advantage section.

The third relationship linking entry mode selection to mode performance combines an asymmetric information argument with Williamson’s transaction
cost approach. These two notions are developed in the internalization advantage section below.

LOCATIONAL ADVANTAGE
The specific sub-theories and relationships studied in this section are illustrated in Figure 4.1 below.

FIGURE 4.1
THE RELATIONSHIP OF LOCATIONAL ADVANTAGE TO INTERNALIZATION ADVANTAGE

Locational advantage has been studied widely within a neoclassical economic context. The classical approach to studying differences in international trade and investment has been the theory of competitive advantage. Adam Smith's initial development of the notion of absolute advantage was later modified to comparative advantage by David Ricardo (Bano, 1991). Comparative advantage has been further developed by a variety of other researchers, including
Heckscher, Ohlin, and Samuelson, who broadened the concept into different factors (e.g., factors of production, capital, etc.). Other international explanations have included the product life cycle model, the demand similarity model, the technical gap model, the human capital theory model, and tariff barrier models (Bano, 1991).

Porter (1990) developed a more recent view of locational advantage by attempting to integrate many of these disparate approaches into a unifying model. In doing so, he suggested that locational advantages are valueless to a firm unless they have been internalized to some degree. He further argued that most of these advantages come from the home-country location simply because that is where the firm’s greatest ability to internalize such advantages exists.

Porter’s logic is illustrated in the following quotes:

*The principal economic goal of a nation is to produce a high and rising standard of living for its citizens. The ability to do so depends not on the amorphous notion of “competitiveness” but on the productivity with which a nation’s resources (labour and capital) are employed. Productivity is the value of the output produced by a unit of labour or capital. It depends on both the quality and features of products and the efficiency with which they are produced.*

*Seeking to explain “competitiveness” at the national level, then, is to answer the wrong question. What we must understand instead is the determinants of productivity and the rate of productivity growth. To find answers, we must focus not on the whole economy but on specific industries and industry segments.*

*Industry attractiveness and competitive position can both be shaped by a firm. Successful firms not only respond to their environment but also attempt to influence it in their favour.*

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20 Porter, 1990, pg. 34.
This explanation that locational advantage is manifested at the firm-level generally conforms to Dunning’s (1993) thoughts on locational advantage and its ultimate manifestation through the firm’s internalization of any such advantage. The examples Dunning (1993) used to define locational advantage suggest that firms internalize these locational advantages to give them value.\textsuperscript{21} Some of these examples include low labor costs, excess to low cost of supplies and materials, and unique assets such as technology. Rugman and Verbeke’s (1993) definition of locational advantage also suggests that the firm must internalize the advantage to utilize it.\textsuperscript{22} They suggest that locational advantage can give a firm the “potential to economize on transaction costs by reducing risks and to benefit from local opportunities.”\textsuperscript{23}

Porter’s second postulation was that a firm’s competitive advantage originates from home-based advantages. This reasoning is illustrated in the following excerpts:

\textit{The home base is the nation in which the essential competitive advantages of the enterprise are created and sustained. It is where a firm’s strategy is set and the core product and process technology (broadly defined) are created and maintained.}\textsuperscript{24}

\textsuperscript{21} Dunning, 1993, pg. 82.
\textsuperscript{22} Rugman & Verbeke, 1993, pg. 762.
\textsuperscript{23} The internalization argument becomes even more powerful if one takes a more modern perspective of the bounds to the firm. Historically, a legal, hard assets perspective was used to define the bounds of the firm. More recently a broader perspective has been taken that includes sociopsychological issues such as knowledge, trust, organizational culture, etc. (Casson, 1991). If this perspective is taken, Porter’s (1990) arguments become very powerful because a firm does not have to have legally own an advantage for it to be an ownership advantage (i.e., to have been internalized to some degree). The firm just has to have gained some unique capability to use it more effectively and efficiently than other international firms. Such capabilities might include cultural norms and language, etc. Based on this perspective and assuming a relatively efficient market as is the case in North America, Porter’s perspective is very appropriate and suggests that there are different degrees and indirect ways of partially internalizing or gaining ownership advantage (i.e., unique firm-specific advantage) or locational advantages which provide the firm with an international competitive advantage.
\textsuperscript{24} Porter, 1990, pg. 19.
The home base will be the location of many of the most productive jobs, the core technologies, and the most advanced skills.\textsuperscript{25}

The home base is where strategy in set core product and process development takes place, and the essential and proprietary skills reside. The home base is the platform for a global strategy in the industry in which advantages drawn from the home nation are supplemented by those from an integrated worldwide position.\textsuperscript{26}

All of these points indicate that Porter considered a firm’s international competitive advantage to originate primarily from competitive advantages derived from its home-country. He made even stronger statements in a relatively long discussion about non-home-based advantages in which he suggested that they are difficult to access because of the lack of cultural knowledge and heritage. Thus, non-home-based advantages can only supplement the home based advantages.\textsuperscript{27}

In integrating the diverse international theories, Porter (1990) explained locational or national competitive advantages by using four dimensions: national factor conditions; demand conditions; related and supporting industries conditions; and firm strategy, structure, and rivalry conditions.

National factor conditions represent basic conditions of production. Porter (1990) generally defined them as human resources, physical resources, knowledge resources, capital resources, and economic infrastructure. Furthermore, Porter separated these conditions into a hierarchy of basic and advanced conditions. The basic conditions include natural resources, climate, location, unskilled labor, and debt capital. The advanced conditions include modern digital telecommunications, highly educated and skilled labor, and modern research and development capabilities. Basic conditions are important for extractive and

\textsuperscript{25} Porter, 1990, pg. 19.
\textsuperscript{26} Porter, 1990, pg. 70.
\textsuperscript{27} Porter, 1990, pg. 606-607.
agriculturally based industries, but Porter argued that advanced conditions are more important for the development of sustainable international competitive advantage, particularly in developed countries.

This study does not examine national factor conditions because they are considered to be subordinate or secondary relative to the other three dimensions in causality and in the minds of managers. It must be noted that by secondary the author means that these national or country factors will influence industry and firm factors, which in turn will influence the business decision under study. This situation creates two problems. First, the causal link to the wholly-owned entry mode decision may be complex and time-delayed because of the subordinated or secondary nature of these factors. Second, pretesting revealed managers’ misunderstanding of the long-term importance of these issues, possibly because of their shorter-term perspective, made measurement of national factor conditions extremely difficult. Therefore, an initial test of the relationships between locational advantages and the wholly-owned entry mode decision omits this locational advantage dimension.

Demand factors, market-based conditions leading to the development of competitive advantage in national industries (Porter, 1990), include the demand size, growth patterns, and the sophistication of buyers. These attributes improve the competitive nature of the firm both directly and indirectly. Direct benefits include the influence of economies of scale and scope due to large markets, while indirect benefits include, for example, increasing the competitive rivalry for fickle yet demanding customers.

Related and supporting industry factors produce competitive advantages at the industry-level by contributing innovative processes, and product development capabilities relevant to the particular firm and industry (Porter, 1990). In addition, these factors maximize the effectiveness and efficiency of specific industries in a
country because the firm or industry is surrounded by an efficient and effective set of value chains that maximize the overall value to the ultimate buyer.

Strategy, structure and rivalry conditions produce an environment in which firms within an industry must strive to attain new competitive advantages in an ongoing and dynamic sense because they are continually attempting to improve products and processes (Porter, 1990). This activity will translate into international competitive advantage when the firms attempt to expand into environments having less dynamism.

As explained earlier, Porter believed that the home-based nature of these advantages is the critical element of a firm’s international competitive position. Firms that have such advantages will attempt to extend and augment the advantages into new international markets. This opinion lends to the argument that firms having such a home-based competitive advantage will tend to use the build entry mode for a variety of reasons. First, the build mode will allow them to most effectively extend and develop their firm-specific competitive advantages in the new market because this mode allows them to plan, configure, and implement their competitive advantages in a meticulous and comprehensive manner. Second, they do not have to acquire competitive advantages that might be redundant or incompatible with their own firm-specific competitive advantages.

This second point is critical because recent research has indicated that one of the problems incurred in acquisitions is related to the subsequent implementation and development of synergies. A variety of empirical studies have indicated that developing these synergies is an extremely difficult problem and that procured firms often provide the acquirer with more redundancies than synergies (Chatterjee, 1986; Datta, 1991; Shrivastava, 1986; Trautwein, 1990).

Empirical support for the argument that strong home-based competitive advantages lead to the preferential selection of the build mode appears in
several previous wholly-owned entry mode studies. Zejan (1990) found that comparative national economic development influences entry mode selection. More specifically, as economic development improves in the host-country, the acquisition mode is more apt to be selected. This discovery indicates that as national competitive advantages improve in the host-country relative to the home-country, the acquisition mode is selected; while as the national competitive advantages decline in the host-country relative to the home-country, the build mode is selected. In other words, the greater the competitive advantage a firm has when entering a new international competitive environment, the more likely it is to select the build entry mode over the acquisition entry mode.

Using Hofstede’s (1980) measures of cultural distance and uncertainty, Kogut and Singh (1988) concluded that the greater the cultural gap between two nations, the more likely a firm will select the build entry mode over the acquisition entry mode. This result, although not a direct test of the competitive advantage argument, is counter-intuitive to what one would consider an appropriate entry mode selection if the firm were attempting to procure culturally appropriate host-country resources and skills. An alternative explanation is that these cultural differences are allowing entering firms to use distinct home-country competitive advantages and they select the build mode because it allows them to develop their competitive advantages most effectively, as was tangentially argued by Porter (see footnote 24).

In addition, several researchers have related sales growth to the selection of wholly-owned entry mode (Caves & Mehra, 1986; Singh & Kogut, 1989; Yip, 1982; Zejan, 1990). A variety of different and contrary conjectures regarding sales growth have been delineated. The first conjecture suggests that firms entering high growth markets will tend to select a build entry mode, a proposition supported in research by Zejan (1990), by Yip (1982) and partially by Caves and
Mehra (1986)\textsuperscript{28}. High growth markets could be associated with markets that are not competitively well developed. Thus, the entrant perceives a greater competitive advantage compared to when the market is more mature and the firm's competitors have firmly established their position and advantages.

The eclectic theoretical model developed in this section suggests that firms select an entry mode which tends to maximize the benefits of their perceived locational advantage relative to the market they are entering. An entering firm which has a locational; and therefore a competitive advantage, will more likely select the build mode because it will minimize the costs associated with installing their competitive advantages and it will maximize the benefits of implementing its firm-specific advantages in the new market. However, a firm that does not have a locational, and therefore a competitive advantage, will tend to select the acquisition mode because it perceives that procuring a firm with a known competitive position will minimize the risk of entry.

Therefore, the following hypotheses are proposed:

H1a. The higher the home-country strategic rivalry conditions, relative to the host-country, the greater the probability a firm will select the build over the acquisition entry mode.

H1b. The higher the home-country demand conditions, relative to the host-country, the greater the probability a firm will select the build over the acquisition entry mode.

H1c. The higher the home-country related and supporting industry conditions, relative to the host-country, the greater the probability a firm will select the build over the acquisition entry mode.

\textsuperscript{28} Caves and Mehra (1986) actually found that the relationship to entry mode was non-linear. A linear relationship was not significant. They then argued that at both very high growth and very low growth the acquisition mode is used and with medium growth the build mode is the preferred. These results were not supported by other studies and the convenient non-linear statistical procedure used is not methodologically valid.
In addition, Porter's (1990) theory suggested that locational advantage and the subsequently developed competitive advantage should directly influence the performance of the firm. Considerable empirical research has provided evidence for this relationship, including Porter's work (Dunning, 1993; Porter, 1990). An extension of this theoretical argument relates locational advantage to entry mode performance directly, thereby providing the following hypotheses:

H2a. The higher the home-country strategic rivalry conditions, relative to the host-country, the greater the performance of the entry mode.

H2b. The higher the home-country demand conditions, relative to the host-country, the greater the performance of the entry mode.

H2c. The higher the home-country supporting industry conditions, relative to the host-country, the greater the performance of the entry mode.

OWNERSHIP ADVANTAGE

The relationship between ownership advantages and internalization advantages is considered in this section, as is illustrated in Figure 4.2.

Ownership advantages represent the tangible and intangible industry and firm capabilities that allow a firm to extract economic rents or profits. This discussion will initially focus on firm-specific advantages. Then industry advantage control variables will be considered.
Firm-Specific Advantages
Firm-specific ownership advantages improve a firm's ability to plan and implement more efficient and effective decisions. This study, with its particular interest in the efficiency and effectiveness of foreign entry mode selection, relates the decision process to the concept of bounded rationality.

Simon (1957) developed the theory of bounded rationality as a notion suggesting that people were not completely economically rational, but rather they are forced to make decisions under a number of external and psychological constraints inherent in all individuals and these constraints can be exacerbated by a variety of external conditions. For example, sometimes decision-makers may not have all of the information pertinent to a particular situation and are unaware of all of the possible solutions. Therefore, they make a less than
economically maximizing decision. Even if the necessary information is available, they may not be cognitively capable of processing it to determine the "best" or most economically efficient solution.

Therefore, Simon proposed that individuals make decisions that are "satisficing" rather than maximizing. By "satisficing" Simon meant that the solutions were optimal given the individual's information and decision-making capabilities. In this regard, it was a satisfactory decision because he or she did not know of a better solution. This is in contrast to the rational maximizing decision which in economics is conceived as the best overall decision given all possible solutions that exist.

Simon initially developed the notion of bounded rationality as an individual trait (Simon, 1957). More recently, a variety of theoreticians have used this concept in an organizational sense. Their logic for such a connotation is based on the fact that organizations are made up of individuals, and accordingly, organizations can manifest bounded rationality if such a phenomena prevails within all individuals or decision makers in the organization. In such a situation the common trait of bounded rationality in all of the decision makers in the organization leads to a satisficing decision in an organizational sense (Decanio, 1993). Based on this argument, organizational bounded rationality has become a relatively widely used concept in the literature (Morgan, 1986).

This study uses the notion of bounded rationality in an organizational sense. More specifically, the bounded rationality concept is used to indicate when top managers in a firm (i.e., as group of individuals) have a bounded rationality problem specific to the wholly-owned entry mode decision. Therefore, this study does not contradict the notion of bounded rationality at the individual level, but considers bounded rationality to exist in all individuals involved with and making the wholly-owned entry mode decision.
The theoretical notion that groups of individuals have bounded rationality in a firm is important because the organizational context may influence the nature of the bounded rationality. Simon (1957) described such an organizational context when he stated that bounded rationality, or the limits on human rationality, are institutionalized in the structure and modes of the functioning of our organizations. And Scott (1987) suggested similarly that it is the various contexts that produce differences in bounded rationality, and that academics should be focusing on the differences in contexts rather than the notion of bounded rationality. Clearly, a manager in an organization that supplies him or her with more, or better, or well-synthesized information will have different bounded rationality constraints than a manager who receives poor information. Another example is the comparative difference between the information processing capabilities of a personnel manager and a production manager. Their different perspectives and capabilities will often allow them to interpret the information differently and therefore, respond in a different decisional manner. In other words, these managers’ bounds of rationality are better suited to solving different business decisions. In this regard, the context of the decision-maker influences the decision maker’s bounded rationality constraints. Similarly, the organizational context could influence the bounded rationality constraints of all of its top managers when the concept is considered from an organizational perspective.

The context, and its influences on bounded rationality, are important because the scope and focus of the bounded rationality constraint that is imposed on a manager may influence whether the decision is satisficing or economic maximizing. Honkapohja (1993) made this point when he suggested that a manager who has received all the pertinent education and experience surrounding an issue may be able to select a more economic maximizing decision because it was completed within the bounds of his or her rationality limits. Therefore, one must differentiate between two situations: where contexts tend to decrease the likelihood that the bounds of rationality for an individual
include the necessary information and capabilities to make the economic maximizing decision; and where contexts tend to increase the likelihood that the bounds of rationality for an individual include the necessary information and capabilities to make the economic maximizing decision.26

The organizational contexts that tend to improve the likelihood of an individual making a decision within his or her bounded rationality constraints, and thus, producing a more economic maximizing decision, are: where that individual is intuitively and explicitly familiar with the decision under consideration; and contexts where the appropriate information is available to that person on a timely basis. Therefore, the individual must have considerable training and experience in the functional and operational aspects of the decision he or she is facing. Furthermore, any additional and pertinent information must be supplied to the decision-maker in the appropriate fashion and time frame. Organizational contexts that tend to improve the decision-making bounded rationality relative to the economic maximizing decision include the following:

- A relatively focused strategy within a firm allowing the managers to build up considerable experience in the possible decision solutions and outcomes.

- A concentration and consolidation of pertinent knowledge which is available to the decision-maker. Therefore, the organizational structure, size, and strategy must be such that the decision-maker would concentrate repetitively on the same types of decisions.

- A good information flow amongst all of the members so that the information and capabilities to make decisions are dispersed to the decision-maker in the organization.

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26 It must be noted that although it is stated that one context leads to the economic maximizing solution and the other does not, in reality the first context may only lead to a better satisficing solution than the second context.
This study will look at some of the contexts that influence the probability of an organization making a decision within its bounded rationality constraints, and thus, a more economic maximizing decision. To differentiate between these two situations, this thesis renames bounded rationality to reflect when the constraints have a high probability of not including the economic maximizing solution. This situation will be referred to as the bounded rationality problem because, clearly, the organization has a problem in respect to trying to find and apply the economic maximizing solution.

This study applies this notion of the organizational bounded rationality problem to the international wholly-owned entry mode decision when the firm is entering a new international market.

The notion of an organizational bounded rationality problem as it applies to the wholly-owned entry mode is developed in Figure 4.3, which illustrates the facilities and operations duplicated in the international markets by a firm using the wholly-owned entry mode. In general, it is the operational or line activities such as production, sales, logistics, etc. that are duplicated in a new international manufacturing subsidiary. Porter (1990) calls these activities the "primary activities in the value chain." The staff functions or supporting functions are often not duplicated to the same degree when a firm establishes a manufacturing presence in a new international market because the subsidiary can rely on the parent company for these functional needs. Particularly, for functions such as finance and research and development.

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30 This assumes that the firm has developed some prior marketing strength in the foreign market - a relatively safe assumption as this study is examining wholly-owned entry through the establishment of a manufacturing plant, not fundamental market entry. In addition, internationalization theory would suggest that the firm incrementally invests in a new market until it has the appropriate local market knowledge to make a wholly-owned investment (Luostarinen, 1978; Luostarinen & Welch, 1990).
In this practical example, the parent firm has made two wholly-owned investments in countries A and B. The two investments include only primary activities. The support activities in the value chain remain in the home-country.

FIGURE 4.3

THE NOTION OF ENTRY MODE BOUNDED RATIONALITY

When a firm decides to enter an international market on a wholly-owned basis, the top managers making the investment decision may or may not have adequate information to know how to duplicate and exploit these primary activity advantages. Knowledgeable managers who think and feel they have the appropriate primary activity competitive advantages will want to use the build mode so that they can develop these advantages in the most appropriate manner and maximize any exploitable advantage. Therefore, when a firm decides to enter using a build entry mode, the top managers must be cognizant
of the specific competitive advantages that their firm has at the operational level. Furthermore, these managers must be well versed in how these competitive advantages are developed and created over time and on an integrated basis in a new market. Otherwise, the top managers may not be terribly comfortable about entering the market using a build approach that relies so heavily on their competitive advantage at the operational or primary level.

If the top managers do not understand how to develop and exploit their firm’s primary activities advantages in the new market, they would preferentially select the acquisition mode. This entry strategy circumvents the need for in-depth knowledge about the primary activities and operational level competitive advantages, and how they should be developed to suit the new competitive environment. By using the acquisition strategy, top managers are procuring advantages that have produced a known competitive position in a host market with both a history and a trend.

In addition, when top managers become disassociated from the primary activities, they not only lose their knowledge of operational level competitive advantages, but they also become more familiar with support activities such as financial and administrative skills and capabilities. These skills are more suited to the acquisition strategy, and top managers may prefer this mode because of their familiarity as well as their ability to actively manage the “big” financial and administrative issues inherent in the implementation of an acquisition strategy.

An example of this bounded rationality is illustrated in a recent survey conducted by Booz Allen and Hamilton (Henkoff, 1994). The survey was attempting to discern why large firms were not successful when implementing organizational change and, in particular, why they were not getting closer to the customer, or improving quality and product technology. The results indicated that although Chief Executive Officers (CEOs) talk about technology, quality, and customer satisfaction, they see their priority as cost control, a financial skill. In addition,
the CEOs do not want information on critical operational level functional measures and ratios. They are principally interested in obtaining traditional profit and stock market performance reports. Yet, these same CEOs do want to get involved in operational level tactical decisions such as pricing and packaging changes. This example illustrates the potential bounded rationality or information problem that is confronting top management decision makers.

Song (1982) found empirical evidence of such a bounded rationality problem or disassociation from the operational level functions by top management. His research showed that top managers who had production and marketing experience were much more inclined to select the build entry mode, while top managers who selected the acquisition mode tended to come from accounting, finance, and law backgrounds.

