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Multinational Corporation's Subsidiary Operations: Channel Management, Subsidiary Performance, and the Entry Mode Decision

A doctoral dissertation submitted to the

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by

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Abstract

The dissertation investigates three important aspects of multinational corporation's (MNC's) subsidiary management. First, consistent with the strategy-environment coalignment principle, a framework for MNC subsidiary channel management is developed. The framework views MNC subsidiary channel structures and processes to be contingent on the MNC's worldwide strategic motives, the global environment, and factors internal to the MNC. Empirical validation of the framework is carried out by studying the influence of the multinational's worldwide strategic motives and the facets of the host country environment on the use of process and output control mechanism by a MNC subsidiary to manage its distributor.

The second issue the dissertation studies concerns MNC subsidiary performance. The conceptual model for MNC subsidiary performance also relies on the strategy-environment coalignment principle and investigates the influence of (1) factors internal to the multinational corporation (MNC) and (2) the fit between the MNC's worldwide strategy and the facets of the host country environment on MNC subsidiary performance. The third topic the dissertation examines concerns the nature of MNC's entry mode decision. Specifically, the implications of decision framing and judgment uncertainty on normative theory development for entry mode decision is studied.

The three empirical investigations are carried out for German and Japanese subsidiaries in the United States. Survey data is used to validate the channel management and subsidiary performance models. While scenarios in a factorial array are used to study the entry mode decision hypotheses. The various models estimated to test the research hypotheses provide support for theoretical conjectures.

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Chapter 1

Introduction and Overview

Towards the end of the last decade several unconnected events, including the collapse of the communist world and advances in communication technology, have ushered us into an era characterized by one large global economy. As we embark on the next millennium, business scholars are emphasizing that businesses that do not either think or act globally are at a competitive disadvantage (Bartlett and Ghoshal 1995; Levitt 1983; Ohmae 1989; Prahalad and Doz 1987). The economic unification of the world has enhanced the significance of Multinational Corporations (MNCs), which are being considered as the primary vehicles for attaining any economic agenda (UNCTAD 1993). Given the immense significance of international business and the MNCs, this dissertation examines three important aspects of MNC foreign subsidiary operations, viz., channel management, subsidiary performance, and the entry mode decision. In the remainder of this chapter, a brief overview of the contributions of the dissertation to these three aspects of MNC management are presented.

Channel Management

Developing an understanding of multinational subsidiary channel management channels is important, as the success of a MNC depends on the performance of its distribution partners. Unfortunately there is limited conceptual and empirical research addressing this issue. Responding to this paucity of research, the dissertation develops a comprehensive framework for MNC subsidiary channel management (Chapter 2). To demonstrate the utility of the framework, a part of the framework is empirically validated (Chapter 3).

To advance an integrative conceptual framework for MNC subsidiary channel management, the strategy-environment coalignment perspective is adopted. Consistent with this perspective, the framework views MNC subsidiary channel structures and processes to be contingent on the MNC's worldwide strategic motives, the global environment, and factors internal to the MNC. A MNC's worldwide strategic motives are conceptualized in terms of emphasis on global efficiency, multinational flexibility, and worldwide learning. The global environment is viewed in terms of the forces of global integration and the pressures of local responsiveness, which in turn are visualized as stemming from both the task environment and the institutional environment. MNC's internal factors are theorized as either specific to the subsidiary or the MNC. MNC specific variables include the subsidiary's method of founding, the international experience of the MNC, the value of firm assets used in the subsidiary operations, characteristics of the product(s) marketed by the subsidiary, the cultural distance between the MNC headquarters and its subsidiary, and the relative size of the subsidiary in relation to the headquarters. To demonstrate the utility of the framework illustrative propositions are developed (see Chapter 2 for details).

Empirical validation of the integrative framework is presented in Chapter 3. Specifically, a MNC subsidiary's use of formal control and coordination mechanisms to manage its distributors are investigated. Consistent with the strategy-environment coalignment principle, Chapter 3 examines the influence of a multinational's worldwide strategic motives and the facets of the host country environment on the use of process and output control mechanism by the MNC subsidiary to manage its distribution partners. The results show that the distribution partner's performance is determined by the extent

to which a MNC subsidiary utilizes process and output control mechanisms to manage its distribution channel along with munificence and volatility in the local task environment. The extent to which a MNC uses these two control mechanisms in turn depends on the facets of the local environment, including munificence, dependence, and multiplicity, along with the worldwide strategic motives of the MNC. The results also confirm the mediational hypotheses and demonstrate that the local environment serves as a filter for the influence of the strategic motives on a MNC's use of formal control and coordination mechanisms.