The notion of a bounded rationality problem is largely associated with an organizational knowledge dislocation problem. A decision is being made in one part of the organization while the critical knowledge resides in another (Simon, 1957; 1960). The notion introduces the idea that the decision-maker has cognitive limits, and therefore makes decisions within external and psychological constraints (Cherrington, 1989). One of the external constraints may be the lack of knowledge about what or where the information specific to the operational level competitive advantages exists in the organization. The decision-maker then is faced with two choices: making a non-optimal decision; or searching for more information, while possibly gaining no useful additional information and incurring more searching costs. The tradeoff between further searching and decision-making is based upon each individual’s risk aversion as well as the specific characteristics of the decision. However, a top manager who does not know implicitly and explicitly the nature of the firm’s operational level competitive advantages will incur costs associated with finding, integrating and understanding the new information. The point at which a manager decides he or
she has a satisfactory or good enough solution is called a satisficing decision (Simon, 1984).

A manager who lacks the knowledge or who is uncertain about how to build and develop the company's home-based competitive advantages in a new foreign manufacturing operation may feel more certain about acquiring a firm with a known competitive position than risking an uncertain build entry strategy having no associated competitive position. Furthermore, a manager with a strong financial and/or administrative background may feel that the acquired firm's competitive advantages will synergistically help the whole firm even though the manager is not intimately familiar with any of the specific primary or operational competitive advantages.\(^{31}\)

Previous research on wholly-owned entry modes provides some tangential evidence that a bounded rationality problem influences entry mode selection. The most consistent indicator of entry mode selection, in prior studies, has been parent product diversification strategy (Caves & Mehra, 1986; Dubin, 1975; Kogut & Singh, 1988; Wilson, 1980; Yip, 1982). These studies, because of their consistent support for this relationship, provide strong evidence that diversification is positively associated with the acquisition mode, and moreover, that the diversification strategy has been related to bounded rationality problems.\(^{32}\)

Several other relationships also provide evidence of bounded rationality problems and its influence on entry mode selection. Organizational size, a concept that has also been theoretically related to bounded rationality, has been found to consistently relate to the acquisition mode (Caves & Mehra, 1986;\(^{33}\)

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\(^{31}\) Walter and Barney (1990) found that synergies were the most often used reasoning for an acquisition. However, empirical research indicates that these synergies are usually not present. Bounded rationality could be an explanation for these two incongruent results.

\(^{32}\) It should be noted that diversification strategy has been related to bounded rationality by a variety of studies in both the domestic and international context (Amburget & Miner, 1992; Chatterjee, 1990; Montgomery & Singh, 1984; Rumelt, 1974; 1982; Simmonds, 1990).
Dubin, 1975; Kogut & Singh, 1988). Finally, several of the wholly-owned entry mode studies have related knowledge to mode selection. Caves and Mehra (1986) found that multinational experience was positively related to the build mode, and Wilson (1980) concluded that a multinational's propensity to use the acquisition mode was negatively related to the amount of experience the firm had in the host-country. All of these results support the argument that a bounded rationality problem influences the wholly-owned entry mode selection process. Therefore, this theoretical and empirical evidence leads to the following hypothesis:

H3. The greater the organizational bounded rationality problem in the parent company, the greater the probability that the entry mode selected will be the acquisition mode.

Bounded rationality problems have also been associated with lower performance in a firm. The most compelling evidence of this relationship is from the product and strategy diversification stream of research. Rumelt (1974; 1982) and a variety of other researchers have consistently been able to associate unrelated product diversity, which is a sign of a bounded rationality problem, to lower firm performance. Therefore, a second hypothesis relates bounded rationality directly to entry mode performance:

H4. The greater the organizational bounded rationality problem in the parent company, the lower the performance of the entry mode.

**Causes of Bounded Rationality Problems**
A variety of arguments have been put forth as to why bounded rationality problems exist in a firm. The prior discussion mentioned several, including strategic diversity, organizational size, and lack of organizational coordination and integration.

Strategic diversification has been related to both bounded rationality and entry mode selection by a variety of researchers (Caves & Mehra, 1986; Rumelt,
1974). Yet, firms appear to continue to select diversification strategies because of the expected and possible strategic synergies which decision-makers perceived to exist between the firms (Trautwein, 1990; Walter & Barney, 1990). Ansoff (1965), who was the originator of the strategic synergy notion, deemed it to be a necessary strategic advantage for the successful growth of a firm. However, empirical research has shown quite strongly that the advantage of synergies is negated by the costs of integrating the very disparate synergies when the acquisition mode is employed.

Related product diversification appears to augment the firm’s performance through synergies because the benefits of synergy overwhelm the costs of integrating. However, when unrelated product diversification occurs, the costs of integrating appear to overwhelm the benefits of synergy, and firm performance declines (Christensen, et al., 1987; Christensen & Montgomery, 1981; Geringer, Beamish, & daCosta, 1989; Montgomery & Singh, 1984; Ramanujam & Varadarajan, 1989; Rumelt, 1974; 1982).

Unrelated product diversification performance problems have been related directly to bounded rationality problems. This managerial problem occurs because the managers are not able to cogently understand the diverse strategies of their businesses because of bounded rationality. Therefore, unrelated diversifiers are unable to benefit from the economies of scope and scale synergies that they otherwise would because there is little integration, coordination and overlap in their resource-base (Bettis, 1981; Christensen & Montgomery, 1981; Palepu, 1985; Rumelt, 1974).

Empirical product diversification research tends to confirm the conjecture that firms preferentially have adopted related and unrelated product diversification types in association with the build and acquisition mode respectively. Both domestic and international research on wholly-owned entry
mode selection has supported this argument (Amit, et al., 1989; Caves & Mehra, 1986; Yip, 1982; Zejan, 1990). This therefore suggests the following hypothesis:

H5. The greater the product diversification in the parent company, the higher the organizational bounded rationality problem in the firm.

Organizational size is one of the few organizational variables that have been considered recurrently in the wholly-owned entry mode research. Size is considered an important attribute in industrial organization economics because it provides evidence of economies of scale, economies of scope, and surplus resources. All of these factors are important in positively influencing the nature of the organization's ongoing strategic direction.

However, size can negatively impact the firm's performance. Chandler (1962) noted that as its size increased, the firm had to become more decentralized in its structure. Research has tended to verify this relationship between the complexity and size of an organization and its decentralized control mechanisms (Hill, 1988). Furthermore, Williamson (1970) developed a theoretical model of the firm which postulated that as internal integration and transaction costs increased a firm would have to move towards a multi-divisional structure. These theoretical explanations all suggest that the increasing bounded rationality problems as firms grow are being solved by distributing the decision-making power throughout the organization.

The above theory appears to be highly effective when operational decisions are being made. However, when a firm is facing a major decision such as investing in the first international plant in a new international market, the process becomes more complex. First, top managers want to be involved with such a large investment decision. Second, because such an investment requires a diversity of information from many different parts of the corporation, integration is necessary. In a large corporation this integration process may be difficult. Therefore, top managers, after having collected the diverse information, then have to integrate
it cognitively. This achievement may be difficult when they do not have a strong 
operational level of knowledge to integrate the different types and sources of 
information.

The above decision-making process may differ greatly from the normal capital 
requisition process because, in the majority of firms facing an entry mode 
decision, the top managers do not discuss the entry mode selection with other 
managers. Furthermore, many of these managers do not rationally compare the 
alternative entry modes (Newbould, Buckley, & Thurwell, 1978). Therefore, a 
subconscious bounded rationality process seems to influence the entry mode 
selection in a non-rational manner.

In addition, organizational size could also be considered a potential influence on 
bounded rationality, and thus on entry mode selection. Yip's (1982) initial 
hypothesis, based on his asymmetric knowledge theory, was that size would 
allow firms to overcome barriers to entry. He provided two competing 
hypotheses: one based on anti-trust concerns suggesting that large firms would 
be restricted from acquisitions, and the other based on a large company's 
financial resource surplus predicting that such a firm would favor acquisitions 
because of its financial ability. However, he found that parent size was not 
significant (Yip, 1982). Caves and Mehra (1986) considered wholly-owned 
modes, but predicted that larger firms would favor the acquisition mode because 
anti-combines problems would not arise when the firm was entering a foreign 
market. Their empirical results supported this view. However, a number of 
researchers have found contrary results. Dubin's (1975) discovery that smaller 
firms acquired in the domestic market more often, supported Yip's second 
hypothesis. When Wilson (1980) considered this research question from a 
multinational perspective, his evidence supported Dubin's. Kogut and Singh's 
(1988) investigation of international companies also supported Dubin's 
conclusions. Their explanation was that large multinational companies were
often prevented or discouraged from acquiring local firms because of nationalist sentiments.

All of the above arguments suggest that, although size is not a direct cause of entry mode selection, it may cause an organizational bounded rationality problem that in turn influences entry mode selection. Therefore, the following hypothesis is presented:

H6. The greater the organizational size of the parent company, the higher the organizational bounded rationality problem in the firm.

Organizational structure and systems have been related to a wide variety of strategic decisions (Chandler, 1962). A variety of researchers along many different dimensions. For example, Williamson's (1970; 1975) provided economic explanations for the selection of the multidivisional organizational structure. Williamson (1975) argued that multidivisional firms are characterized by: a separation of strategic and operating functions which fosters a "psychological commitment" on the part of top officers to maximize profitability; functional autonomy of divisions, which implies that the contribution of each to profitability is observable and measurable; reallocation of resources generated by divisions on the basis of relative yields rather than returning them to their source; the use of corporate incentives to promote profit-seeking behavior; and employment of a specialized corporate staff to "audit" the affairs of divisions.

Chandler (1962) initially related strategy to structure, and his research implicitly linked diversification strategy to decentralized structural concepts. Berg (1965a; 1965b) formally developed this link between diversification strategy and decentralization, or conglomerate structure. His theme has since been theoretically developed and quantitatively researched by several authors (Galbraith & Kazanjian, 1986). More recently, Hill (1988) and Hill and Hoskisson (1987) examined the theory in a manner that allowed the concepts to be specifically defined and empirically tested. Hill (1988) hypothesized that
multidivisional organizational structures would perform best under unrelated diversification strategies. Hill (1988) and Hill and Hoskisson (1987) argued that the control systems which maximize operational synergies between the two entities are incompatible with the systems required to realize the benefits from an internal capital market. Their empirical tests of this hypothesis indicated that multidivisional firms performed better when they undertook an unrelated diversification strategy (Hill & Hoskisson, 1987; Hill, 1988; Hoskisson, 1987).

Selection of wholly-owned modes has consistently been related to prior diversification strategies. Moreover, the hypothesis surrounding such a relationship suggests that organizational control synergies and internal capital market system incompatibilities create problems based on organizational bounded rationality problems (Caves & Mehra, 1986). There is supporting evidence for such a relationship. Berg's (1973) discovery that corporate staffs tend to be much bigger in internal developers than in acquisitive diversifiers indicated a centralization of management control and systems. When Pitts (1976; 1977a; 1977b) studied build versus acquisitive firms, he determined that firms using the build mode could be described as having substantial interdivisional resource sharing, large corporate staffs, extensive inter-divisional managerial transfers, and subjective performance measures for divisional managers. On the other hand, acquisitive firms had little inter-divisional resource sharing, small corporate staffs, few inter-divisional transfers, and objective performance measures for divisional managers. These studies show that the organizational characteristics that have been associated with the build mode are some of the classical techniques for reducing organizational bounded rationality problems. In general, they are organizational structures and procedures that improve the firm's ability to make decisions using the appropriate information.

The attributes associated with the centrally-managed firms suggest that they have the ability to manage information more quickly. They are especially able to integrate information from the functional levels in the organization, an important
attribute for the build mode. A multi-divisional firm, on the other hand, will be more involved in managing corporate level information. This information bias means that top managers in a multi-divisional firm will have problems with organizational bounded rationality and imperfect information when they must analyze the operational level functional requirements of a build entry. Therefore, a multi-divisional firm would be more likely to procure the required operational level information through an acquisition.

Management control is also an important element in managing a foreign entity. The literature has described four types of control: market, output, clan, and bureaucratic control systems (Hill & Jones, 1989). Market control implies that external markets such as stock markets and other price-related mechanisms will control the behavior of a business unit. Market control, by definition, has been forgone when a firm internalizes a market. Output control is based on the firm’s setting output goals and objectives for a business unit and simply measuring the degree to which these are attained by that unit. Output control is used when outcome is measurable and when of greater certainty or forecast ability of output levels is possible (Eisenhardt, 1985). Clan control is based on establishing or imbuing shared social values and norms into the employees of a business unit. This type of behavioral control mechanism occurs in situations where social control is possible, and more desirable or effective (Ouchi, 1977). Clan control is associated with situations in which output levels are difficult to measure, and social values or norms are easily identified and shared by the various employees. Bureaucratic control involves, directing behavior by standardized rules and regulations to control behavior, is a more extreme control technique used when behavioral norms are not shared, and output is difficult to forecast.

Researchers have not previously related these control mechanisms to entry mode selection. However, the eclectic theory suggests that clan control would be most suitable to build entry mode. This method of control requires that a company have a tightly integrated and communicative structure to ensure the
continuous sharing of values, thereby minimizing organizational bounded rationality concerns and imperfect information problems. Such firms have access to the information necessary to successfully complete a build entry and therefore, would preferentially select such a mode. Ouchi (1977) has shown that entrepreneurial ventures relate more effectively to clan-type control mechanisms. However, the three other types of organizational control systems would tend to create greater organizational bounded rationality problems because organizational communication is less frequent and more formal. Therefore, these firms would tend to procure the information that they can not access in their firm through an acquisition.

In addition, non-clan type control systems are more appropriate when the organizational entities are stable, and information communication between entities is low. Acquisitions tend to provide more stable environments to enter into because they have a known market share and a historic financial record. Therefore, organizations that do not have clan-type cultures and organizational control systems would prefer to acquire when entering a new market.

Organizational integration mechanisms may also influence the selection of the entry mode because they influence the ability to communicate information throughout the organization. A primary determinant of the information communication and coordination capabilities in a firm is the firm's integrating mechanisms (Galbraith, 1973; Galbraith & Nathanson, 1978; Thompson, 1967; Van de Ven, Delbecq, & Koenig, 1976). Interdependencies required to create synergies, based on organizational shared information, are dependent upon the integration mechanisms that a company utilizes (Galbraith, 1973; Lawrence & Lorsch, 1967). This relationship between coordination and integrating mechanisms has proven to be particularly important in the management of international companies (Bartlett, 1986; Roth, Schweiger, & Morrison, 1991).
This study postulates that the need for organizational coordination and integration is associated with entry mode selection. Such a postulation is supported in some of Pitts' (1975; 1976; 1977a; 1977b) qualitative research on entry mode.

The eclectic model suggests that different integrating mechanisms are required for build and acquisition modes. Build entry requires informal operational level integration involving the operating organizational levels of the firm because the new entity must obtain the appropriate competitive skills and information from these levels of the firm. An acquisition entry, on the other hand, requires only higher level skills because generally the operational level skills will be present in the acquired organization. Furthermore, the firm that uses an acquisition entry mode is using the financial markets to acquire an organization that already has the necessary operational level skills, and it maybe inferred that the acquiring firm acquires these skills because they are not available or accessible to them internally.

Therefore, the firm which is more integrated and coordinated is less likely to have organizational bounded rationality problems and thus it will tend to select the build entry mode. This observation provides the following hypothesis:

H7a. The lower the international vertical organizational integration in the firm, the higher the organizational bounded rationality problem in the firm.

H7b. The lower the international horizontal organizational coordination in the firm, the higher the organizational bounded rationality problem in the firm.

Industry-Specific Advantages
Ownership advantages in the form of industry and firm-specific factors also influence the internalization advantages of entry mode selection and performance.
A variety of industry and firm factors have been associated with wholly-owned entry mode selection. Prior studies have examined factors relating to barriers to entry in particular industry groups, including economies of scale, economies of scope, and industry concentration (Caves & Mehra, 1986; Kogut & Singh, 1988; Zejan, 1990). However, theoretical arguments for the causality of these forces on entry mode selection have been varied and weak in empirical support. The consensus of these studies suggests that the acquisition mode is favored when the market is concentrated, oligopolistic in nature, and has significant barriers to entry. The reasoning is that when a firm is confronted by high entry barriers, it will take the lower risk option of buying a firm that has already surmounted those barriers (Gronhaug & Fredriksen, 1988).

Another parallel and competing argument takes a more dynamic perspective. Oligopolistic game theory submits that when a new firm is entering a concentrated market, the host firms will probably react in an aggressive manner towards the new entrant (Aumann & Hart, 1992; Davies & Lyons, 1988; Shepherd, 1990; Tirole, 1988). In particular, concentrated markets are susceptible to considerable negative competitive reaction if excess capacity is added. Clearly the build mode adds more capacity than a simple acquisition mode. In the case of the build entry mode, the entering firm must have strong competitive advantages to survive and grow in such an antagonistic environment.

Furthermore, because the host firms in the oligopoly have better knowledge of the competitive forces in the market, they have an information advantage regarding the competitive game that might be played when the new firm enters. Entering firms, on the other hand, are faced with an information disadvantage or organizational bounded rationality problem because their organizations do not have the above information. Therefore, entering firms are more likely to use the acquisition entry mode because this would not disturb the oligopolistic game that is presently being played, and the entering company would procure the game
playing knowledge so that it could play the game as proficiently as others in the future.

Several prior empirical studies have found that barriers to entry were related to entry mode selection, with one of the most consistent relationships existing between industry concentration and mode selected. The research of Chatterjee (1990) and Caves and Mehra (1986) indicated that industry concentration is related to the selection of the acquisition mode, as the above theoretical arguments predict. In addition, Yip (1982) detected that investment intensity, a similar measure to industry concentration, was related to entry mode selection.

In another analysis, Caves and Mehra (1986) examined the effect of advertising and research intensity (i.e., both considered barriers to entry in an industry) on entry mode selection. They discerned some evidence of a relationship between these variables and entry mode selection. However, their statistical technique was unreliable (see Chapter 2). Yip (1982), who tested these relationships in a domestic context, found them to be non-significant, but in the correct direction.

Therefore, the following hypothesis is proposed for ownership structure:

H8. The greater the barriers to entry into a market, the greater the probability that the entering firm will select an acquisition over a build entry mode.

Barriers to entry have also been directly related to performance from both a theoretical and empirical perspective (Bain, 1956; Caves & Porter, 1977). These arguments suggest that a firm which is in an industry having high barriers to entry will profit because the threat of new competition is minimized, creating a situation which in turn allows an oligopolistic game to be played in that market. The result tends to maximize all of the firms' profits in the industry.

This same logic should be applicable to an entry mode. If an industry group has high barriers to entry, the specific entry should have higher than normal profitability. Therefore, the following hypothesis is proposed:
H9. The greater the barriers to entry into a market, the greater the probability that the entry mode will have high performance.

INTERNALIZATION ADVANTAGE

Internalization advantages delineate the association between the entry mode selected and the resultant mode performance. Figure 4.4 illustrates this relationship.

FIGURE 4.4

THE RELATIONSHIP OF ENTRY MODE SELECTED TO PERFORMANCE WITHIN INTERNALIZATION ADVANTAGE

Locational Advantage

Ownership Transactional Advantage

Mode Selection

Mode Performance

Internalization Advantage

Two arguments supporting the postulation that the build entry mode has lower costs than the acquisition mode relate to resource and information asymmetry and the entry mode control cost.
Performance Implications of Resource Requirements and Information Asymmetries

The resource-based argument for wholly-owned entry modes is related to the fact that acquisitions are situations in which the firm is not certain that it has the appropriate resources to compete in the new market. Therefore, the firm procures the appropriate resources through an acquisition. On the other hand, in the case of a build entry mode, a firm believing it has the appropriate uses them to build a new plant rather than acquire different resources. In particular, such firms incur minimal resource-based transaction costs, while those lacking the required resources must procure them and accept an associated transaction cost.

A firm using an acquisition entry mode will have several costs associated with acquiring the necessary resources for market entry, particularly in the inefficient market situation which an acquisition (a single and unique transaction) represents. First, the firm incurs the cost of searching for an appropriate acquisition target. Second, the acquiring firm has a cost associated with the risk of paying too much for the target firm, and therefore, the resources being procured. The cost of this risk is associated with the asymmetric information problem confronting the acquiring firm due to the firm's inferior knowledge of the resources being purchased. On the other hand, the firm to be acquired has an information advantage because of its superior knowledge about its industry, its internal resources, and the market for these resources. Therefore, the acquiring firm is at a disadvantage for evaluating the value of the resources being purchased. The seller may ask a price in excess of the value of the business and resources, or the acquirer may overbid for them.

An additional problem makes the economic transaction even more risky for the acquiring company: the singular nature of the transaction allows the sellers to cheat an acquirer, and provides the acquirer with little or no recourse to exact retribution from the sellers. Such a situation puts the seller at a distinct
advantage. Therefore, acquisitional risk or premium costs are associated with information asymmetry combined with the singular nature of the acquisition transaction process. Increasing the initial search costs can reduce these expenses, but will, in turn, be an added cost that is associated with an acquisition strategy.

Teece (1982) made a similar argument for a firm that selects the acquisition mode by suggesting that the build mode firm has excess or slack resources that can be expended on the creation of a build mode. Utilizing these slack resources more fully improves the overall effectiveness and efficiency of the firm. Furthermore, his thesis is applicable to the whole firm, while the theoretical argument in this paper is focused only on the entry mode itself. Other researchers have made similar information asymmetry arguments specific to the acquisition entry mode (Yip, 1982).

A broader development of the information asymmetry argument suggests that firms making acquisitions have less information, on average, than those selling. Therefore, the successful buyer generally pays more than what the seller and all other potential buyers estimate the market value to be for the company. This concept, which has been developed more rigorously in economics as the Winner's Curse, is best described as a winning bidder who is cursed by its overpayment for the acquired company (Keloharji, 1993). The winner is the firm that has the poorest information, and hence makes the highest bid. This overbid position is further supported by the fact that all of the other bidders as well as the seller felt that the bid was in excess of the worth of the company. Thus, if market forces were allowed to produce a fair value for the firm, the value would be somewhat less than the winning bid.

The above assessment illustrates that the cost of procuring necessary resources (i.e., competitive advantages) through an acquisition tends to provide lower performance, due to overbidding, when compared to the build mode.
Entry Mode Control Costs

Acquisitions also incur supplementary control costs. In particular, the resource deficiency perceptions that constrain a firm to contingently select the acquisition mode may tend to cause management control problems. The information asymmetry created by the resource deficiency may limit the firm’s ability to understand and effectively control newly acquired entities in several ways. First, organizational culture differences may exacerbate the management control problem between the two merging entities. In particular, cultural differences may limit the effectiveness of behaviorally-based control mechanisms that rely upon trust, value congruence, and respect. This situation may force the acquiring company to use a restricted set of control mechanisms which, in turn, may decrease the implementation efficiency of the organizational control process, and increase the risk of opportunistic action by the acquired company’s workforce. Organizational culture differences may also impede organizational integration, yet executives often erroneously predict that organizational integration will produce post-acquisitional synergies. The opportunity costs of not gaining these synergies immediately may be significant.

Organizational cultural problems of this sort have been reported by a variety of researchers (Adler & Graham, 1989; Alstrom & Gillespie, 1989; Balakrishnan, 1988; Caves & Mehra, 1986; Conn & Connell, 1990; Datta, 1991; Harrison, Hitt, Hoskisson, & Ireland, 1991; Hopkins, 1987). When Datta (1991) correlated acquisition performance with the degree of similarity between the management styles in the entities before acquisition, he learned that similar management styles, a proxy measure for organizational cultural characteristics, led to better performance. The costs of controlling for an organizational cultural gap are incurred both prior to an acquisition, when significant searching costs are required to differentiate appropriate from inappropriate organizational cultures, and subsequently, when a variety of management and organizational integration techniques must be used to merge the two cultures.
Another problem associated with the organizational synergy argument surrounding the acquisition strategy approach is that many of the synergies are not realized. A variety of researchers have investigated the potential for different types of synergies in acquisitions. However, the vast majority have revealed no significant relationship between synergies and post-acquisitional performance (Caves, 1989). Chatterjee (1992) discovered that synergies, in general, do not create value in acquisitions. The more significant value-creating strategy is management restructuring, a tactic that could have been implemented by the previous management independently of the acquiring firm. Furthermore, for every synergy created in an acquisition there are several costly redundancies. An empirical study by Chatterjee (1990) revealed that, from a resource-based perspective, acquisitions have the potential to create more resource redundancies or duplications than synergies. Despite this evidence, most managers continue to suggest that they choose acquisitions for synergistic reasons (Walter & Barney, 1990). This enigma of managers claiming synergies, which often are not present, to justify an acquisition is further evidence of information asymmetries and inappropriate use of management control systems. Both of these control problems will lead to higher management costs for acquisitions compared to the build mode.

Table 4.1 summarizes the management control inefficiencies and resource procurement costs associated with the two entry modes.\(^{33}\)

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33 It should be noted that Figure 4.1 has delineated the costs associated with the entry modes. It has neglected to delineate the opportunities. This oversight is intentional and deemed logical for two reasons. First, to the author's knowledge, strategic opportunities have not been preferentially delineated that would apply to one international entry mode and not the other. Second, resource based theory might suggest that the acquisition provides firms with new strategic resources and opportunities. However, many of the strategic resources can be developed internally. Furthermore, it is presumed that the acquiring firm more than pays full market price for such resources. Finally, research on strategic synergies has indicated that in general they are not available to firms, given the management control problems and redundancies inherent in the acquisition approach (i.e., see prior argument in this chapter on this issue). Therefore, there appears to be minimal theoretical or empirical support for differentiating strategic opportunities that may result from one mode and not the other.
TABLE 4.1

THE COSTS ASSOCIATED WITH UTILIZING THE ENTRY MODES

<table>
<thead>
<tr>
<th>Entry Mode</th>
<th>Costs of Procuring Additional Resources</th>
<th>Ownership and Managerial Control Costs</th>
<th>Total Costs</th>
</tr>
</thead>
<tbody>
<tr>
<td>New Venture</td>
<td>Low</td>
<td>Low</td>
<td>Low</td>
</tr>
<tr>
<td>Acquisition</td>
<td>High</td>
<td>High</td>
<td>High</td>
</tr>
</tbody>
</table>

This reasoning leads to the following hypothesis is derived:

H10. On average the build mode will outperform the acquisition wholly-owned entry mode.

THE COMPLETE RESEARCH MODEL

The complete research model that has been delineated in the preceding theoretical discussion is illustrated in figure 4.5.

This model will be tested using two methodologies:

1. The first test will use a secondary data-set to test the relationship of organizational bounded rationality problems to mode selection, and of mode selected to performance, while controlling for locational competitive advantage. This test is methodologically detailed in Chapter 5 and the analysis of the data is completed in Chapter 6.

2. The second test will use a survey-based approach for a more thorough assessment of the complete causal model. This test is methodologically detailed in Chapters 7, and analyzed in Chapter 8.
FIGURE 4.5

THE COMPLETE RESEARCH MODEL

Locational Advantage

- Home-Based Competitive Advantages
  - H2, H1

Ownership Advantage

- Industry Concentration
  - H9, H8

- Firm Size
  - H6

- Diversification Strategy
  - H5

- Internat. Integ. & Coordin.
  - H7

Bounded Rationality

Mode Selection

- H3, H4

Mode Performance

Internalization Advantage

- H10
CHAPTER 5 - STUDY #1 METHODOLOGY

The first test of the eclectic theoretical model used a Japanese Foreign Direct Investment (FDI) database to assess the influence of organizational bounded rationality problems on entry mode selection, and the influence of entry mode selection on the performance of the entry mode. The analysis controls for locational competitive advantages. Clearly, this is not a comprehensive test of this research model; however, it provides an initial evaluation of some of the main propositions.

DATABASE CHARACTERISTICS

This database is from a survey of all Japanese manufacturing subsidiaries in North America (i.e., Canada and United States) whose parent companies were listed on the Tokyo, Osaka, or Nagoya stock exchanges in 1991 (Toyo Keizai, 1992). It under-represents small parent firms and over-represents larger parent firms because of the public nature of the database source. Although this bias reduces the generalizability of the study, it helps control for organizational size.

The details were compiled using public information, plus a questionnaire-survey of the top Japanese manager in each foreign subsidiary during 1991 (Toyo Keizai, 1992). The effects of locational advantage were controlled for by using only Japanese entries into the North American market. Industry-specific effects were partially controlled for by using only entries that involved manufacturing firms with established manufacturing operations in North America.

The database contained information on the entry mode, the entry objective, the performance of the entry in 1991, and the ownership structure of the entity, as well as a variety of other firm-specific characteristics. This study confined itself to pure build and acquisition modes, and a total of 242 market entries were

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34 Prior databases were used to insure that acquisition entry modes were not joint ventures that had evolved into acquisitions.
used: 166 new ventures, and 76 acquisitions. This sample size is large for such a constrained international theoretical problem.

Although no industry-level variables were used in the analysis, the two modes appear to include cases having comparable operational scope and scale. The sample consisted of subsidiaries having average sales of $52 million, average investment of $22 million, and average employment of 216 people.

A T-test for independence analysis of the sales volume, total employment, and capitalization values of these two modes appears in Table 5.1. The results indicate that the means for the capital and sales levels are not independent. This test is further supported by the results of a Kolmogorov-Smirnov Test\(^\text{35}\) that indicated the first two variables were not significantly different from each other. However, the total employment levels appear to be significantly different.

<table>
<thead>
<tr>
<th>TABLE 5.1</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>T-TEST FOR INDEPENDENCE: BY THE VARIABLE MODE</strong></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Capital</td>
</tr>
<tr>
<td>Sales</td>
</tr>
<tr>
<td>Employment</td>
</tr>
</tbody>
</table>

Figure 5.1 graphically illustrates the distribution differences in employment between the build and acquisition mode. The middle 50 percent (i.e., 25% to 75%) of the distributions appears to have considerable overlap. However, the acquisition mode clearly has a much greater upper tail to its distribution, while

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\(^{35}\) The Kolmogorov-Smirnov Test is particularly helpful in differentiating between two sets of data because it not only tests for the difference in means but also tests for the difference in distribution shapes between the groups.
the build mode has a much more concentrated distribution with fewer outliers having high employment numbers.

Based on this graphic illustration and further reasoning the independence of employment can be explained by the fact that acquisitions can involve very large companies while the build mode must grow and develop from a zero employment state. Therefore, the acquisition mode could involve companies having more employees compared to the build mode. The final expected sales level may be similar for both types of modes, but the build mode may require some time to develop production capacity or market share as sales are initially supplemented with imports from the home-country.

FIGURE 5.1

BOX & WHISKER PLOT OF TOTAL EMPLOYMENT BY MODE

This inconsistency, however, does not indicate a tremendous industry difference because the evidence is contrary to what one might expect which is that industries having high levels of capital and sales per employ would have higher
entry barriers. One possible explanation for this difference is that the build mode is using importing to provide sales growth to supplement its internal production.

A look at the different industries present in the two entry mode samples reveals that the content of the two samples is not very different. Figure 5.2 illustrates the frequencies of industries, by Standard Industrial Code (SIC), in the two mode samples. The shapes of the distributions are quite similar to each other; the only exception occurs in the transportation equipment, electrical equipment, industrial machinery, and instrument product manufacturing industries, where the build mode has more entries. There does not appear to be a strong industry structural difference or logic between the two samples, and possibly the best explanation is that firms and industries having superior competitive strengths are favoring the build mode.

FIGURE 5.2

HISTOGRAM OF INDUSTRY GROUPS
(by product SIC categories)
This analysis tends to confirm that radically different industries (e.g., capital intensive versus non-capital intensive industries) are not present in the two mode sub-samples.

OPERATIONALIZATION OF THEORETICAL CONCEPTS

The theoretical chapter proposed that a variety of theoretical concepts relate to each other. This section will attempt to define or operationalize the concepts into variables that are related to measured items in the Japanese FDI database.

The operational definition of the modes is as follows: a new venture was defined as an entry that involved only one parent, which built and operationally equipped the plant; and an acquisition was defined as an entry that involved only one parent, and its plant which purchased equipment from the previous owner. These definitions ensure that the entry modes are mutually exclusive.

The measurement of performance was a survey question which asked the top Japanese managers in the subsidiary to evaluate their overall financial performance in terms of financial profitability in 1991. The scale for the performance indicator had only three choices: profitable (1), break-even (0), or a loss (-1). Table 5.2 indicates the distribution of performance measures in the total sample. This indicates a performance indicator having good variance.

TABLE 5.3
PERFORMANCE MEASURE DISTRIBUTION

<table>
<thead>
<tr>
<th>Performance</th>
<th>Number</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Loss</td>
<td>81</td>
<td>33.5</td>
</tr>
<tr>
<td>Breakeven</td>
<td>68</td>
<td>28.0</td>
</tr>
<tr>
<td>Profit</td>
<td>93</td>
<td>38.5</td>
</tr>
</tbody>
</table>

These financial performance measures, although limited, represent the only information Japanese firms are willing to provide, given their very private nature.
The use of different accounting approaches and individual assessments of performance is likely to be minimized because respondents are from the same country and from the same level in the organization. Furthermore, the analysis eliminated startup period variations when unusual one-time accounting charges are most likely to create anomalous performance variations.

Bounded rationality is an extremely difficult concept to measure. This methodological stage used three proxy measures as indicators for international organizational bounded rationality problems.

A series of questions in the Japanese survey asked the executives what was important to the firm when it entered the new market. One of these questions asked the respondent whether information collection was important and an objective. The other questions asked the firm's managers whether they were interested in attaining other operational objectives. All questions were yes or no check type responses. The respondent could check as many or as few of the responses as he or she deemed appropriate.

The first proxy measure for a bounded rationality problem used the question pertaining to the firm and manager's interest in information collection. The response indicated whether the managers were interested in obtaining more information so that they could make a "less satisficing" (i.e., more maximizing) decision. In this context, bounded rationality is minimized because the managers in the firm are continuously seeking information relevant to various decisions. Clearly, this question does not pertain specifically to the acquisition versus build selection decision; but if managers are attempting to reduce bounded rationality in relation to some decisions, they probably will take this approach with all business decisions. Thus, firms that indicated yes to this question were perceived to have less of an organizational bounded rationality problem. Table 5.3 illustrates the characteristics of this variable in the data-set.
TABLE 5.3

INFORMATION INQUISITIVENESS MEASURE

<table>
<thead>
<tr>
<th>Information Inquisitiveness</th>
<th>Number</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>34</td>
<td>14</td>
</tr>
<tr>
<td>No</td>
<td>208</td>
<td>86</td>
</tr>
</tbody>
</table>

The second proxy measure was whether the firm had provided a yes answer to any of the questions related to operationally-important issues when entering the new market. The final proxy measure considered the quantity of operationally-important issues firm’s which firms selecting a certain entry mode chose on average. Both of these measures are used as indicators for the clarity of strategic intent that the managers have for the entry. If they were relatively clear as to the requirements and objectives of an entry, then it is assumed that they have minimized the bounded rationality in their firm. However, if they were uncertain about these factors, then they would not indicate yes to any of these operationally-delineated questions. Such responses will indicate that the managers and their firm may have bounded rationality problems, because all entries must clearly understand and focus on the operational objectives of a plant entry to ensure that the entry will be competitive.

Although these concepts are less than ideal in both reliability and validity, they represent the only measures available within this database. Therefore, despite these limitations, the study will use this information as proxy variables for an organizational bounded rationality problem.
TECHNIQUE OF ANALYSIS

Analysis of Variance (ANOVA), Spearman's Rank Correlation and Kruskal-Wallis tests were used to assess the relationship between performance and entry mode. ANOVA is used initially to estimate the significance of the difference between the two modes. This parametric approach is used even though the dependent variables are categorical in nature, because with larger sample sizes certain statisticians think that the non-parametric techniques will be biased (Freund & Walpole, 1980). The two non-parametric approaches, Kruskal-Wallis and Spearman's Rank Correlation tests, are used to confirm relationships using a test that is specific to interval-based categorical variables. The Kruskal-Wallis test is a non-parametric alternative to the one-way analysis of variance (ANOVA) test. It is based on the generalized rank-sum test that investigates the null hypothesis and it tests whether the samples come from the same population (Freund & Walpole, 1980). Spearman's Rank Correlation is a measure of variance accounted for in the relationship and is computed from the ranks of the variables present (Freund & Walpole, 1980). These three statistical tests were employed to ensure that the results were duplicable, and were not the result of an inherent mathematical bias within one statistical technique.

When investigating the relationship between performance and entry mode, one must consider the effects of entry age. The internationalization literature has shown consistently that entry into a new international market requires a period of time to establish a stable competitive and profitable position (Cardozo, Reynolds, Miller, & Phillips, 1989; Forsgren, 1989; Johanson & Vahlne, 1977; Johanson & Wiedersheim-Paul, 1975; Juul & Walters, 1987; Newbould, Buckley, & Thurwell, 1978). During this startup period, performance is depressed because a new entrant is trying to establish market penetration and achieve economies of scale and scope. In addition, certain tax write-offs will impinge on initial entry performance. During this period, financial performance may be both poor and unstable for a variety of reasons. First, new entrants require time to adjust to new markets, new organizational processes and systems, or new
competitive factors. A lag effect would probably be most pronounced in the build entry mode because of the firm's newness and initial vulnerability. Second, this study is not testing if a firm selected contingently the wrong entry mode. Rather, it is testing the postulation that in general the acquisition and build modes are selected by firms with different characteristics, and that the acquisition mode has the lower performance on average. Therefore, because the study would like to minimize entry modes that have been contingently selected improperly, it attempts to control for these effects by defining and excluding the initial adjustment period. Therefore, the data were examined to determine if an initial adjustment period was present.

The approach used to assess whether such an initial startup period should be used in a secondary test of the data was initial visual observation of the data and then Piece-wise Linear Regression. The Piece-wise Linear Regression solves for two time periods to minimize the least squared of the residuals. In doing so, it provides a point in time where the relationship seems to "break" or become different. In this data it should occur when the startup period becomes the more stable financial performance period.

Piece-wise Linear Regression with a breakpoint maximizes the correlation ($R^2$) by fitting two linear relationships appropriate to the sub-samples; one prior to an x variable breakpoint and one subsequent to that breakpoint. Thus, the technique not only searches for the best slopes and intercepts for the sub-samples, but it also searches for the best point on the x-axis for an appropriate breakpoint to occur between the two sub-samples. Using age as the x variable, one can attempt to describe the point at which the relationship between performance and entry age stabilizes. Furthermore, one can see whether the second regression line, which describes the data beyond the solved-for breakpoint, is horizontal and thus stable.
CHAPTER 6 - STUDY #1 ANALYSIS

The analysis of the Japanese FDI data was completed in two stages. The first stage looked at the relationship between the organizational bounded rationality problem and entry mode selection, while the second stage examined the relationship between entry mode selected and performance.

THE RELATIONSHIP BETWEEN INTERNATIONAL ORGANIZATIONAL BOUNDED RATIONALITY AND ENTRY MODE SELECTION

The results of the relationship between information inquisitiveness and entry mode is illustrated in Table 6.1. The build mode respondents indicated that information inquisitiveness was an important objective almost four times more than did the respondents using the acquisition mode. This is a highly statistically significant result, as is indicated below in the table.

TABLE 6.1

ENTRY MODE VERSUS INFORMATION INQUISITIVENESS

<table>
<thead>
<tr>
<th>Entry Mode</th>
<th>Information Inquisitiveness</th>
</tr>
</thead>
<tbody>
<tr>
<td>Build</td>
<td>18%</td>
</tr>
<tr>
<td>Acquisition</td>
<td>5%</td>
</tr>
</tbody>
</table>

Chi-square: p=0.005
Yates corrected Chi-square: p=0.009
Kruskal-Wallis Test: p=0.005
Spearman's Rank Correlation: p=0.005

The other proxies for the bounded rationality problem provided further evidence of its relationship to the acquisition mode. The build mode respondents disclosed over two times more objectives compared to the acquisition entry
respondents when the frequency of responses to the objective set of questions in the survey was analyzed. Furthermore, the build mode indicated at least one objective 56 percent of the time while the acquisition entrants indicated at least one objective only 26 percent of the time. These figures again suggest that the build entry mode managers know what they want and where they are going, while the acquisition entry mode managers are buying something, but they are not sure what they bought or why they bought it. These ascribed attitudes provide more evidence that the build mode managers appear to understand their goals, while the acquisition mode managers are hindered by an organizational bounded rationality problem which limits their understanding of operational objectives relative to the new entry mode\textsuperscript{36}.

**THE RELATIONSHIP BETWEEN ENTRY MODE SELECTED AND PERFORMANCE**

The relationship between entry mode and performance is delineated in Table 6.2. This analysis of all 242 cases in the sample indicated that the build entry mode is the higher performing mode, as hypothesized. This relationship is statistically significant in all of the statistical tests used.

However, as indicated in the previous chapter, entry mode age must be considered because a recent startup may bias performance. A visual check of the data indicated that both entry modes had an initial startup period, having low unstable performance which subsequently increased and stabilized at a higher level.

\textsuperscript{36} More evidence that the build mode was not related to firms having an organizational bounded rationality problem can be found in answers to the other objective questions in the survey. Another objective question that was significantly related to mode was the objective of market expansion. This relationship indicates that the build mode firm is interested in information and market expansion, both characteristics that would suggest a lack of an organizational bounded rationality problem and a perception of a strong competitive advantage position relative to the market being entered.
TABLE 6.2.