Subsidiary Performance

The study of the determinants of organizational performance has been at the heart of marketing research, though the empirical research has been primarily limited to domestic firms (cf., Buzzell and Gale 1987; Jacobson 1990; Phillips, Chang, and Buzzell 1983). The handful of studies that examine organizational success in the international context have explicitly focused on export market ventures (cf., Bello and Gilliland 1997; Cavusgil and Zou 1994; McGuiness and Little 1981). Chapter 3 adopts the strategy-environment coalignment perspective to study the influence of (1) factors internal to a MNC and (2) the fit between the MNC's worldwide strategy and the facets of the host country environment on MNC subsidiary performance (Chapter 4). The results show that demand munificence enhances subsidiary performance, though demand volatility does not have a significant impact. The conjectures of institutional theorist concerning the non-significant influence of the facets of the local institutional environment on subsidiary performance are supported, though institutional environment moderates the influence of worldwide learning. In addition, as hypothesized, psychic distance between a MNC

headquarter and its subsidiary proves detrimental for the performance of the subsidiary, while subsidiary performance increases with the value of firm-specific knowledge. Finally, the results support the conjectures that the influence of a MNC's worldwide strategic motives are contingent on the local environment.

Entry Mode Decision

After having decided to enter a foreign market, the first decision that a MNC has to take concerns its choice of entry mode. Mode of entry is the institutional arrangement that a MNC choose initially to organize and conduct its country specific operations (Root 1994). At the very least, the choice of entry mode is an important determinant of the initial success of a MNC's foreign operations (cf., Anderson and Gatignon 1986; Erramilli and Rao 1993). Chapter 5, investigates the implications of decision framing and decision uncertainty on theory development for a multinational corporation's entry mode decision. Specifically, the chapter examines the two decision frames adopted by entry mode researchers. First, the available entry mode options are viewed as discrete alternatives ordered with respect to the level of resource commitment. Second, the entry mode decision is framed as the choice between discrete unordered alternatives. Chapter 5 reasons that framing of the entry mode decision is likely to determine the hypotheses that a researcher is likely to test. Though the findings do not conclusively establish which of the two decision frames is better, they do show that examining both decision frames provides richer insights into the entry mode decision.

To study decision uncertainty, I rely on the basic psychological premise that, to an extent, all judgments are fuzzy and, therefore, embody two components: the decision itself and decision uncertainty. This conjecture builds on previous research on entry

mode decision, which has primarily focused only on the entry mode decision. The results supports this conjecture and illustrate the importance of investigating both the entry mode decision and uncertainty associated with the entry mode decision.

Dissertation Organization

The dissertation is organized along the following lines. Chapter 2 develops an integrative conceptual framework for MNC subsidiary channel management. Chapter 3 examines issues related to the use of formal control mechanisms by MNC subsidiaries to manage their distributors. Chapter 4 studies the drivers of MNC subsidiary performance. Finally, Chapter 5 investigates the significance of decision framing and judgment uncertainty for the entry mode decision of MNCs.

Chapter 2

Marketing Channel Structures and Processes for Multinational Corporation's Subsidiary Operations: An Integrative Conceptual Framework

Overview

With the globalization of world markets, developing a comprehensive understanding of international channels and channel management for MNC subsidiary operations is gaining importance for both practitioners and scholars. Unfortunately there is a limited conceptual and empirical research addressing this issue. I adopt the strategy-environment coalignment perspective to develop an integrative conceptual framework for the determinants of MNC subsidiary's channel structures and processes. The framework views MNC subsidiary channel structures and processes to be dependent on a MNC's worldwide strategic motives, the global environment, and factors internal to the MNC. MNC's worldwide strategic motives are conceptualized in terms of emphasis on global efficiency, multinational flexibility, and worldwide learning. The global environment is viewed in terms of the pressures of global integration and the forces of local responsiveness, which in turn are visualized as stemming from both the task environment and the institutional environment. MNC specific variables include the subsidiary's method of founding, the international experience of the MNC, the value of firm assets used in the subsidiary operations, characteristics of the product(s) marketed by the subsidiary, the cultural distance between the MNC headquarters and its subsidiary, and the relative size of the subsidiary in relation to the headquarters. To demonstrate the utility of the framework illustrative propositions are developed.

Introduction

When organizational units are separated by large barriers of distance and time, and managers are isolated by differences in language and culture, the administrative challenges become both complex and highly observable.

Bartlett and Ghoshal (1991, p. 9).

Technological advances and collapse of the communist world have resulted in a economically more unified world with an emerging global market. At the organizational level it has become imperative to adopt a global perspective while developing marketing programs and implementing strategies (Bartlett and Ghoshal 1995; Caves 1998; Prahalad and Hamel 1994). This economic unification of the world and globalization of world markets have enhanced the significance of the Multinational Corporations (MNCs) in the organizational landscape. Recent statistics show that MNCs' control as much as 33% of world trade and national governments consider them to be the primary vehicle to achieve any chosen agenda for economic stability and prosperity (UNCTAD 1993). As a result it is becoming increasing important to study these corporations.[1]

Organizational survival in the unified world market depends on the organization's capacity and capability to manage operations scattered across national borders (cf., Bartlett and Ghoshal 1991; Caves 1998). Unlike domestic or local firms, MNCs have to deal with two, often contradictory, pressures (cf., Boddewyn and Brewer 1994; Prahalad and Doz 1987). On one hand, a MNC needs to control and coordinate subsidiary operations across countries. On the other hand, the MNC has to be flexible to respond to

[1] We use the word multinational to signify firms having operations in more than one country. Thus multinational could be an international firm, a global firm, a multilocal firm, or a transnational firm (see Bartlett and Ghoshal 1995).

the idiosyncratic needs of host country institutional environment and distinct needs of the host country product markets. These forces of ***global integration*** and ***local responsiveness*** make the management of MNC's unique and complex.