THE PERFORMANCE DIFFERENCE IN ENTRY MODES
(Given as performance frequency per entry mode in percent)

<table>
<thead>
<tr>
<th>Entry Mode</th>
<th>Gain</th>
<th>Break Even</th>
<th>Loss</th>
<th>Mean¹</th>
</tr>
</thead>
<tbody>
<tr>
<td>Build</td>
<td>43%</td>
<td>27%</td>
<td>30%</td>
<td>2.13</td>
</tr>
<tr>
<td>Acquisition</td>
<td>31%</td>
<td>28%</td>
<td>41%</td>
<td>1.90</td>
</tr>
</tbody>
</table>

(N = 242)

ANOVA: p=0.045
Kruskal-Wallis Test: p=0.064
Spearman's Rank Correlation: p=0.045

¹Mean is based on 3 being gain, 2 being break even and 1 being loss.

Regression analysis confirmed that the startup period may have lower performance than subsequent periods because the regression relationships are upward sloping, as illustrated in Table 6.3. These results show a positive slope for the modes, indicating that performance was initially low, and as age increased performance increased. In addition, the low $R^2$ values suggest that the curves may be nonlinear, and thus, may level off over time. Therefore, the influence of age must be either controlled for or eliminated. However, controlling for age statistically is unworkable because it reduces the cell size to less than 5.
TABLE 6.3.
THE REGRESSION OF ENTITY AGE AFTER ENTRY TO PERFORMANCE

<table>
<thead>
<tr>
<th>Entry Mode</th>
<th>Regression Model</th>
<th>Adj. $R^2$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Build</td>
<td>$P = 1.9 + 0.22 \cdot \text{Age}$</td>
<td>0.044</td>
</tr>
<tr>
<td>Acquisition</td>
<td>$P = 1.8 + 0.18 \cdot \text{Age}$</td>
<td>0.018</td>
</tr>
</tbody>
</table>

(N = 242)

The technique used to eliminate the effects of entry age was Piece-wise Linear Regression analysis as described in the previous chapter. Table 6.4 illustrates the results from this break-point analysis. These analyses used all of the statistical evidence in the data to develop the breakpoint lines, and thus, the significance of these relationships cannot be assessed. However, several interesting attributes provided strong evidence of an appropriate region from which to select a stable sample for subsequent analysis. First, the break-points all occurred at approximately two years. Furthermore, as one would expect, the new venture entry required a slightly longer period to stabilize than the acquisition mode. Second, the linear relationships subsequent to the breakpoints were flat, suggesting that a stable relationship among entry mode, age, and performance factors was established after the break-point. Therefore, the sub-samples used in the subsequent analyses were limited to entities over two years old.

The test of all cases that were older than two years eliminated 62 cases from the sample (i.e., the sample size was now 180 cases). Results are illustrated in Table 6.5. As shown, all tests were statistically significant (i.e., $p < 0.05$). In addition, the direction of the relationship supported the originally-delineated
hypotheses as shown by the means in Table 6.5. In conclusion, both tests have related entry mode to performance in the direction hypothesized.

TABLE 6.4.

BREAK POINT REGRESSION OF ENTITY AGE AFTER ENTRY TO PERFORMANCE

<table>
<thead>
<tr>
<th>Entry Mode</th>
<th>Regression Model #1</th>
<th>Break Point</th>
<th>Regression Model #2</th>
<th>$R^2$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Build</td>
<td>$P = 1.4 + 0.0 \times \text{Age}$</td>
<td>2.1 years</td>
<td>$P = 3.0 + 0.0 \times \text{Age}$</td>
<td>0.801</td>
</tr>
<tr>
<td>Acquisition</td>
<td>$P = 1.0 - 0.0 \times \text{Age}$</td>
<td>1.9 years</td>
<td>$P = 2.5 - 0.0 \times \text{Age}$</td>
<td>0.796</td>
</tr>
</tbody>
</table>

(N = 242)

TABLE 6.5.

THE PERFORMANCE DIFFERENCE IN ENTRY MODES FOR ENTRIES OVER 2 YEARS OF AGE

(Given as performance frequency per entry mode in percent)

<table>
<thead>
<tr>
<th>Entry Mode</th>
<th>Gain</th>
<th>Break Even</th>
<th>Loss</th>
<th>Mean$^1$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Build</td>
<td>45%</td>
<td>30%</td>
<td>25%</td>
<td>2.20</td>
</tr>
<tr>
<td>Acquisition</td>
<td>27%</td>
<td>33%</td>
<td>40%</td>
<td>1.87</td>
</tr>
</tbody>
</table>

(N = 180)

ANOVA: $p=0.019$

Kruskal-Wallis Test: $p=0.029$

Spearman's Rank Correlation: $p=0.018$

$^1$Mean is based on 3 being gain, 2 being break even and 1 being loss.
The results provide support for Hypothesis #3 relating organizational bounded rationality problems to the acquisition mode, and to Hypothesis #10 relating the build entry mode to higher performance than the acquisition entry mode. These two relationships represent two of the major postulations within this study.
CHAPTER 7 - STUDY #2 METHODOLOGY

The second method of testing the eclectic theoretical model in this study was a questionnaire-survey approach, which is appropriate because prior research used only qualitative or secondary data-set methodologies. Furthermore, the questionnaire-survey approach appears to be particularly useful in obtaining quantitative information specific to the organizational and managerial levels of analysis. Prior studies have indicated that the organizational level of analysis is where some of the more significant relationships exist (Pitts, 1975; Pitts, 1976; Pitts, 1977a; Pitts, 1977b; Song, 1982). Therefore, the questionnaire-survey method offers a potentially valuable differential approach for looking at some of the organizational specific issues that are examined in this study.

This chapter will initially describe how the questionnaire was developed and how the theoretical concepts were operationalized into measurable variables or scales. Then the chapter will briefly consider the methodological approaches taken to develop a sample and improve the response rate, and will conclude by, describing the analytical approach.

DEVELOPMENT OF THE QUESTIONNAIRE

The survey, provided in Appendix I, was limited to four pages on account of the respondent’s time constraints and thus reluctance to answer a longer questionnaire. Since all of the respondents were at the vice president level and above, their busy business schedule precluded a lengthy and abstract questionnaire having multiple measures of all constructs. Furthermore, it was important to have questions that were succinct, could be answered without a great deal of research, and were clearly understandable.

The definitional delineation of variables in the hypotheses, or operationalization of constructs, is completed through a variety of questions. One issue that must be addressed in the questionnaire is the allocation of questions to constructs.
Many of the questions have multiple-item approach which allows subsequent analysis of construct reliability. However, due to the broad scope of this study and the large number of hypotheses, some constructs are addressed through multiple-item questions while others are addressed with limited and possibly only one-item questions. Because time and space were limited, the allocation of space in the questionnaire was a critical concern.

The allocation of questionnaire space to multiple-items was contingent upon several factors. First, the importance of the construct to the relationship of competitive advantage and bounded rationality on organizational performance was an issue, because these are both unique and fundamental postulations to this study. The important constructs were locational advantage, organizational bounded rationality problems, organizational performance, and organizational coordination and integration constructs. Second, if previous literature had demonstrated strong support for the hypotheses (i.e., an indication of higher reliability, validity, and statistical power) then the questionnaire placed less emphasis on these constructs. Finally, the dimensionality and objectivity of a concept was considered important to the space allocated in the questionnaire. If a theoretical concept is uni-dimensional, such as entry mode, then less emphasis was placed on creating questions having multiple-items.

Finally, many of these questions have been adopted or adapted from existing survey scales which have been tested previously for reliability and validity. The repeated tests of these survey scales provide additional reliability and validity assurances.

**Operationalization of Theoretical Concepts**

The eclectic model proposes a variety of theoretical concepts which are related to each other. This section will attempt to operationalize the concepts into variables that both describe the concept appropriately and are measurable in a questionnaire format.
**Locational Advantages**

Locational competitive advantage has previously been measured, either qualitatively as Porter (1990) did in his broad-based study of ten countries and many industries, or quantitatively as economic studies used proxy measures for national theoretical concepts. Neither of these approaches are appropriate for this study because of their inherent reliability and validity problems.

In this study, several questions having multiple-items were developed principally from Porter's (1990) qualitative work, which delineated dimensions for the national competitive conditions of demand conditions, related industry conditions, and strategy and rivalry conditions. These dimensions, however, are not new to international literature, as many of them have already been explored in studies. Dunning (1993) detailed a wide variety of locational advantage research studies, including studies those which empirically examined the effects of market characteristics, government policy, competitive characteristics, related industry characteristics, and efficiency considerations. Other studies looking at comparative economic systems have taken a similar and possibly broader focus (Haitani, 1986). Therefore, the issues Porter highlighted in his arguments were not new, but his dimensionalization and framework were innovative.

These dimensions are particularly useful in attempting to dimensionalize locational advantage into constituent theoretical concepts. Therefore, in order to conceptualize locational advantage, this study uses three dimensions: competitive, market, and related and supporting industry conditions.

The locational dimensions considered in this study are listed in Table 7.1. The synthesis of these items involved reducing Porter’s findings down to critical factors that he deemed important to that particular dimension. Porter (1990) actually developed many more issues specific to each condition. However, two problems are associated with describing all of these issues in questionnaire items. The first problem arises because the conditions are so related to each
other that certain market demand conditions are extremely closely connected to firm-specific competitive conditions. An example occurs in Porter’s (1990) discussion of product innovation in relation to all three conditions. He stated that related and supporting industries play a crucial part in the development of new designs and products, markets play an important role in demanding new products, and industry rivalry plays an important part in focusing the firms to innovate quickly and effectively. The question becomes: How can the various forces be distinguish from one and another? And even more critically: Is the respondent going to answer the questions in a manner consistent with the underlying theoretical definitions?

<table>
<thead>
<tr>
<th>Dimensions</th>
<th>Issues Considered</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rivalry and Strategy Conditions</td>
<td>• Costs of doing business</td>
</tr>
<tr>
<td></td>
<td>• Competitors’ product quality</td>
</tr>
<tr>
<td></td>
<td>• Industry’s technical capabilities</td>
</tr>
<tr>
<td></td>
<td>• Product development knowledge</td>
</tr>
<tr>
<td></td>
<td>• Competitors’ product innovation speed</td>
</tr>
<tr>
<td></td>
<td>• Global nature of competition</td>
</tr>
<tr>
<td></td>
<td>• Global nature of technology</td>
</tr>
<tr>
<td>Related and Supporting Industry</td>
<td>• Relationship with suppliers and buyers</td>
</tr>
<tr>
<td>Conditions</td>
<td>• Buyers’ product knowledge</td>
</tr>
<tr>
<td></td>
<td>• Suppliers’ Capabilities</td>
</tr>
<tr>
<td>Market Demand Conditions</td>
<td>• Market size</td>
</tr>
<tr>
<td></td>
<td>• Market growth</td>
</tr>
<tr>
<td></td>
<td>• Speed of new product introductions</td>
</tr>
<tr>
<td></td>
<td>• Global nature of customer standards</td>
</tr>
</tbody>
</table>
The second problem with the various dimensions is related to the difficulty in measuring some of the issues. Porter (1990, pg. 106) suggested that related industries are most effective if “technical and information flow” is maximized by “proximity and cultural similarity.” Unfortunately, these concepts are extremely difficult to measure without producing a very long and multi-item questionnaire, which pre-testing demonstrated would not be feasible.

Therefore, this study used the above multiple indicators to describe the underlying theoretical concepts and to provide some evidence of reliability. The minimum number of items used to test for reliability was three as is indicated above.

The questions related to these dimensions asked the local manager to compare the characteristics of his local market (i.e., host market) to the parent firm’s market (i.e., home market) and explain which is better. If the manager perceived the home market characteristic to be better, then the locational advantage was perceived to exist in the home-country of the firm. These questions (9 through 11) are illustrated in Appendix I.

Ownership Advantages: Industry Level
This hypothesis relates barriers to entry to entry mode selection principally as a control variable. Prior research has consistently related industry concentration to entry mode selection, while other barriers to entry have not been related to entry mode. Therefore, industry concentration will be the barrier to entry control variable used in this study.

Industry Concentration
Industry concentration has been historically measured using secondary economic data that have been classified into markets by government codes. This approach has been criticized primarily because the definitions of markets are often unclear to government officials creating these databases, and therefore the concentration ratios tend to either inflate or deflate the market concentration.
perceived by the firms in those markets. Many researchers have had to severely limit their industry samples, or define and collect the data themselves. This study asked the respondents to delineate industry concentration based on the historically-defined method for measuring concentration: the percentage market share the top four firms have in a market (Schmalensee & Willig, 1989). Although this is a perceptual measure, it avoids the above definitional problems by allowing managers to define their competitors for themselves.

Ownership Advantages: Firm Level
At the firm level there are a variety of important organizational and strategic attributes to be measured. The survey measured these theoretical concepts using a considerable number of question-items for two reasons. First, these concepts are relatively important issues in the overarching eclectic model developed. Second, a few of the concepts have not been measured in this context, and therefore the study wanted to specifically test the reliability of these measures.

However, two of the concepts were only operationalized using one question. These two concepts, firm size and strategic diversity, have both been consistently and strongly related to entry mode selection. Therefore, the author decided that because questionnaire length was problematic this was an area where statistical power could be minimized. The following several sections will describe in more detail how these concepts were operationalized.

Firm Size
The operationalization of firm size in the questionnaire was based on the firm's annual sales level. Firm size has been a consistent indicator of mode selection in previous studies, yet other organizational size indicators have been used in strategic research, including number of employees, capital employed, and market value. However, these latter measures tend to be related to industry characteristics such as economies of scale and scope, while sales volume is less related to a firm's underlying industry characteristics. Finally, it provides a
concise yet easily measured indication of a firm's size in a questionnaire. Therefore, this study uses annual sales as a proxy for firm size.

**Strategic Diversification**
A firm's strategic diversification has been operationalized historically using secondary data measures (i.e., product SICs) (Rumelt, 1974; 1982). For several reasons, however, this study will use one subjective question to operationalize diversity. First, the concept had consistently and strongly been related to entry mode selection, which precludes the need for higher statistical power. In addition, previous research indicated that only the extreme ends of product diversification influence performance (Rumelt, 1982). Finally, pre-testing revealed that managers could not define how many three digit SICs their company was involved in. Therefore, the operationalization of this diversification variable was done in a relatively simple manner in which each top manager was asked to specify the degree (i.e., percentage categories) to which the parent company was operating in one industry.

**Organizational Coordination and Integration**
Organizational configurations were measured in two ways: horizontal coordination among international functional units, and vertical integration between the subsidiaries and the parent company. The measures essentially relate to the concepts of international coordination and international configuration, as delineated by Porter (1986).

International organizational coordination, a horizontal concept, has been qualitatively measured by a variety of researchers. Porter (1986) proposed a theoretical technique by measuring the coordination between different parts of a company's value chain. Roth, Schweiger, and Morrison (1991) further developed this approach into a multiple indicator scale which, although tested only once, provided a reliability of 0.85. Because of its excellent reliability, an adaptation of this scale was used in this research.
International organizational integration, a vertical concept, has also been studied qualitatively by a wide number of authors. Porter (1986) defined this notion in a similar manner to the above configuration notion, and Roth, Schweiger, and Morrison (1991) developed a scale based on this conceptualization, which considered the configuration of a firm's value chain throughout its various markets. An adaptation of this multiple indicator scale was used in this study.

These two scales, having six questions associated with the international horizontal coordination concept and eight questions associated with the international integration concept, were used in this study.

*International Organizational Bounded Rationality Problems*
Because no previous measurements had been developed for organizational bounded rationality problems at the top management level, the author had to create a scale that reflected the theoretical definition of this concept.

The abstract nature of this concept does not lend itself easily to objective measurement. Therefore, subjective questions were used. A more difficult question surrounds the issue of what the subjective scale should attempt to ask the manager. This research uses a relatively restrictive approach to organizational bounded rationality problems, as was defined in Chapter 4. In this study, these problems are related to information imperfections within the parent firm when it is deciding whether it should enter the new market through either an acquisition or build mode. A questionnaire presents multiple-items that examine how much knowledge the parent firm has specific to the local subsidiary and market. The assumption is that a firm that needs to procure information (i.e., use the acquisition mode) to circumvent organizational bounded rationality problems will not have internalized this local knowledge. Therefore, much of the knowledge will have remained at the local level, and the subsidiary will only communicate critical elements about the local market and operation.
The scale for international organizational bounded rationality problems used eight questions for a broad coverage of the previously un-operationalized concept. These questions asked each general manager what his or her perception was of the parent firm's knowledge regarding a variety of local operational and market characteristics. If the knowledge was high in the parent firm, that firm did not have an international organizational bounded rationality problem; if the knowledge was low, the firm did have such a problem. This may be a conservative test for this bounded rationality problem or knowledge gap, because the existence of knowledge within the parent firm does not guarantee that it exists with the top manager making the decision. The specific questions for international organizational bounded rationality problems are shown in Appendix I (see question 20).

**Internalization Advantages**
Two internalization advantage concepts had to be operationalized. They are entry mode and entry mode performance.

**Entry Mode**
Enter mode was operationalized using a simple dichotomous variable depicting either entry mode, acquisition or build.

**Entry Mode Performance**
The existing literature has used several approaches to organizational performance, including financial performance, entity failure, and management satisfaction (Chakravarty, 1987; Venkatraman & Ramanujam, 1986). An additional problem occurs when one is trying to measure the organizational performance of only part of an international company. This problem is related to the fact that the assessment of financial performance can be erroneous because the parent company is taking profits out, using non-income related means such as consulting fees, excess transfer payments, and so forth (Harrigan, 1986). Japanese firms have been accused this activity in North America (Haar, 1989). The entity failure approach differentiates only the failed or extremely
unsuccessful organizational entities from the surviving ones. However, this method, although appropriate for research investigating firms having taken completely unsuitable foreign entry strategies, it is not appropriate for research examining performance differences in the surviving entities.

Two other problems exist with the use of objective financial questions in a survey approach. First, objective knowledge questions that ask a respondent for a specific fact or figure often have reliability problems because a respondent who doesn’t know the exact answer, feels forced to provide one (Neuman, 1991). Therefore, the respondent who guesses is sometimes substantially wrong. This inaccuracy contributes to the unreliability of the variable. However, a subjective question asks the manager to state a personal perception, thereby eliminating the need to surmise. The other problem is associated with the lack of response. The pretesting indicated that requiring the respondent to provide financial performance measures dramatically decreased the response rate both for that question set and for the overall questionnaire in general. Therefore, objective financial measures did not appear feasible.

This study, as previous studies, used subjective scales to assess the relative performance of the firm. A variety of researchers have determined that this measure was as reliable as or more reliable than objective measures when pertaining to internal organizational performance (Geringer & Hebert, 1991; Pearce, 1983). Abramson (1992) also concludes in his entry mode research that subjective performance measures appeared to have greater nomological validity.

The performance scale used six questions that were adopted from Abramson’s (1992) work on entry modes. The scale used two goal-related questions specific to the plant entry, two questions related to increase in sales and profitability, and two questions on competitiveness relative to the industry.
In conclusion, the above sections have operationalized several variables that are all detailed with their associated scales and indicators in Table 7.2.

**TABLE 7.2**

**THE MEASUREMENT SCALES AND INDICATORS**

<table>
<thead>
<tr>
<th>Theoretical Concepts</th>
<th>Scales and Indicators</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Locational Advantages</strong></td>
<td></td>
</tr>
<tr>
<td>Rivalry &amp; Strategy Conditions</td>
<td>• Costs of doing business</td>
</tr>
<tr>
<td></td>
<td>• Competitors' product quality</td>
</tr>
<tr>
<td></td>
<td>• Industry's technical capabilities</td>
</tr>
<tr>
<td></td>
<td>• Product development knowledge</td>
</tr>
<tr>
<td></td>
<td>• Competitors' product innovation speed</td>
</tr>
<tr>
<td></td>
<td>• Global nature of competition</td>
</tr>
<tr>
<td></td>
<td>• Global nature of technology</td>
</tr>
<tr>
<td>Related Industry Conditions</td>
<td>• Relationship with suppliers and buyers</td>
</tr>
<tr>
<td></td>
<td>• Buyers' product knowledge</td>
</tr>
<tr>
<td></td>
<td>• Suppliers' capabilities</td>
</tr>
<tr>
<td>Market Conditions</td>
<td>• Market size</td>
</tr>
<tr>
<td></td>
<td>• Market growth</td>
</tr>
<tr>
<td></td>
<td>• Speed of new product introductions</td>
</tr>
<tr>
<td></td>
<td>• Global nature of customer standards</td>
</tr>
<tr>
<td><strong>Ownership Advantages</strong></td>
<td></td>
</tr>
<tr>
<td>Industry Concentration</td>
<td>• Market concentration in host-country</td>
</tr>
<tr>
<td></td>
<td>• Market concentration in home-country</td>
</tr>
<tr>
<td>Firm Size</td>
<td>• Annual sales</td>
</tr>
</tbody>
</table>
### TABLE 7.2 (CONTINUED)

<table>
<thead>
<tr>
<th>Theoretical Concepts</th>
<th>Scales and Indicators</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>International Organizational Coordination</strong>&lt;br&gt; (Horizontal)</td>
<td>• Manufacturing operation&lt;br&gt; • Material procurement&lt;br&gt; • Research &amp; development&lt;br&gt; • HR Management&lt;br&gt; • Promotion &amp; advertising&lt;br&gt; • IS systems</td>
</tr>
<tr>
<td><strong>International Organizational Integration</strong>&lt;br&gt; (Vertical)</td>
<td>• Manufacturing operation&lt;br&gt; • Material procurement&lt;br&gt; • Research &amp; development&lt;br&gt; • HR Management&lt;br&gt; • Promotion &amp; advertising&lt;br&gt; • IS systems&lt;br&gt; • Strategic planning&lt;br&gt; • Financial management</td>
</tr>
<tr>
<td><strong>International Organizational Bounded Rationality Problems</strong></td>
<td>• Manufacturing processes&lt;br&gt; • Buyer’s needs&lt;br&gt; • Distribution techniques&lt;br&gt; • Competitive Pressures&lt;br&gt; • Plant operating procedures&lt;br&gt; • Market characteristics&lt;br&gt; • Labor practices&lt;br&gt; • Product &amp; service characteristics</td>
</tr>
</tbody>
</table>

### Internalization Advantages

<table>
<thead>
<tr>
<th>Entry Mode</th>
<th>Mode</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Mode Performance</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Plant’s initial entry objectives&lt;br&gt; Plant’s productivity objectives&lt;br&gt; Plant’s overall competitiveness&lt;br&gt; Subsidiary’s before tax profit&lt;br&gt; Subsidiary’s increase in sales&lt;br&gt; Subsidiary’s relative competitiveness</td>
<td></td>
</tr>
</tbody>
</table>
THE PROCESS OF QUESTIONNAIRE DESIGN

The design was ultimately based upon the above operationalized concepts. However, to aid in the process of preparing questions with face validity as well as a high response rate, the survey was pretested in two different contexts.

In the first pretest, four consultants and business persons who were familiar with the acquisition mode strategic approach reviewed the survey. Instead of answering the questions, they assessed them for readability, clarity and face validity. After the survey had been reviewed and returned with comments, the researcher conducted an interview of approximately thirty minutes with each respondent. Their remarks resulted in changes to the questionnaire’s wording, format, and length.

The second pretest involved six presidents of companies that had completed a plant entry into the Canadian market during the latter half of the 1980s. These respondents had minor comments about the questionnaire’s clarity. They had more significant criticism’s regarding its length, as well as concerns about some of the questions relating to confidential firm and personal issues. From this pretest a variety of further changes were made\(^{37}\).

Also the ethics committee at the University of Western Ontario influenced several adjustments. For example, one answer to a question identified the name of the respondent’s firm. If the name of the firm was filled in, the researcher would have to obtain a contractual release letter from each firm because of the public nature of the document and data-set. Because a contractual release

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\(^{37}\) Two major sections of the questionnaire had to be dropped based upon these pretests. The first related to objective financial performance questions, and the second related to the personal characteristics of the top management team. The theoretical arguments surrounding this second issue were also dropped from this study.
would discourage many potential respondents, this question was omitted. The resulting questionnaire, as illustrated in Appendix I, was printed in booklet form on bright yellow paper for high visibility. In addition, an accompanying response card, to be returned separately like a post card, identified the respondent and indicated that he or she had returned the answered questionnaire. This avoided the problem of having the firm's name associated with the potentially sensitive information in the questionnaire. The response card, which is illustrated in Appendix II, was colored bright orange for high visibility on executives' desk.

**SAMPLING FRAME CHARACTERISTICS AND RESPONDENT SAMPLING METHOD**

This section will discuss the overall sampling frame, the sampling approach and the sample characteristics.

**Sampling Frame Characteristics**

The overall sampling frame for this study included all manufacturing plant entries into the North American market that involved a new product entry for the firm in that market. The sample consisted of two sub-sampling frames of Canadian and United States market entries.

The sampling time period, between and including 1985 and 1990, was selected because it provided a relatively recent entry period which ensured that the entry mode still significantly influence the overall strategic performance of the subsidiary. It also provided enough time for the entry to attain stable performance and recover from tax adjustments as well as from other short term entry instabilities\(^{36}\). Prior research has indicated that an entry requires at least

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\(^{36}\) Another issue is that some firms may select the wrong entry mode or try an entry on a very initial basis. If the entry is clearly disastrously wrong, usually these firms will withdraw relatively quickly. This study is not interested in these disastrously wrong entries; rather it is focused on the subtle differences among correctly initiated wholly-owned entries.
two years to attain a stable performance level (Woodcock, Beamish, & Makino, 1994). The entire survey was completed during 1993.

**Canadian Sampling Frame**

Plant entries into Canada were selected using Investment Canada’s news release bulletins (Investment Canada, 1985 to 1991). These bulletins delineated the foreign firms considering investing in Canada during the six year period between and including 1985 and 1990.

The Canadian data-set contains an estimated 4,100 foreign investment entries for these six years. Approximately, 21 percent (i.e. approximately 870 entries) of these are manufacturing acquisition entries, and approximately 5 percent (i.e., approximately 210 entries) are manufacturing plant build entries. However, the author found this data-set to be relatively unreliable, especially because potential investors do not always translate into actual investors. They often submitted notices to Investment Canada before the investment was completed, especially when negotiating acquisitions, and never came to fruition.

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39 The population characteristics of this data-set are only approximated because of the poor quality of the data-set. The estimates were done by sampling the 40 pages in four different time periods (i.e., at the beginning, one third way through, two thirds of the way through, and at the end of the time period) of the 439 pages that contained the information. The bulletins are each about three to five pages long on average.

40 The foreign firm only has to indicate to Investment Canada in abstract terms how it is considering investing in Canada, although a merger or acquisition must delineate the candidate. Most of the entries are less than one sentence long. Generally they identify very briefly the what (e.g., mode and business) and where (e.g., location) of the investment only.

Merger and acquisition investments of over $100 million require more formal explanations, but these are very rare investments.
United States Sampling Frame
The United States sampling frame was taken from the Department of Commerce’s detailed transaction reports on foreign investment into the United States (U.S. Department of Commerce, 1985 to 1990). These transaction reports were obtained for the six years being sampled.

The U.S. data-set contains approximately 5,500 investment entries for the years in question, including 1,349 manufacturing plant acquisitions and 873 manufacturing plant build entries. The size of this relatively clean data-set compared to the Canadian data-set indicates how the latter may have overestimated the actual sampling frame size (i.e., Canadian 4100 versus U.S. 5500). It also indicates how the acquisitions in particular may have been overestimated\(^{41}\).

Sampling Technique and Respondent Contact
The sampling technique involved several steps. First, the author telephoned potential respondents from the above sampling frames. This personal contact served two purposes: to check and make sure that both the firm and manager were appropriate for the study, and to develop a rapport which would, hopefully, increase the odds of receiving an answered questionnaire returned.

The phone call allowed the author to ensure that the manager was at least at the vice-president level, that the manager or somebody at that level would answer the questions, and that the manager had adequate knowledge about the subsidiary plant(s) and the parent company to answer the questionnaire. The person initially contacted was always the top manager in the North American subsidiary. In addition, the appropriateness of the entry mode was checked to ensure that it met the study’s sampling frame criteria. These four criteria are as follows:

\(^{41}\) Usually U.S. to Canadian economic statistics are found to approximate a 10 to 1 difference ratio.
- The firm had to have annual sales in excess of $20 million. This requirement would eliminate small entrepreneurially run companies which often operate based on an intuitive or "non-rational" basis. Other researchers have used similar cut off points for firm size (Morrison, 1990).

- The entry mode had to be a "pure" entry mode, not a joint venture that was later fully acquired by one of the parents.

- The entry had to be in a manufacturing industry.

- The entry had to represent a newly manufactured product type for that firm in the North American market.\(^{42}\)

After the initial contact, the questionnaire and verification card were sent to the potential respondent.\(^{43}\) If the respondent did not reply (i.e., return the verification card) within approximately one month, the author again phoned to inquire about the questionnaire. This tactic was carried out a maximum of two times for any one respondent.

In completing the above process, the author attempted to get equal numbers of acquisition and build modes as well as adequate sample sizes from the Canadian and U.S. markets. In general, this meant that the process had to concentrate on obtaining build mode and Canadian responses because of the relatively limited sub-sampling frames for these two dimensions. Approximately nine months were required to complete this sampling phase of the study.

\(^{42}\) The firm could have other plants that manufactured other products.

\(^{43}\) Very few appropriate respondents said they would not fill out the questionnaire (i.e., fewer than ten). However, quite a few potential respondents did not want to get involved prior to being deemed appropriate for the study (i.e., approximately 25 percent). Some of these potential respondents did not return calls while others from the beginning indicated they were not interested.
SAMPLE CHARACTERISTICS
The number of returned questionnaires was 116. However, ten of these were unusable because of missing data. The remaining 106 questionnaires had provided complete data for the issues considered in this study.

The response rate for the total sample was quite acceptable at 35 percent (see Table 7.3). However, the two sub-samples, Canada and United States, were quite different. The Canadian response rate was 63 percent while the U.S. response rate was only 28 percent. This was judged to be due to the widespread reputation of the Western Business School in the Canadian market compared to its relatively unknown reputation in the U.S. market\textsuperscript{44}.

TABLE 7.3

\begin{center}
\begin{tabular}{lccc}
& Responses & Contacted & Response Rate \\
\hline
Canadian & 40 & 64 & 63\% \\
United States & 76 & 271 & 28\% \\
Total & 116 & 335 & 35\% \\
\hline
\end{tabular}
\end{center}

The breakdown in usable sample responses is shown in Table 7.4. The targeted total sample size for each cell was over 20 with an absolute lower limit of 10, and for the whole sample a target of 100. The only cell where the targeted figure was not attained was the Canadian build cell, which did have well in excess of the absolute lower limit of 10.

\textsuperscript{44} This judgment is based on the phone conversations the author had with the various respondents. Canadian respondents received the research and questionnaire proposition very favorably, while the U.S. respondents were noticeably less enthusiastic.
TABLE 7.4

USABLE SAMPLE BREAKDOWN

<table>
<thead>
<tr>
<th></th>
<th>Acquisition Mode</th>
<th>Build Mode</th>
<th>Totals</th>
</tr>
</thead>
<tbody>
<tr>
<td>Canadian Entries</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Count</td>
<td>21</td>
<td>16</td>
<td>37</td>
</tr>
<tr>
<td>Column %</td>
<td>36%</td>
<td>34%</td>
<td></td>
</tr>
<tr>
<td>Row %</td>
<td>57%</td>
<td>43%</td>
<td></td>
</tr>
<tr>
<td>Total %</td>
<td>20%</td>
<td>15%</td>
<td>35%</td>
</tr>
<tr>
<td>US Entries</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Count</td>
<td>38</td>
<td>31</td>
<td>69</td>
</tr>
<tr>
<td>Column %</td>
<td>64%</td>
<td>66%</td>
<td></td>
</tr>
<tr>
<td>Row %</td>
<td>55%</td>
<td>45%</td>
<td></td>
</tr>
<tr>
<td>Total %</td>
<td>36%</td>
<td>29%</td>
<td>65%</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Count</td>
<td>59</td>
<td>47</td>
<td>106</td>
</tr>
<tr>
<td>Total %</td>
<td>56%</td>
<td>44%</td>
<td>100%</td>
</tr>
</tbody>
</table>

THE STATISTICAL TECHNIQUE FOR ANALYSIS

The statistical approach taken in this research used Partial Least Squares (PLS) because it takes a causal modeling analytical approach. Such an approach assists the researcher in developing more complex causal inferences and is useful because it restricts the possible solutions when compared to first generation multivariate analysis. The improved resolution is due to the constraints put on the related variables by surrounding variables which act as a network restraining force. These second generation multivariate analysis techniques tend to significantly improve the reliability and validity of measures and their relationships in a model (Barclay, Higgins, & Thompson, 1991).

PLS also appears to be appropriate for this research because it can accommodate dichotomous variables having only one indicator and it has been used widely for more exploratory statistical analysis compared to other second generation multivariate techniques, such as LISREL and EQS, that are used primarily for confirmatory analysis (Fornell, 1984; Fornell & Robinson, 1983).
A jackknifing approach was used to estimate the significance of the various results\textsuperscript{45}. In addition, exploratory factor analysis was used to more fully understand the dimensions espoused by Porter's (1990) national competitive advantage arguments.

\textsuperscript{45} Also called bootstrapping in some research streams, this is a statistical technique used to calculate stability and estimate significance.
CHAPTER 8 - STUDY #2 ANALYSIS

This chapter examines the analyzed results for the fully developed eclectic model using PLS. The dimensions of the model are first examined, particularly those dimensions produced for the operationalized indicators of Porter's three national competitive advantages. The PLS approach then was used to evaluate the model, first looking at the total model, and then adjusting the model to improve the reliability, validity, and loadings in the final model.

FACTOR ANALYSIS OF NATIONAL COMPETITIVE ADVANTAGES

The national competitive advantage indicators were theoretically developed and operationalized in Chapters 4 and 7, resulting in three national competitive advantage factors or conditions. They are rivalry and strategy, market demand, and related industry conditions.

The first analytical step is to complete a factor analysis on the scales and indicators for these conditions to see if they factor together. Figure 8.1 illustrates the resulting scree plot, which indicates that the slope visually flattens after the fourth factor. Furthermore, Kaiser's criterion, which states that only factors having eigenvalues greater than 1 be considered, also recommends a four factor solution (Statsoft, 1994). Consideration was also given to the three factor solution, which of course would be most suitable to the theoretical dimensions being sought. However, a three factor solution created more confusion in the definitional nature of the dimensions. Therefore, the four factor solution was determined to be the most appropriate dimensionalization.
The factors illustrated in Table 8.1 have been rotated using a Varimax normalized rotation technique\textsuperscript{46}. This solution provided three dimensions that correspond to some degree to the originally postulated dimensions. The first, third, and fourth dimensions represent the locational advantages of related industry conditions, demand conditions, and strategic innovation conditions. The second factor was a global strategy dimension which is independent of the other three dimensions\textsuperscript{47}.

\textsuperscript{46} The Varimax normalized rotation technique was used because it normalizes results and is the most common approach used to rotate factor solutions (Statsoft, 1994).

\textsuperscript{47} This factor or dimension was dropped from the study because it had not been theorized in the deductive development of the theoretical model.
### TABLE 8.1

**ROTATED FACTOR SOLUTION FOR NATIONAL COMPETITIVE ADVANTAGE DIMENSIONS**

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Factor 1 Related Ind. Conditions</th>
<th>Factor 2 Global Nature</th>
<th>Factor 3 Demand Conditions</th>
<th>Factor 4 Strategic Innovation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Supplier Relations</td>
<td>.714</td>
<td>.006</td>
<td>-.164</td>
<td>.264</td>
</tr>
<tr>
<td>Product Quality</td>
<td>.774</td>
<td>.133</td>
<td>-.312</td>
<td>.059</td>
</tr>
<tr>
<td>Buyer's Product Knowledge</td>
<td>.673</td>
<td>.080</td>
<td>.259</td>
<td>.233</td>
</tr>
<tr>
<td>Technical Capabilities</td>
<td>.751</td>
<td>.030</td>
<td>.170</td>
<td>.215</td>
</tr>
<tr>
<td>Low Costs</td>
<td>-.005</td>
<td>.180</td>
<td>* .673</td>
<td>-.217</td>
</tr>
<tr>
<td>Market Size</td>
<td>-.120</td>
<td>.001</td>
<td>* .815</td>
<td>.211</td>
</tr>
<tr>
<td>Market Growth</td>
<td>.225</td>
<td>-.506</td>
<td>* .630</td>
<td>.006</td>
</tr>
<tr>
<td>Product Dev. Knowledge</td>
<td>.248</td>
<td>-.058</td>
<td>.036</td>
<td>* .733</td>
</tr>
<tr>
<td>Speed of Innovation</td>
<td>.137</td>
<td>.107</td>
<td>.052</td>
<td>* .841</td>
</tr>
<tr>
<td>Freq. of Prod. Improvements</td>
<td>.316</td>
<td>.000</td>
<td>-.038</td>
<td>* .813</td>
</tr>
<tr>
<td>Supplier Tech. Capabilities</td>
<td>.463</td>
<td>.007</td>
<td>.422</td>
<td>.269</td>
</tr>
<tr>
<td>Global Customer Needs</td>
<td>-.051</td>
<td>* -.838</td>
<td>.072</td>
<td>-.070</td>
</tr>
<tr>
<td>Global Technology</td>
<td>-.071</td>
<td>* -.917</td>
<td>-.023</td>
<td>-.016</td>
</tr>
<tr>
<td>Global Competitors</td>
<td>-.114</td>
<td>* -.873</td>
<td>-.141</td>
<td>.039</td>
</tr>
<tr>
<td>Explained Variance</td>
<td>2.620</td>
<td>2.633</td>
<td>1.943</td>
<td>2.250</td>
</tr>
<tr>
<td>Proportion of Total</td>
<td>.187</td>
<td>.188</td>
<td>.139</td>
<td>.161</td>
</tr>
</tbody>
</table>

Factor Loadings (Varimax normalized)
Extraction: Principal components

Note: * The asterisks note indicators that load on each other to produce that particular factor.

Several differences occurred relative to what was postulated dimensionally in these factors. First, the rivalry and strategy dimension became a strategic innovation dimension. Interestingly, if the factors are further factored, different strategies begin to evolve, such as low costs strategies and niche strategies. This result indicates that certain strategic dimensions are somewhat independent of each other and cannot be completely unidimensionalized. It also suggests that innovation is an important national competitive rivalry dimension compared to the other issues having much lower eigenvalues.
Second, the related industry conditions include the indicators having to do with industry capabilities and knowledge. These issues appear to be clearly related because the quality of buyers and suppliers is related to the capabilities and knowledge in the business system or value chains surrounding the industry in question.

Third, the demand conditions of market size, growth, and low cost of doing business were one factor. This can be explained when one considers that growth is related to both rate and volume of sales. The study's theory and methodology had focused on the measurement of the rate of growth and not the volume of growth, yet the volume of growth appears to be what was measured for the most part\(^{48}\). However, given a large market the volume of growth may be high, and thus provide an appropriate measure. Finally, low cost is possibly causally related to market volume and maturity, but it was not theoretically conceived as being part of the same dimension. Furthermore, in Porter's model low cost is not a market demand condition, but rather it is a rivalry and strategy condition. This problem is indicative of the multidimensionality as well as the collinearity among some of these dimensions. Because the low cost variable theoretically was not described as part of the market demand and it is difficult to theoretically postulate a strong theoretical reason why it should be in the same dimension other than by causal association, it will be omitted in subsequent testing.

Based on the above analysis, the national competitive advantage dimensions deemed appropriate for further PLS analysis are illustrated in Table 8.2.

\(^{48}\) Prior studies did not make this distinction between rate and volume of growth.
**TABLE 8.2**

**NATIONAL COMPETITIVE ADVANTAGE CONDITIONS**

<table>
<thead>
<tr>
<th>National Competitive Advantage</th>
<th>Scales or Indicators</th>
</tr>
</thead>
<tbody>
<tr>
<td>Innovative Strategy Conditions</td>
<td>• Speed of innovation</td>
</tr>
<tr>
<td></td>
<td>• Product development knowledge</td>
</tr>
<tr>
<td></td>
<td>• Freq. of Prod. Improvements</td>
</tr>
<tr>
<td>Related Industry Conditions</td>
<td>• Suppliers and buyers</td>
</tr>
<tr>
<td></td>
<td>• Buyers’ product knowledge</td>
</tr>
<tr>
<td></td>
<td>• Technical capabilities</td>
</tr>
<tr>
<td></td>
<td>• Product quality</td>
</tr>
<tr>
<td>Market Conditions</td>
<td>• Market size</td>
</tr>
<tr>
<td></td>
<td>• Market growth</td>
</tr>
</tbody>
</table>

**PARTIAL LEAST SQUARES (PLS) ANALYSIS**

The PLS analysis will be completed in three stages. First, an appropriate outer model will be developed. Then an appropriate inner model will be analyzed to examine the statistical significance of the paths linking the latent variables. Finally, an overall model will be developed and tested for significance.

**Analysis of Outer Model**

The initial PLS model that considered all of the constructs and indicators was not an appropriate solution, as is indicated by the latent variable loading patterns shown in Table 8.3. These results indicate that several of the constructs have major problems and others have minor problems. It should be noted that the
indicators must have a value of 0.7 or greater to be appropriate indications in a model (Barclay, et al., 1991; Fornell, 1984).\textsuperscript{49}

Major problems exist in two theoretical constructs: market demand conditions and industry concentration. Both have negative loadings, indicating that they either have excessive random error caused by poor measurement or they are multidimensional (Green & Barclay, 1987). Since these two constructs have only two indicators each, it is impossible to complete ancillary factor and reliability analysis. Therefore, the adjustments to these two constructs will have to rely upon theoretical considerations and judgment.

The market demand construct included both a size and a growth indicator. Prior research on wholly-owned entry mode has indicated several times that growth is related to entry mode selection while market size is not related to entry mode selection or profitability. Furthermore, the positive aspect of the growth indicator loading provides further evidence that it should be the indicator selected and market size dropped. Therefore, the market demand condition construct was operationalized using only market growth.

The industry concentration construct presents a more difficult problem because both indicators load strongly in a negative manner onto the latent variable. Theoretically, it should be the host-country concentration that matters when the entry mode is being selected, given that the theory for industry concentration is built upon game theory pertinent to the new entry entity. This suggests that the market concentration of the host-country is the critical measurement for this construct. Based on this argument, the market concentration in the home-country manifest variable was dropped.

\textsuperscript{49} For example, a loading of 0.7 or more explains more than 49 percent of the variance (i.e., $(0.7)^2 = 0.49$). Based on this, one would like to have a loading of greater than 0.7 between the measurement and the theoretical concept under measurement because this indicates that at least 50% of the concept is being explained by the measurement. A value lower than 0.7 indicates that the majority of the measurement's explanation is not appropriate to the concept.
### TABLE 8.3

**LATENT VARIABLE LOADING PATTERN**

<table>
<thead>
<tr>
<th>Theoretical Concepts</th>
<th>Scales and Indicators</th>
<th>Loading</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Locational Advantages</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rivalry &amp; Strategy Conditions</td>
<td>Speed of innovation</td>
<td>0.875</td>
</tr>
<tr>
<td></td>
<td>Product development knowledge</td>
<td>0.846</td>
</tr>
<tr>
<td></td>
<td>Freq. of Prod. Improvements</td>
<td>0.786</td>
</tr>
<tr>
<td>Related Industry Conditions</td>
<td>Supplier and buyer relationship</td>
<td>0.741</td>
</tr>
<tr>
<td></td>
<td>Buyers' product knowledge</td>
<td>0.750</td>
</tr>
<tr>
<td></td>
<td>Technical capabilities</td>
<td>0.834</td>
</tr>
<tr>
<td></td>
<td>Product quality</td>
<td>0.716</td>
</tr>
<tr>
<td>Market Demand Conditions</td>
<td>Market size</td>
<td>-0.061</td>
</tr>
<tr>
<td></td>
<td>Market growth</td>
<td>0.846</td>
</tr>
<tr>
<td><strong>Ownership Advantages</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Industry Concentration</td>
<td>Market concentration in host-country</td>
<td>-0.713</td>
</tr>
<tr>
<td></td>
<td>Market concentration in home-country</td>
<td>-0.659</td>
</tr>
<tr>
<td>Strategic Diversification</td>
<td>Product Diversification</td>
<td>1.000</td>
</tr>
<tr>
<td>Firm Size</td>
<td>Annual sales</td>
<td>1.000</td>
</tr>
<tr>
<td>International Organizational Integration</td>
<td>Manufacturing operation</td>
<td>0.756</td>
</tr>
<tr>
<td>(Vertical)</td>
<td>Material procurement</td>
<td>0.684</td>
</tr>
<tr>
<td></td>
<td>Product development</td>
<td>0.591</td>
</tr>
<tr>
<td></td>
<td>HR Management</td>
<td>0.751</td>
</tr>
<tr>
<td></td>
<td>Promotion &amp; advertising</td>
<td>0.388</td>
</tr>
<tr>
<td></td>
<td>IS systems</td>
<td>0.414</td>
</tr>
<tr>
<td></td>
<td>Strategic planning</td>
<td>0.685</td>
</tr>
<tr>
<td></td>
<td>Financial management</td>
<td>0.661</td>
</tr>
<tr>
<td>International Organizational Integration</td>
<td>Manufacturing operation</td>
<td>0.787</td>
</tr>
<tr>
<td>(Horizontal)</td>
<td>Material procurement</td>
<td>0.539</td>
</tr>
<tr>
<td></td>
<td>Research &amp; Development</td>
<td>0.796</td>
</tr>
<tr>
<td></td>
<td>HR Management</td>
<td>0.557</td>
</tr>
<tr>
<td></td>
<td>Promotion &amp; advertising</td>
<td>0.592</td>
</tr>
<tr>
<td></td>
<td>IS systems</td>
<td>0.751</td>
</tr>
</tbody>
</table>
### TABLE 8.3 (CONTINUED)

<table>
<thead>
<tr>
<th>Theoretical Concepts</th>
<th>Scales and Indicators</th>
<th>Loading</th>
</tr>
</thead>
<tbody>
<tr>
<td>International Organizational Bounded</td>
<td>Manufacturing processes</td>
<td>0.891</td>
</tr>
<tr>
<td>Rationality Problems</td>
<td>Buyers' needs</td>
<td>0.840</td>
</tr>
<tr>
<td></td>
<td>Distribution techniques</td>
<td>0.810</td>
</tr>
<tr>
<td></td>
<td>Competitive Pressures</td>
<td>0.657</td>
</tr>
<tr>
<td></td>
<td>Plant operating procedures</td>
<td>0.646</td>
</tr>
<tr>
<td></td>
<td>Market characteristics</td>
<td>0.878</td>
</tr>
<tr>
<td></td>
<td>Labor practices</td>
<td>0.864</td>
</tr>
<tr>
<td></td>
<td>Product &amp; service characteristics</td>
<td>0.681</td>
</tr>
<tr>
<td><strong>Internalization Advantages</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Entry Mode</strong></td>
<td>Mode</td>
<td>1.000</td>
</tr>
<tr>
<td><strong>Mode Performance</strong></td>
<td>Plant's initial entry objectives</td>
<td>0.763</td>
</tr>
<tr>
<td></td>
<td>Plant's productivity objectives</td>
<td>0.804</td>
</tr>
<tr>
<td></td>
<td>Plant's overall competitiveness</td>
<td>0.891</td>
</tr>
<tr>
<td></td>
<td>Subsidiary's before tax profit</td>
<td>0.770</td>
</tr>
<tr>
<td></td>
<td>Subsidiary's increase in sales</td>
<td>0.704</td>
</tr>
<tr>
<td></td>
<td>Subsidiary's relative competitiveness</td>
<td>0.850</td>
</tr>
</tbody>
</table>

A variety of other more moderate, but significant problems are indicated in the vertical international integration construct where only 25 percent of the indicators are appropriate, in the horizontal international coordination construct where 50 percent of the variables are appropriate, and in the international bounded rationality where 75 percent of the indicators are appropriate. These dimensions were analyzed further using factor analysis.

The factor analyses for these three constructs are illustrated in Appendix III. The first two constructs, vertical international integration and horizontal international coordination, factor into two factors, although just barely. The international bounded rationality construct factors into only one factor. Furthermore, the reliability of all of these constructs is over 0.7, which is quite adequate for an
initial exploratory causal examination (Kidder & Judd, 1986). Therefore, the analysis took the perspective of eliminating on an unconditional basis any indicator that did not have a 0.7 or over loading.

The new PLS model was analyzed and results of the outer model are shown in Table 8.4.

<table>
<thead>
<tr>
<th>TABLE 8.4</th>
</tr>
</thead>
</table>

**LATENT VARIABLE LOADING PATTERN FOR THE BEST OUTER MODEL SOLUTION**

<table>
<thead>
<tr>
<th>Theoretical Concepts</th>
<th>Scales and Indicators</th>
<th>Loading</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Locational Advantages</strong></td>
<td>Speed of innovation</td>
<td>0.799</td>
</tr>
<tr>
<td>Rivalry &amp; Strategy Conditions</td>
<td>Product development knowledge</td>
<td>0.836</td>
</tr>
<tr>
<td></td>
<td>Freq. of Prod. Improvements</td>
<td>0.877</td>
</tr>
<tr>
<td><strong>Related Industry Conditions</strong></td>
<td>Supplier and buyer relationship</td>
<td>0.739</td>
</tr>
<tr>
<td></td>
<td>Buyers' product knowledge</td>
<td>0.761</td>
</tr>
<tr>
<td></td>
<td>Technical capabilities</td>
<td>0.835</td>
</tr>
<tr>
<td></td>
<td>Product quality</td>
<td>0.715</td>
</tr>
<tr>
<td><strong>Market Demand Conditions</strong></td>
<td>Market growth</td>
<td>1.000</td>
</tr>
<tr>
<td><strong>Ownership Advantages</strong></td>
<td>Market concentration in host-country</td>
<td>1.000</td>
</tr>
<tr>
<td>Industry Concentration</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Strategic Diversification</strong></td>
<td>Product Diversification</td>
<td>1.000</td>
</tr>
<tr>
<td><strong>Firm Size</strong></td>
<td>Annual sales</td>
<td>1.000</td>
</tr>
<tr>
<td><strong>International Organizational Integration (Vertical)</strong></td>
<td>Manufacturing operation</td>
<td>0.959</td>
</tr>
<tr>
<td></td>
<td>Material procurement</td>
<td>0.702</td>
</tr>
</tbody>
</table>
### TABLE 8.4 (CONTINUED)

<table>
<thead>
<tr>
<th>Theoretical Concepts</th>
<th>Scales and Indicators</th>
<th>Loading</th>
</tr>
</thead>
<tbody>
<tr>
<td>International Organizational Coordination (Horizontal)</td>
<td>• Manufacturing operation 0.811</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Research &amp; Development 0.811</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• IS systems 0.793</td>
<td></td>
</tr>
<tr>
<td>International Organizational Bounded Rationality Problems</td>
<td>• Buyers' needs 0.863</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Distribution techniques 0.854</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Competitive Pressures 0.819</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Market characteristics 0.897</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Product &amp; service characteristics 0.724</td>
<td></td>
</tr>
<tr>
<td>Internalization Advantages</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Entry Mode</td>
<td>• Mode 1.000</td>
<td></td>
</tr>
<tr>
<td>Mode Performance</td>
<td>• Plant's initial entry objectives 0.769</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Plant's productivity objectives 0.910</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Plant's overall competitiveness 0.891</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Subsidiary's before tax profit 0.748</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Subsidiary's relative competitiveness 0.867</td>
<td></td>
</tr>
</tbody>
</table>

### Analysis of Inner Model

The analysis of the inner model began with a jackknifing analysis of the model delineated above. The results, illustrated in Appendix III, used a jackknifing procedure that created 11 partitions or sub-samples to calculate the t values for the path loadings.

The final model is illustrated in two figures for ease of viewing, although it must be remembered that the model analytically and theoretically represents one overall model. Figure 8.2a illustrates the relationships between the locational advantages and internalization advantages and Figure 8.2b illustrates the relationships between ownership advantages and internalization advantages.
FIGURE 8.2A

RESULTS FOR LOCATIONAL ADVANTAGE SIDE OF THE MODEL

**LOCATIONAL ADVANTAGES**

- **Rivalry & Strategic Conditions**
  - Prod. Development = 0.84
  - Innovation Speed = 0.80
  - New Product Freq. = 0.88

- **Related Industry Conditions**
  - Buyer/Supp. Rel. = 0.74
  - Product Quality = 0.71
  - Product Knowledge = 0.76
  - Supplier Capability = 0.84

- **Market Demand Conditions**
  - Market Growth = 1.00

**Mode Selection**

- $R^2 = 0.22$
- Mode Selection = 1.00

**Mode Performance**

- $R^2 = 0.34$

  - Manufacturing Objective = 0.82
  - Pre-Tax Profitability = 0.75
  - Overall Competitiveness = 0.87
  - Initial Entry Objectives = 0.77
  - Plant Competitiveness = 0.91

**INTERNALIZATION ADVANTAGE**

Notes:

- *** $p < 0.01$
- ** $p < 0.05$
- * $p < 0.10$
Figure 8.2B: Results for Ownership Advantage Side of Model

Ownership Advantages

- Strategic Diversity
  - Prod. Diversity = 1.00
- Vertical Int. Coordination
  - Manufacturing = 0.96
  - Material Procurement = 0.70
- Horz. Int. Coordination
  - Manufacturing = 0.81
  - MIS Systems = 0.79
  - R & D = 0.81

Firm Size
- Annual Sales = 1.00
  - \(-0.014^{*}\)

Industry Concentration
- Ind. Concentration = 1.00
  - \(0.176^{***}\)

International Bounded Rationality Problems
- \(R^2 = 0.19\)
- Knowledge of Buyers = 0.86
- Knowledge of Distributors = 0.85
- Knowledge of Competition = 0.82
- Knowledge of Market = 0.89
- Knowledge of Product & Service = 0.72

Mode Selection
- \(R^2 = 0.22\)
- Mode Selection = 1.00
  - \(0.177^{***}\)

Mode Performance
- \(R^2 = 0.34\)
- Manufacturing Objective = 0.82
- Profitability = 0.75
- Overall Competitiveness = 0.87
- Initial Entry Objectives = 0.77
- Plant Competitiveness = 0.91

Notes:
1. This path was somewhat unstable moving from insignificant (i.e., \(p > 0.10\)) to highly significant (i.e., \(p < 0.01\)).

\(***\) \(p < 0.01\)
\(**\) \(p < 0.05\)
\(*\) \(p < 0.10\)
The resulting model and its implications relative to the hypotheses will be considered in more detail in Chapter 9. However, Table 8.5 depicts the model's support for the hypothesized relationships.

**TABLE 8.5**

<table>
<thead>
<tr>
<th>Hypothesized Relationship</th>
<th>Agreement</th>
<th>Problem</th>
</tr>
</thead>
<tbody>
<tr>
<td>H1a. Comp. Rivalry to Mode</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>H1b. Related Industry to Mode</td>
<td>No</td>
<td>Reverse Relationship</td>
</tr>
<tr>
<td>H1c. Market Demand to Mode</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>H2a. Comp. Rivalry to Performance</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>H2b. Related Industry to Performance</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>H2c. Market Demand to Performance</td>
<td>No</td>
<td>Reverse Relationship</td>
</tr>
<tr>
<td>H3. Org. Bounded Rationality Prob. to Mode</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>H4. Org. Bounded Rationality Prob. to Performance</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>H5. Strategic Div. to Org. Bounded Rationality Prob.</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>H8. Ind. Concentration to Mode</td>
<td>No</td>
<td>Not Significant</td>
</tr>
<tr>
<td>H9. Ind. Concentration to Performance</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>H10. Mode to Performance</td>
<td>Yes</td>
<td></td>
</tr>
</tbody>
</table>

As can be seen from this table, 5 of the 15 relationships (i.e., 33%) were not supported as hypothesized in the theory section of the paper.
CHAPTER 9 - RESULTS AND DISCUSSION

This chapter discusses the combined results of the two methodologies that were used to assess the theoretical relationships developed in this study. The discussion looks initially at how well the overarching postulations, suggesting that competitive advantage and international bounded rationality influence entry mode selection and performance, are supported. In addition, the discussion assesses how well the analyses support the individual hypotheses that detail the relationships within these overarching postulations. The final section examines the limitations and strengths of this study.

For the ease of reference, the hypotheses have been re-stated in Table 9.1.

TABLE 9.1

THEORETICAL HYPOTHESES

H1a. The higher the home-country strategic rivalry conditions, relative to the host-country, the greater the probability a firm will select the build over the acquisition entry mode.

H1b. The higher the home-country demand conditions, relative to the host-country, the greater the probability a firm will select the build over the acquisition entry mode.

H1c. The higher the home-country related and supporting industry conditions, relative to the host-country, the greater the probability a firm will select the build over the acquisition entry mode.

H2a. The higher the home-country strategic rivalry conditions, relative to the host-country, the greater the performance of the entry mode.

H2b. The higher the home-country demand conditions, relative to the host-country, the greater the performance of the entry mode.

H2c. The higher the home-country supporting industry conditions, relative to the host-country, the greater the performance of the entry mode.

H3. The greater the organizational bounded rationality problem in the parent company, the greater the probability that the entry mode selected will be the acquisition mode.

H4. The greater the organizational bounded rationality problem in the parent company, the lower the performance of the entry mode.

H5. The greater the product diversification in the parent company, the higher the organizational bounded rationality problem in the firm.

H6. The greater the organizational size of the parent company, the higher the organizational bounded rationality problem in the firm.

H7a. The lower the international vertical organizational integration in the firm, the higher the organizational bounded rationality problem in the firm.
TABLE 9.1 (continued)

H7b. The lower the international horizontal organizational coordination in the firm, the higher the organizational bounded rationality problem in the firm.

H8. The greater the barriers to entry into a market, the greater the probability that the entering firm will select an acquisition over a build entry mode.

H9. The greater the barriers to entry into a market, the greater the probability that the entry mode will have high performance.

H10. On average the build mode will outperform the acquisition wholly-owned entry mode.

RESULTS OF MULTI-METHODOLOGIES

This study used two methodologies to assess the support of the overarching postulations and hypotheses. The examination is broken into four sections that focus on the different groups of relationships: between locational and internalization advantages, among ownership advantages, between ownership and internalization advantages, and among internalization advantages.

Relationship Between Locational and Internalization Advantage

The overarching relationship, suggesting that locational competitive advantages influence a firm to select the higher performing build mode, is considered only in the second methodology. The first methodology controls for locational competitive advantage by looking only at Japanese firms entering into the North American market.

Locational advantages are operationalized using Porter’s national competitive advantage dimensions (Porter, 1990). These dimensions are used because Porter’s work represented the first attempt at delineating country-specific factors or conditions that create competitive advantage at the firm and industry level. Porter defined these relationships at the national level, yet their affect is at the firm level, as he frequently pointed out. This creates a problem because the dimensions defined at the national level become distorted when they are realized, perceived, and measured at the firm level. Evidence of this phenomenon is provided by the factor analysis that assesses these locational advantages and conditions. In this factor analysis two pertinent dimensions
seemed to develop. The first under rivalry and strategic conditions is essentially a product development and innovation dimension, while the related industry condition is a mix of buyer/supplier issues plus product specific attributes. This last condition, at first glance, appears to be multidimensional. However, when one considers that knowledge of the product, buyer/supplier relationships, and supplier capabilities all contribute to product quality, then one can see how they could be one strategic dimension which ties together a particular business system or value chain to ensure high product quality.

These two dimensions illustrate two different potential product strategies: high quality and innovativeness. These are not mutually exclusive, but they indicate how certain locational advantages may produce firm- and industry-specific competitive advantages, as Porter suggested (Porter, 1990).

The first two sets of hypotheses, derived from Porter’s work, proposed that three home-based locational competitive advantage conditions would positively load on both a build plant entry mode and higher performance. The rivalry and strategy conditions loaded positively on both concepts, indicating that a strong rivalry and strategy condition (i.e., product development condition) increases the probability of a firm’s selecting the plant build entry mode. This conclusion agrees with the overarching notion that firms having unique locational competitive advantages will tend to select the build mode, thereby enabling them to develop their firm-specific competitive advantages most effectively using their own capabilities. This locational competitive concept is also associated with higher performance, as predicted by both this study and Porter’s (1990).

Related industry conditions loaded positively on mode performance, indicating that a firm having a strong home-country business system or value chain and producing high quality products reaped the benefits of this home-country advantage internationally. This result is as hypothesized.
However, the relationship between related industry conditions and mode selection was the reverse of what had been expected. A consideration of the possible alternative explanations, leads to the observation that a firm entering a market using the plant build mode wants to ensure that it has a strong business system or value chain surrounding it. Achieving this assurance could involve inducing the firm's home-country-based suppliers to come to the host-country, as the Japanese have done in the auto parts industry, or it could involve selecting suppliers very careful using strict criteria and a review process. On the other hand, a firm entering using the acquisition mode might not really focus on supplier relationships and capabilities because they expect the plant to have adequate suppliers. This explanation suggests that the firm taking the build mode approach is more aware of the need to ensure that a good and capable supplier network is in place; considerable care in reviewing and ensuring that its suppliers provide quality products and service. As a result, the supplier network is of higher average quality relative to the acquisition entry mode firm that is preoccupied with financial and internal organizational integration problems. Another possible explanation for this difference is that certain strategic dimensions can and should be sought out in a host-based environment. Dunning (1993) made this argument specific to certain knowledge-based industries in which a firm will enter a market to take advantage of the knowledge being derived in these regional industry centers. Other researchers have made similar theoretical arguments, although the author is aware of no research that empirically finds such a host-based advantage to improve overall firm performance. Unfortunately, this study can not clearly differentiate among these possible explanations, and future research must be directed at such an issue.

The positive relationship between market demand condition and the build mode agrees with prior research by Zejan (1990) and Yip (1982). It also agrees with the hypothesis delineated in this study. However, market growth was inversely related to mode performance. This inverse relationship, although counter to what Porter (1990) predicted, is not surprising because firms in high growth industries
are spending money on growth and dealing with growth problems, a well-documented phenomenon in high growth industries and firms (Penrose, 1959; Scherer & Perlman, 1992). Furthermore, the operationalization of Porter’s market demand condition using market growth is simplistic because it ignores the other aspects of market demand condition suggested by Porter. However, in this study the fact that the market demand condition multiple-item scale did not factor as one dimension was probably because the managers perceived these influences at the firm level and delineated them in a more multidimensional way. This result again suggests that managers do not see these advantages as part of the environment, but as an integral part of their firm competitive position. Also, this relationship, although statistically significant, is not very substantive.

In conclusion, the overarching postulation that national competitive advantage influences the selection of entry mode and performance is broadly supported by the evidence, excepting the several explainable differences delineated above. Furthermore, the nature of the concepts and the manner in which Porter has defined the influences of national competitive advantage (i.e., national competitive advantages must be internalized and become firm competitive advantages for them to be useful to the firm) suggest that competitive advantage defined at the firm level influences entry mode selection and performance.

**Relationships Among Ownership Advantages**

The results indicate that all four theoretical concepts - organizational size, strategic diversification, international organizational vertical integration, and international organizational horizontal coordination - influence the international organizational bounded rationality problem between the parent company and the entry mode.

More specifically, firm size influences the organizational bounded rationality problem in an inverse manner to that which was hypothesized. However, the result is unstable over different jackknifing runs, sometimes being significant and
other times being non-significant, depending upon the size of the hold out group used in the PLS analysis. This observation combined with the fact that the results are relatively unsubstantive, indicates that the relationship is marginal at best.

The problem with this relationship could be one of measurement. The operationalization of firm size using interval data clearly reduces the information available to the model, compared to the situation in previous studies which used actual annual sales figures. Using better measurements, these previous studies did associate firm size with entry mode selection (Caves & Mehra, 1986; Kogut & Singh, 1988; Yip, 1982). In conclusion, the relationship between firm size and the international organizational bounded rationality problem is unresolved by this study both from a theoretical and an analytical basis.

The relationship between strategic diversity and the international organizational bounded rationality problem is in the hypothesized direction, suggesting that as diversification increases the international organizational bounded rationality problem increases. This result is supported in general by prior studies which have found product diversity to be related, on a consistent basis, to the acquisition mode (Caves, 1982; Wilson, 1980; Zejan, 1990). This study, in fact, suggests that product diversity influences a firm’s international organizational bounded rationality problems, which in turn influence the selection of the acquisition entry mode. In addition, the relationship between diversification strategy and international bounded rationality is relatively small.

The relationship between international vertical integration and the international organizational bounded rationality problem was the inverse to that which was hypothesized. The model indicates that the greater the international vertical integration, the greater the international organizational bounded rationality problem. However, the vertical integration measure is essentially a measure of centralization of control over functions by the parent company. Since this study was skewed to larger companies, there is a possibility that decentralization of
power is more important to minimizing the international organizational bounded rationality problem than is vertical integration. This alternative explanation suggests that in larger firms the control issue regarding international plant entry should be decentralized to the appropriate level in the organization and entry decisions should be delegated to this level.

Furthermore, it should be noted that the size of the relationship between international vertical control and the organizational bounded rationality problem is small and relatively unsubstantive compared to the horizontal coordination issue.

The relationship between international horizontal coordination and the organizational bounded rationality problem is in the hypothesized direction and it is substantive. This result suggests that a firm having strong horizontal coordination among international units and functions has a distributed operational or primary activity competitive knowledge and skill base. This feature reduces the chance of an international organizational bounded rationality problem among top managers because they not only have access to some of the distributed skills and knowledge, but they also have greater ability to gather these skills when needed. On the other hand, a firm without such a distributed knowledge or skill base, due to the lack of horizontal coordination, will be more likely to incur an international organizational bounded rationality problem, and thus will choose an acquisition plant entry mode strategy.

Relationship Between Ownership and Internalization Advantage
The overarching notion that international organizational bounded rationality problems are associated with the selection of the acquisition plant entry mode and poorer plant entry mode performance is supported by both of the methodologies in this study.

The Japanese FDI methodology found that firms selecting the build plant entry mode tend to have more operational objectives when carrying out the entry. This
observation indicates that the firm has a specific competitive plan and is not just investing in another entity hoping that the entity will take care of operational and non-operational objectives itself. Firms selecting the acquisition mode, on the other hand, do not have many objectives for their new entity. This attitude of no entry mode objectives is symptomatic of an organizational bounded rationality problem. In addition, firms selecting the build mode seem to realize the importance of knowledge and information to sustaining a firm’s international competitive advantage. This is illustrated by the fact that the build entry mode firms have a greater propensity to learn and gain information, while the acquisition mode firms do not stress this objective. Therefore, this methodology provides considerable support for the linkage of an international organizational bounded rationality problem to mode selection.

The second methodology, a questionnaire-survey methodology, also provided strong support for the hypothesis that a greater higher international organizational bounded rationality problem influences a firm to select the acquisition entry mode. This causal relationship was both significant and relatively substantive.

All of the above evidence provides considerable support for the association between an international organizational bounded rationality problem and plant entry mode selection. In this context, an international organizational bounded rationality problem is defined as lack of understanding about the firm’s competitive position, capabilities and operational skills and resources in different international settings. This study indicates that operational functional level knowledge is particularly important in understanding the primary activities being installed in a new international wholly-owned market entry.
Relationships Among Internalization Advantages
Both methodologies also provide strong support for the hypothesis relating entry mode selection to performance. The Japanese FDI methodology found that the build mode had significantly higher financial performance than the acquisition mode. This methodology, however, only controlled for locational competitive advantages and startup stability.

The survey questionnaire methodology found that the build mode performed significantly better than the acquisition mode while controlling for industry concentration, some organizational factors, and locational competitive advantage. Such a result provides additional support to the findings of the first methodology. Furthermore, the results agree with the two prior studies examining this relationship (Li & Guisinger, 1991; Simmonds, 1990).

In conclusion, there is a relatively consistent amount of support for the hypothesis that the build plant entry mode outperforms the acquisition plant entry mode.

LIMITATIONS AND STRENGTHS OF THE STUDY
Despite the relatively strong support for the overarching postulations, the study has both its weaknesses and strengths. Nonetheless, the author has concluded that on balance, the strengths of the study counter most of the weaknesses within each methodology individually. The following two sections list the limitations and strengths of the study.

Limitations
- Some of the scales used for operationalizing the concepts in the questionnaire were exploratory in nature. In particular, the organizational bounded rationality problem, locational advantages, and performance scales can be criticized because of operationalization limitations. In the case of bounded rationality, the concept was measured “ex post” when the theory suggests that it should be measured “ex ante”. The locational advantage
scales were developed from Porter's rather unscientific work on national competitive advantage. Clearly, more work is necessary on these dimensions, particularly when they are viewed from the firm and a manager's perspective. Finally, the performance scale did not directly measure the actual financial performance but rather the manager's perception of it. However, there are many problems associated with measuring the actual financial performance in internal international business units, as was explained previously, and some researchers have found subjective measures to be as effective (Chakravarthy, 1987; Geringer & Hebert, 1991; Hitt, 1988; Venkatraman & Ramanujam, 1986).

- The Japanese FDI study used proxy measures for the organizational bounded rationality problem. Such secondary proxy measures always produce reliability and validity concerns. This study, however, used several proxy measures for the concept of an organizational bounded rationality problem and these measures all supported the relationships consistently. Therefore, this study improves the reliability and validity of the measures compared to previous economic, secondary data-set studies on this topic.

- The issue of common method variance, particularly in the questionnaire-survey methodology, creates a potential problem when managers have feelings or attitudes that are not directly pertinent to the research issues, yet affect the answer. One such situation would exist with managers who are emotionally upset after having been acquired because the acquiring company is demanding better performance and possibly a change in organizational culture. As a result, the manager may have subconscious emotional feelings that influence his performance-related answer in the questionnaire. A build mode, on the other hand, would promote congeniality because the managers would often come from the home organization or be hired in the likeness of the home organization's sociopsychological and skill
profile. Fortunately, only one of the methodologies used subjectively based performance indicators.

- Is this study generalizable to plant entries outside North America? Because neither methodology looked examined such a scenario this limitation could constrain the generalizability of the results. Yet, the selection of the North American market was important for two reasons: it was a convenient sample for the author who was the Canadian-based author, and it is one of the most unregulated markets. This second reason allows for the most appropriate mode to be selected independent of most political constraints and regulation. Government regulation can be a problem in highly regulated markets because considerable international policy is aimed at ownership restrictions, which of course limits the possible entry modes available.

- This study did not specifically consider the sociopsychological and cultural dimensions of entry mode selection. Porter (1990) suggested that firms cannot gain or internalize locational competitive advantages unless they have the appropriate cultural and social assimilation and transactional abilities. However, this attitude is a simplification of a much more complex issue, which was not addressed in this study.

- This study did not specifically consider certain strategic or organizational situations where the acquisition mode might be a strong performer. A variety of theoreticians have proposed why acquisitions may be appropriate in certain situations and not in other situations. For example, Dunning (1993) differentiated among market, strategic, resource-based, and efficiency seeking entry objectives. This study has concentrated primarily on entries taking primarily a strategic and secondarily a market entry objective. Other objectives may influence the causal logic developed in this study. From this perspective, the study concentrated on examining the differences between
entry mode and performance issues rather than within mode differences. Future studies must consider these within mode contexts.

Strengths

- The study used a multi-method approach. These methodologies, which used different data-sets collected from different sources and by different means, apply different statistical techniques to analyze the data. These multi-method differences enhance the external and internal validity considerably over single method studies. Furthermore, both methodologies support the overarching theoretical postulations and the majority of individual hypotheses. Many of the hypotheses are additionally supported by prior research studies on these issue.

- The questionnaire-survey methodology used a causal modeling approach in developing the theoretical relationships and then tested them using a second generation multivariate causal modeling technique. Such an approach ensures that consistency and congruency are maximized in the development of the theoretical model. Furthermore, results of the statistical tests are constrained considerably by the multiplicity of relationships that are interdependent.

- Research using the questionnaire-survey approach incurs a variety of internal validity concerns such as questionnaire bias and sample frame generation bias, as well as the concern of respondent contamination through telephone selection interviews. However, the first methodology, the Japanese FDI methodology, counters many of these internal validity arguments because the data was collected independently.

- On the other hand, using proxy variables, as was done in the Japanese FDI methodology, incurs its own set of internal validity problems because the concepts are poorly operationalized. Again, this validity concern is countered in the second methodology where proxies were not used.
• Finally, the questionnaire-survey methodology uses many scales having multiple measures, particularly for important and ambiguous theoretical concepts in the model. This provides the second methodology with greater ability to verify the operationalized consistency and reliability of the theoretical concepts initially developed in the model.

The author concludes that, on balance, the multi-methodological approach, combined with the support provided by previous studies for many of the relationships considered herein, provides this study with considerable internal and external validity.
CHAPTER 10 - CONCLUSIONS

The eclectic research model and the analysis developed in this study have a variety of theoretical and practical implications which will be examined in the next two sections. A final section will consider the opportunities for further research.

ACADEMIC AND THEORETICAL IMPLICATIONS

There are several important theoretical propositions supported in this study. These encompass the findings that relate locational competitive advantage and international organizational bounded rationality problems to wholly-owned plant entry mode selection and performance, and provide broad support for the eclectic theory model of internationalization. Prior studies have investigated certain aspects of the relationship between locational competitive advantage and non-wholly-owned entry mode selection (Hill, et al., 1990; Kim & Hwang, 1992). However, wholly-owned research has not been very good at examining the influences of locational advantage within both a theoretical and empirical setting (Caves & Mehra, 1986; Kogut & Singh, 1988; Zejan, 1990). Neither non-wholly owned entry mode or wholly-owned entry mode research has postulated relationships between organizational bounded rationality problems and entry mode selection and performance.

This study examined locational advantages from a national competitive advantage perspective and operationalized the concept using Porter’s national competitive advantage conditions. The results indicated that home-based national competitive advantages, in general, influence the selection of the entry mode, and subsequently, entry mode performance. However, this research also indicated that Porter’s national competitive advantage dimensions require more work to improve the reliability and validity of the measures. Problems with multicollinearity and multidimensionality appear to be two of the more important
aspects that must be considered for future work. In fact, Porter's (1990) work on these national competitive advantage conditions also points out the complexity of the inter-relationships among the concepts. There is also tangential support in this research for Porter's notion that these national competitive advantages must be internalized by the firms before they become competitive advantages for the particular country.

Porter also stated that it was the home-country advantages that were so important to international competitive advantage. In general, this supposition was supported because home-based competitive advantages in both the rivalry and strategy condition and the related and supporting industry condition produced higher performance for the entry mode. However, the relationship between related and supporting industries and entry mode selection suggested that a firm must not forget to provide competitive support for its subsidiaries in host countries because this is what provides the plant subsidiary with a strong value chain or business system. Another possible explanation for this finding is that the build mode is more critically linked to trying to tap into host-country national competitive advantages to gain further competitive advantages. This issue of home versus host-country advantages is an interesting issue which was only partially considered in this research. Future research must delve into this complex problem from both a situational-specific and overarching perspective.

Finally, prior research on international diversification indicated that geographic diversification is profitable (Geringer, Beamish & daCosta, 1989). However, considerable controversy has surrounded the theoretical debate of whether increased performance was due to a competitive advantage provided by geographic diversification or whether performance due to competitive advantages actually created more geographic diversification. Porter's theory and the results of this study suggest that competitive advantage both creates increased performance and leads to greater geographic diversification. However, this study looked only at plant entry into the North American market.
Industry concentration was found to be related to higher performance, as one would expect, because of the potential for oligopolistic behavior and possibly higher profits due to barriers to entry (Bain, 1954; Bain, 1956; Caves & Porter, 1977). This study did not, however, find support for the relationship between industry concentration and entry mode selection. Prior studies have related industry concentration to the acquisition entry mode. However, the inconsistency of empirical support for this relationship suggests that it is more complex than initially thought. It may be non-linear or be moderated by other influences such as the height of the barriers to entry, the willingness of various participants to enter into an oligopolistic relationship, and the diversity of the firms within an industry. Prior research did not control for as many variables as this study controlled for in the second methodology. In addition, the sample was skewed to larger organizations compared to prior studies, which may have lowered the industry concentration variance and thus eliminated this causal relationship. This particular issue is certainly not resolved in this research study and further work must be done to provide more clarity to the inconsistent relationship between industry concentration and mode selection.

The overarching postulation relating organizational contexts to organizational bounded rationality problems, and organizational bounded rationality problems to entry mode selection and performance, is unique to this study. Prior studies have looked at the relationship between individual organizational characteristics and entry mode selection and these relationships are usually developed using minimal theoretical deduction or causal logic.

Furthermore, this study merged into one overarching eclectic model two previously independent research streams, which examined the influences on entry mode selection and the influence of entry modes selected on performance. Central to this model was the concept of international organizational bounded rationality problems, which have been defined in this research as the lack of knowledge and decision-making capabilities specific to top decision-makers
when they must determine how to build operational competitive advantages in a new international market. The concept assumes that most new plant entry modes are, in fact, largely duplicating the primary activities in the value chain and that the top managers have become cognitively disassociated from these primary activities through lack of experience, poor information flow, organizational distance, or lack of coordination. Therefore, it is very difficult for these top managers to plan and implement build entry modes. However, since their experience and capabilities often lie in the financial, administrative, and negotiation roles in the firm, they select the acquisition mode because these particular roles are well suited to this strategy.

The results of this study demonstrate broad support for the notion that international organizational bounded rationality problems influence entry mode selection. Both methodologies support this relationship. Secondly, the study finds some support for the fact that certain organizational and strategic contexts influence the degree of organizational bounded rationality in the firm. In conclusion, the results of this merged model provide substantial evidence that international bounded rationality is an important issue in both the selection and performance of entry modes.

Finally, the study provides strong support for the eclectic theory as it applies to the wholly-owned selection and performance issue. Such support is important because, to the author's knowledge, this is the only empirical test for micro-theory or micro-organizational and managerial level issues that has been done on the eclectic theory. Furthermore, the eclectic theory model in this study was developed specifically for the wholly-owned entry mode research decision. A tremendous amount of theorizing and high level testing using abstract variables has been applied to the eclectic theory. However, in order to develop the intricacies of causality as well as an integration of the disparate theories in eclectic theory future researchers must begin to apply these models to specific situations. And in doing so they must attempt to develop strong causal links
among the sub-theories in the eclectic model, and thereby prepare for the ultimate development of a broader and less controversial eclectic model of the international firm.

In conclusion, this study significantly augments the theoretical arguments surrounding international diversification, and entry mode selection and performance. It provides some strong theoretical arguments for entry mode selection and performance, and then assesses these relationships using two methodologies.

MANAGERIAL IMPLICATIONS
The managerial implications of this research are related to the overarching postulations that competitive advantage and organizational bounded rationality problems tend to influence a firm's entry mode selection and performance. Obviously, one of the central considerations relevant to a manager is that the plant build mode outperform the plant acquisition entry mode. This is an important issue for many managers because four out of every five foreign entries into the North American market use the acquisition mode.

This study does not, however, suggest that managers should never select acquisitions because, clearly, there are situations and exceptions in which the acquisition mode would be appropriate. In addition, a manager or firm can not necessarily adopt a plant build mode and expect to get high performance. In this study, the firms that had selected the build entry mode achieved a competitive advantage and had better organizational capabilities than those that selected the acquisition mode. These attributes may be necessary prerequisites to adopting the build plant entry mode and/or to deriving improved performance from an entry strategy. This indicates that the managers must adopt more that just the entry mode strategy; they must also adopt the substantive processes, skills, and capabilities that allow such a strategy to be implemented appropriately.
An example of a situation in which many North American firms have adopted strategies unsuccessfully is the Japanese quality control and just-in-time that were adopted in the 1980s. Managers adopted these strategies in form, but not in substance, neglecting to put in place the organizational processes, skills, and attributes that were necessary for the successful implement these strategies. Many of them later discarded these strategies when they did not improve performance. This same problem may occur with entry mode strategies if firms do not adopt the necessary organizational implementation capabilities and attributes to implement the build mode appropriately.

Necessary strategic and organizational implementation skills include a clear and strong international competitive position in the home-country as well as appropriate organizational systems and capabilities that allow the competitive advantages to be understood and mobilized effectively in a new international environment. A home-based international competitive position appears to be important, as Porter has suggested. Therefore, a firm must focus on developing such home-based competitive advantages. However, a firm must also concentrate on developing a strong competitive position in the new international market by ensuring that it has a strong supplier network and a strong distribution system. Clearly, home-country advantages are only useful internationally if they can be mobilized and developed in new markets. Thus, although home-country advantage is a prerequisite for international competitive advantage, a firm should not forget that each international plant must have its own competitive advantage either in conjunction with the parent company or uniquely by itself. Therefore, managers can not neglect host-based competitive advantages and think that concentrating on home-country advantages will provide them with unlimited international competitive advantage.

In conclusion, firms that are considering international expansion must attempt to improve their organizational capabilities so that managers understand how to mobilize and evolve their home based competitive advantages in new
international markets. The results of this study indicate that when managers become disassociated from their underlying competitive advantages at the functional, operational and market level, they tend to take the acquisition entry mode resulting in lower mode performance. This phenomenon was labeled international bounded rationality in this study.

Organizational considerations that appear to make a difference in minimizing the international organizational bounded rationality problems are the following:

- Minimize the product diversity in a firm so that the managers can focus on operational, functional and market-competitive advantages rather than on administrative and financial issues.

- Decentralize the entry mode decision-making if the firm is large or diversified, and provide incentives as well as control techniques to ensure that managers at the appropriate level who have the necessary information are making these decisions. In addition, provide these managers with feedback and remuneration so that they will have all the incentives to make the right decision for the company.

- Concentrate on ways to improve organizational coordination, particularly at the international level, among functions and within functions located in different countries. Clearly, the international competitive advantage of the firm must be acknowledged and understood by as many people as possible in the firm. Furthermore, encourage improvement in this competitive advantage and share these improvements as quickly as possible with other international units. Unfortunately, competition often spurs competitive improvements, but discourages the units from cooperating and sharing these improvements. The most effective firms are those that clearly understand both their competitors and their allies. This is an attribute the Japanese appear to have mastered.
OPPORTUNITIES FOR FURTHER STUDY

There are a wide variety of issues that either have not been adequately studied or are tangential to the issues in this research which must be explored in the future. Listed below are some of these issues:

- How does competitive advantage and international bounded rationality influence entry modes that are not wholly-owned in nature? Internationalization research has tended to show that knowledge is important, but researchers must now attempt to delineate what information is necessary, when and where.

- What is the relationship between locational and ownership advantage in the eclectic model? Porter's theory of national competitive advantage suggests that locational advantages must be internalized before they can be used by the firm. This study appears to support Porter's perspective. Yet, what is this relationship in the context of the eclectic theory?

- This study looked at firms from developed nations entering developed nation markets. How do the theoretical relationships change if either one of these national parties is a developing nation? Porter suggested a hierarchy of factor conditions. The developing nations have an abundance of the lower level conditions, while the developed nations have an abundance of the higher level conditions. How does this difference influence the entry mode decision and the resulting performance?

- This study has taken a cursory look at some issues that might influence international bounded rationality. Yet, how does international bounded rationality develop in a firm? What other influences affect it? How does a firm eliminate it once it has this problem? What other top level decisions might this problem impact?
• Finally, are there cultural and social dimensions to this international bounded rationality?
APPENDIX I  QUESTIONNAIRE

The University of Western Ontario
Western Business School

ANONYMOUS INTERNATIONAL ENTRY MODE DECISION:
QUESTIONNAIRE

This short survey is part of a study we are doing to better understand factors influencing the selection of an acquisition versus a greenfield strategy for expansion of manufacturing facilities in international markets. The results will allow us to better understand factors influencing these decisions as well as the performance implications of such decisions. Please answer all questions to the best of your ability. If you wish to add supplementary comments, feel free to do so on the last blank page.

In the event you would like to discuss any of the questions, feel free to call Patrick Woodcock at either of the below telephone numbers.

Please mail the confirmation card when you mail back this questionnaire. Thank you for your help.

*All of your responses will be held in strict confidence.*

Please return the questionnaire to:
C. Patrick Woodcock
Western School of Business
University of Western Ontario
London, Ontario, N6A 3K7
Phone: Office (519) 661-3206 Ext. 5138
       Home (519) 471-2509
       Fax # (519) 661-3292
A NOTE ON HOW TO FILL OUT THE QUESTIONNAIRE

Please indicate the appropriate answer for each question with either a check mark in the box, or a circle around the appropriate number as shown below.

**Examples**

1. Do you feel the economy is improving?  ☐ Yes  ☑ No

2. Do you think economic recovery is important to firm profitability

<table>
<thead>
<tr>
<th>Important</th>
<th>Not at all Important</th>
<th>Extremely Important</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>7  6  5  4  3  2  1</td>
<td></td>
</tr>
</tbody>
</table>
Background on Canadian Plant

Q1. Was this plant built or acquired? □ Built □ Acquired
Q2. Was this the first Canadian plant owned by your foreign parent firm? □ Yes □ No
Q3. Was this plant a product diversification for your foreign parent firm? □ Yes □ No

Background on Foreign Parent Company

Q4. Estimate how often your foreign parent company has used either an acquisition or build strategy for plant expansion:

<table>
<thead>
<tr>
<th></th>
<th>Never</th>
<th>Very Often</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acquisition strategy</td>
<td>7</td>
<td>6</td>
</tr>
<tr>
<td>Built or Greenfield</td>
<td>5</td>
<td>4</td>
</tr>
<tr>
<td>strategy</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>1</td>
<td>1</td>
</tr>
</tbody>
</table>

Q5. How did your foreign parent do business in Canada prior to this plant?
□ None □ Export □ Licensing □ Joint Venture □ Other Canadian Plants

Q6. Approximately what was your foreign parent’s annual sales in 1992?
□ Under $50 Million □ $50 Million to $99 Million □ $100 Million to $249 Million □ $250 Million to $499 Million □ $500 Million to $749 Million □ $750 Million to $999 Million □ $1 Billion or more

Background on Business Environment

Q7. Estimate how much market share the top 4 companies in these two markets account for in your industry:

<table>
<thead>
<tr>
<th></th>
<th>Less than 20%</th>
<th>Between 20% and 50%</th>
<th>Between 50% and 75%</th>
<th>More than 75%</th>
</tr>
</thead>
<tbody>
<tr>
<td>The Canadian market</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Your foreign parent’s market region</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
</tbody>
</table>

Q8. How would you describe the diversity of industries that your foreign parent company is involved with?
□ It derives 95% of its sales from one industry □ It derives 70% to 94% of its sales from one industry □ It derives less than 70% of its sales from one industry and the industries are related technologically □ It derives less than 70% of its sales from one industry and the industries are unrelated technologically

Q9. How would you rate the following business conditions in Canada relative to those in your foreign parent’s home country?

<table>
<thead>
<tr>
<th>Condition</th>
<th>Much Better</th>
<th>Better</th>
<th>Slightly Better</th>
<th>Same</th>
<th>Slightly Worse</th>
<th>Worse</th>
<th>Much Worse</th>
</tr>
</thead>
<tbody>
<tr>
<td>In Canada relationships between suppliers and buyers are</td>
<td>7</td>
<td>6</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>In Canada product development knowledge is</td>
<td>7</td>
<td>6</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>In Canada the product quality of firms is</td>
<td>7</td>
<td>6</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>In Canada technical capabilities of firms are</td>
<td>7</td>
<td>6</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>In Canada the speed of product innovation by competitors is</td>
<td>7</td>
<td>6</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
</tbody>
</table>
Q10. How would you rate the following business conditions in Canada relative to those in your foreign parent's home-country?

<table>
<thead>
<tr>
<th>Condition</th>
<th>Much Higher</th>
<th>Higher</th>
<th>Slightly Higher</th>
<th>Same</th>
<th>Slightly Lower</th>
<th>Lower</th>
<th>Much Lower</th>
</tr>
</thead>
<tbody>
<tr>
<td>In Canada the costs of doing business are</td>
<td>7</td>
<td>6</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>In Canada the market size for the product is</td>
<td>7</td>
<td>6</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>In Canada the market growth for the product is</td>
<td>7</td>
<td>6</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>In Canada the buyer's product knowledge is</td>
<td>7</td>
<td>6</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>In Canada the speed of new products improvements</td>
<td>7</td>
<td>6</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>In Canada the capabilities of suppliers are</td>
<td>7</td>
<td>6</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
</tbody>
</table>

Q11. Listed below are various activities that may be important to your company when competing in your industry. Indicate how important each item is to your industry.

<table>
<thead>
<tr>
<th>Activity</th>
<th>Not at all Important</th>
<th>Extremely Important</th>
</tr>
</thead>
<tbody>
<tr>
<td>Product or process innovations</td>
<td>7</td>
<td>6</td>
</tr>
<tr>
<td>Large scale plant and production facilities</td>
<td>7</td>
<td>6</td>
</tr>
<tr>
<td>Product or company reputation</td>
<td>7</td>
<td>6</td>
</tr>
<tr>
<td>Emphasis on low cost per unit</td>
<td>7</td>
<td>6</td>
</tr>
<tr>
<td>Emphasis on advertising and promotion</td>
<td>7</td>
<td>6</td>
</tr>
<tr>
<td>Emphasis of niche markets</td>
<td>7</td>
<td>6</td>
</tr>
</tbody>
</table>

Q12. Listed below are a variety of international industry & market characteristics. Indicate how representative each characteristic is of your industry and market.

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Not at all Characteristic</th>
<th>Extremely Characteristic</th>
</tr>
</thead>
<tbody>
<tr>
<td>Worldwide standardization of customer needs</td>
<td>7</td>
<td>6</td>
</tr>
<tr>
<td>Worldwide standardization of product technology</td>
<td>7</td>
<td>6</td>
</tr>
<tr>
<td>Competitor's market standardized products worldwide</td>
<td>7</td>
<td>6</td>
</tr>
<tr>
<td>A relatively slow stable rate of technological change</td>
<td>7</td>
<td>6</td>
</tr>
<tr>
<td>A highly competitive industry</td>
<td>7</td>
<td>6</td>
</tr>
<tr>
<td>Uncertain sales forecasts</td>
<td>7</td>
<td>6</td>
</tr>
<tr>
<td>Very fast product innovation cycles</td>
<td>7</td>
<td>6</td>
</tr>
</tbody>
</table>

Background Organizational Characteristics

Q13. How would you characterize the organizational structure of your foreign parent company?

- Functional reporting structure
- Geographic area reporting structure
- Product line reporting structure
- Matrix or mixed reporting structure

Q14. Who generally makes the following decisions?

<table>
<thead>
<tr>
<th>Decision</th>
<th>Foreign Parent Office Managers</th>
<th>Subsidiary Top Level Managers</th>
<th>Subsidiary Middle Managers</th>
<th>Production Supervisors</th>
</tr>
</thead>
<tbody>
<tr>
<td>Production scheduling</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Methods of personnel selection</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Machinery or equipment selection</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Allocation of work among production workers</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Product development programs</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
</tbody>
</table>
Q15. Indicate the extent to which coordination has been achieved between similar functional activities in the various international segments of your company.

<table>
<thead>
<tr>
<th>Activity</th>
<th>Not Currently Coordinated at all</th>
<th>Currently Coordinated to a large extent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Manufacturing operations</td>
<td>7 6 5 4 3 2 1</td>
<td></td>
</tr>
<tr>
<td>Raw materials and parts procurement</td>
<td>7 6 5 4 3 2 1</td>
<td></td>
</tr>
<tr>
<td>Product &amp; process research and development</td>
<td>7 6 5 4 3 2 1</td>
<td></td>
</tr>
<tr>
<td>Human resource management</td>
<td>7 6 5 4 3 2 1</td>
<td></td>
</tr>
<tr>
<td>Product promotion and advertising</td>
<td>7 6 5 4 3 2 1</td>
<td></td>
</tr>
<tr>
<td>Information systems and data processing</td>
<td>7 6 5 4 3 2 1</td>
<td></td>
</tr>
</tbody>
</table>

Q16. Indicate the extent to which each of the following activities is performed in various international subsidiaries located in only one domestic or international location.

<table>
<thead>
<tr>
<th>Activity</th>
<th>Located in only One domestic or International location</th>
<th>Located in Multiple International Locations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Manufacturing operations</td>
<td>7 6 5 4 3 2 1</td>
<td></td>
</tr>
<tr>
<td>Raw materials and parts procurement</td>
<td>7 6 5 4 3 2 1</td>
<td></td>
</tr>
<tr>
<td>Product &amp; process research and development</td>
<td>7 6 5 4 3 2 1</td>
<td></td>
</tr>
<tr>
<td>Human resource management</td>
<td>7 6 5 4 3 2 1</td>
<td></td>
</tr>
<tr>
<td>Product promotion and advertising</td>
<td>7 6 5 4 3 2 1</td>
<td></td>
</tr>
<tr>
<td>Information systems and data processing</td>
<td>7 6 5 4 3 2 1</td>
<td></td>
</tr>
</tbody>
</table>

Q17. Indicate the extent to which the following mechanisms are used to coordinate various functional activities between international plants, subsidiaries, and the foreign parent firm.

<table>
<thead>
<tr>
<th>Mechanism</th>
<th>Used Rarely</th>
<th>Used Very Often</th>
</tr>
</thead>
<tbody>
<tr>
<td>Parent to subsidiary personal transfers</td>
<td>7 6 5 4 3 2 1</td>
<td></td>
</tr>
<tr>
<td>Direct contact</td>
<td>7 6 5 4 3 2 1</td>
<td></td>
</tr>
<tr>
<td>Managerial liaison roles</td>
<td>7 6 5 4 3 2 1</td>
<td></td>
</tr>
<tr>
<td>Teams or Task forces</td>
<td>7 6 5 4 3 2 1</td>
<td></td>
</tr>
<tr>
<td>Cross-training</td>
<td>7 6 5 4 3 2 1</td>
<td></td>
</tr>
</tbody>
</table>

Q18. Indicate whether the following levels of management utilize the techniques listed below for transferring knowledge between the foreign parent company and the Canadian plant or subsidiary.

<table>
<thead>
<tr>
<th>Technique</th>
<th>Top Subsidiary Managers</th>
<th>Middle-Level Managers</th>
<th>Lower-Level Supervisors</th>
<th>Production Workers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Parent to subsidiary personal transfers</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Direct contact</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Managerial liaison roles</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Teams or Task forces</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cross-training</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Q19. Listed below are activities and skills associated with all companies. Indicate the degree to which these activities or skills are located and used in your head office versus your Canadian subsidiary.

<table>
<thead>
<tr>
<th>Located in Head Office</th>
<th>Located in Operating Entities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strategic planning</td>
<td>7 5 5 4 3 2 1</td>
</tr>
<tr>
<td>Financial management</td>
<td>7 5 5 4 3 2 1</td>
</tr>
<tr>
<td>Legal council</td>
<td>7 5 5 4 3 2 1</td>
</tr>
<tr>
<td>Advertising and marketing skills</td>
<td>7 6 5 4 3 2 1</td>
</tr>
<tr>
<td>Product knowledge</td>
<td>7 6 5 4 3 2 1</td>
</tr>
<tr>
<td>Manufacturing process knowledge</td>
<td>7 6 5 4 3 2 1</td>
</tr>
</tbody>
</table>

Q20. Indicate how well your foreign parent company understands the following areas of your local market and subsidiary operations.

<table>
<thead>
<tr>
<th>Only Moderately Understands</th>
<th>Thoroughly Understands</th>
</tr>
</thead>
<tbody>
<tr>
<td>Local manufacturing processes</td>
<td>7 6 5 4 3 2 1</td>
</tr>
<tr>
<td>Local buyer's needs</td>
<td>7 6 5 4 3 2 1</td>
</tr>
<tr>
<td>Local distribution techniques</td>
<td>7 6 5 4 3 2 1</td>
</tr>
<tr>
<td>Local competitive pressures</td>
<td>7 6 5 4 3 2 1</td>
</tr>
<tr>
<td>Local plant operating procedures</td>
<td>7 6 5 4 3 2 1</td>
</tr>
<tr>
<td>Local market characteristics</td>
<td>7 6 5 4 3 2 1</td>
</tr>
</tbody>
</table>

Organizational Effectiveness

Q21. Indicate the general operational satisfaction by management towards the Canadian plant since startup.

<table>
<thead>
<tr>
<th>Extremely Satisfied</th>
<th>Extremely Unsatisfied</th>
</tr>
</thead>
<tbody>
<tr>
<td>Has it satisfied the initial entry objectives?</td>
<td>7 6 5 4 3 2 1</td>
</tr>
<tr>
<td>Has it satisfied the profitability objectives?</td>
<td>7 6 5 4 3 2 1</td>
</tr>
<tr>
<td>Has it satisfied the sales growth objectives?</td>
<td>7 6 5 4 3 2 1</td>
</tr>
<tr>
<td>Satisfaction with the overall competitiveness of the plant?</td>
<td>7 6 5 4 3 2 1</td>
</tr>
</tbody>
</table>

Q22. Indicate the category that you feel best estimates how your Canadian subsidiary's performance over the last three years compared to other companies in the industry.

<table>
<thead>
<tr>
<th>Lowest 20%</th>
<th>Lower 20%</th>
<th>Middle 20%</th>
<th>Next 20%</th>
<th>Top 20%</th>
</tr>
</thead>
<tbody>
<tr>
<td>After-tax return on total assets was</td>
<td>5 4 3 2 1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>After-tax return on total investment was</td>
<td>5 4 3 2 1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Annual increase in total sales was</td>
<td>5 4 3 2 1</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
APPENDIX II VERIFICATION CARD

Front of Return Card

Stamp

C. Patrick Woodcock
Western Business School
University of Western Ontario
London, Ontario
Canada
N6A 3K7

Back of Return Card

VERIFICATION CARD
Please return this card when returning the questionnaire
It allows us to verify that you have responded to the
questionnaire without jeopardizing the anonymity
of the survey. It also provides you with an opportunity
to indicate whether you would like a copy of the study
results. Thank You.

Name:______________________________________
Company:____________________________________
Address:______________________________________

☐ Yes, Please send me a summary of the results.
☐ No, do not send me a summary of the results.
APPENDIX III: ANCILLARY ANALYSIS

HORIZONTAL INTERNATIONAL COORDINATION

Factor Loadings (Unrotated) (cpwin1.sta)

Extraction: Principal components

<table>
<thead>
<tr>
<th></th>
<th>Factor 1</th>
<th>Factor 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>_MANOP</td>
<td>.779</td>
<td>-.287</td>
</tr>
<tr>
<td>_MATPRO</td>
<td>.632</td>
<td>.523</td>
</tr>
<tr>
<td>_HUMRES</td>
<td>.555</td>
<td>-.320</td>
</tr>
<tr>
<td>_R_D</td>
<td>.760</td>
<td>.284</td>
</tr>
<tr>
<td>_ADVPRO</td>
<td>.514</td>
<td>.727</td>
</tr>
<tr>
<td>_MIS</td>
<td>.715</td>
<td>.245</td>
</tr>
</tbody>
</table>

Expl.Var 2.787 1.127
Prp.Totl .464 .188

Summary for scale: Mean=23.8208 Std.Dv =6.09418 Valid N:106
Cronbach alpha: .762251 Standardized alpha: .763696
Average inter-item corr.: .356472

<table>
<thead>
<tr>
<th></th>
<th>Mean if</th>
<th>Var. if</th>
<th>Stdv. if</th>
<th>Itm-Totl</th>
<th>Alpha if</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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<td>deleted</td>
<td>deleted</td>
<td>Correl.</td>
<td>deleted</td>
</tr>
<tr>
<td>_MANOP</td>
<td>20.16</td>
<td>24.32</td>
<td>4.93</td>
<td>.603</td>
<td>.699</td>
</tr>
<tr>
<td>_MATPRO</td>
<td>19.69</td>
<td>27.31</td>
<td>5.23</td>
<td>.452</td>
<td>.741</td>
</tr>
<tr>
<td>_HUMRES</td>
<td>19.14</td>
<td>28.12</td>
<td>5.30</td>
<td>.482</td>
<td>.734</td>
</tr>
<tr>
<td>_R_D</td>
<td>20.50</td>
<td>26.82</td>
<td>5.18</td>
<td>.606</td>
<td>.705</td>
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<tr>
<td>_ADVPRO</td>
<td>19.95</td>
<td>29.16</td>
<td>5.40</td>
<td>.346</td>
<td>.767</td>
</tr>
<tr>
<td>_MIS</td>
<td>19.66</td>
<td>24.85</td>
<td>4.99</td>
<td>.558</td>
<td>.713</td>
</tr>
</tbody>
</table>

VERTICAL INTERNATIONAL INTEGRATION

Factor Loadings (Unrotated) (cpwin1.sta)

Extraction: Principal components

<table>
<thead>
<tr>
<th></th>
<th>Factor 1</th>
<th>Factor 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>C_MANOP</td>
<td>.740</td>
<td>.263</td>
</tr>
<tr>
<td>C_MATPRO</td>
<td>.811</td>
<td>.372</td>
</tr>
<tr>
<td>C_PRDDEV</td>
<td>.506</td>
<td>-.112</td>
</tr>
<tr>
<td>C_HUMRES</td>
<td>.659</td>
<td>.071</td>
</tr>
<tr>
<td>C_ADVPRO</td>
<td>.660</td>
<td>.222</td>
</tr>
<tr>
<td>C_MIS</td>
<td>.496</td>
<td>-.615</td>
</tr>
<tr>
<td>C_FINMAN</td>
<td>.460</td>
<td>-.729</td>
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<tr>
<td>C_STRATP</td>
<td>.720</td>
<td>-.194</td>
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</table>

Expl.Var 3.701 1.222
Prp.Totl .463 .153

169
INTERNATIONAL BOUNDED RATIONALITY

Factor Loadings (Unrotated) (cpwin1.sta)
Extraction: Principal components

<table>
<thead>
<tr>
<th>Factor</th>
<th>U_MANUF</th>
<th>U_BUYERS</th>
<th>U_DIST</th>
<th>U_COMPA</th>
<th>U_PLANP</th>
<th>U_MKT</th>
<th>U_LABOUR</th>
<th>U_PRODCH</th>
<th>Expl.Var</th>
<th>Prt.Totl</th>
</tr>
</thead>
<tbody>
<tr>
<td>U_MANUF</td>
<td>.780</td>
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<td></td>
<td></td>
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<td>U_BUYERS</td>
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<td>U_PLANP</td>
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<td>Prt.Totl</td>
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Summary for scale: Mean=29.6415 Std. Dv.=10.1308 Valid N:106
Cronbach alpha:.918649 Standardized alpha:.918308
Average inter-item corr.: .597470
### THE SIGNIFICANCE CALCULATION FOR THE INNER MODEL

**T-Values for Path Coefficients**

<table>
<thead>
<tr>
<th></th>
<th>main</th>
<th>结构调整</th>
<th>物业持有</th>
<th>管理成本</th>
<th>销售成本</th>
<th>营销成本</th>
<th>财务成本</th>
<th>经营成本</th>
<th>财务状况</th>
<th>财务状况</th>
<th>财务状况</th>
<th>财务状况</th>
<th>财务状况</th>
<th>财务状况</th>
<th>财务状况</th>
</tr>
</thead>
<tbody>
<tr>
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<tr>
<td>销售成本</td>
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<td>0.000</td>
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**Note:**

- $p < 0.01$ if $t > 3.17$
- $p < 0.05$ if $t > 2.23$
- $p < 0.10$ if $t > 1.81$
BIBLIOGRAPHY


Lawrence, P. R., & Lorsch, J. W. (1967). *Organization and environment: Managing differentiation and integration*. Boston, Ma.: Division of Research, Graduate School of Business Administration, Harvard University.