While many studies have examined internal structures and processes of MNCs, very little research has investigated the marketing interface between the MNC subsidiary and the host country customer environment. Further, the research addressing this issue has primarily investigated the entry mode decision, but has largely ignored the subsequent expansion concerning MNC subsidiary's distribution network. One of the important aspects of MNC management is the relationship of the MNC subsidiary with their local business partners including distribution channel members.

A marketing channel is an interfirm system in which channel constituents, by an exchange of output and negotiated roles, involve themselves in the process of making products available for consumption. Decisions concerning marketing channels are considered to be strategic, involving large resource commitments that can be revoked only at heavy costs (cf., Stern, El-Ansary, and Coughlan 1996).

The success of a MNC is contingent on its subsidiary operations, while the success of a MNC subsidiary is, to an extent, dependent on its local business partners, including distribution channel members. Given the immense importance of effectively and efficiently managing the distribution of products, it becomes important to develop an in-depth understanding of MNC subsidiary channel management.[2] With this objective of developing insights into MNC subsidiary channel management, I extensively surveyed the extant literature on international channels, which presents, collectively, a rather

disjointed collage. Perhaps, this is due to the absence of framework that integrates various research streams employed in conducting international channels research.

The primary objective of this chapter is to integrate current research on international channels and suggest a comprehensive framework. Such a framework gives marketing theorist and researchers a blueprint to guide and map future research in the area, which should, eventually, aid in the advancement of marketing science. Before the framework it is useful to highlight a few caveats and preview the framework to assist the reader in making sense and appreciating the limitations of this attempt to capture all the critical factors and their influences within the confines of a single composition of restricted length.

1. The objective of the chapter is to present a broad encompassing framework. To accomplish the task of presenting a comprehensive integrative framework, some detail is likely to be sacrificed. Specifically, the objective of the framework is to (a) identify key dimensions of multinational subsidiary channel structures and processes, (b) to delineate at a macro-level the interactions between the key dimensions, and (c) to help future research to proceed in a systematic and methodological fashion towards developing a theoretical paradigm.
2. Consistent with the political economy framework (Stern and Reve 1980), channel structures and processes are conceptualized in terms of economic and sociopolitical structures and processes. The framework presented here identifies three key categories of variables likely to exert an outside influence on MNC subsidiary channel structures and processes. First is the strategic motives of the MNC, which capture

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[2] We use the terms "MNC subsidiary channel" and "international channel" interchangeable to

both the nature of control mechanisms the MNC headquarters is likely to use to manage its subsidiaries and the strategic philosophy of the MNC. Second is the MNC specific variables, which includes the subsidiary's method of founding, the international experience of the MNC, the value of firm assets used in the subsidiary operations, characteristics of the product(s) marketed by the subsidiary, the cultural distance between the MNC headquarters and its subsidiary, and the relative size of the subsidiary in relation to the headquarters. Third is the environment of the MNC, which is conceptualized in terms of pressures of both global integration and local responsiveness. The interactions among these dimensions and their influence on MNC subsidiary channel structures and processes rests on three basic tenets: (a) each of the three variable categories has a direct influence on channel structure and processes, (b) MNC specific variables, which includes the international experience of the MNC and its key assets and skills, determine the strategic motives of the MNC, and (c) the facets of the environment moderates the influence of strategic motives on MNC subsidiary channel structures and processes.

3. A series of illustrative propositions are presented to portray how the framework can be used for predictions and theory development. While developing these propositions, I remain consistent with the dyad as the unit of analysis (Achrol, Reve, and Stern 1983; Stern and Reve 1980) and attempt to illustrate both direct and interaction effects.

While developing a framework it becomes important to demonstrate that the exiting streams of literature do not adequately address the issue. In the next section, I

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capture both marketing channels existing across countries and channels used by MNC subsidiaries.

survey research on marketing channels, mode of entry, and marketing mix standardization to show that these research streams neither intended to address nor fully comprehend various aspects of MNC subsidiary channel management. Subsequently, I use Stern and Reve's (1980) political economy framework to classify existing international channels research with the aim to identify gaps in the international channels literature. Having demonstrated that existing studies do not serve justice to the complex managerial problem of MNC subsidiary channel management, I rely on diverse literatures, including those in marketing (Stern and Reve 1980), organizational theory (Oliver 1991), and international business (Cavusgil and Zou 1994) to develop an integrative conceptual framework for multinational subsidiary channel management. To demonstrate the utility of the framework, I also develop illustrative propositions.

Marketing Channels, Mode of Entry, and Standardization Literature's

In proposing an integrative conceptualization in the area of international channels it is important to show that the exiting streams of literature do not adequately address the issue. In this section I review three streams of marketing literature (i.e., marketing channels, mode of entry, and standardization of marketing mix) that some what address issues related to MNC subsidiary channel management and delineate how they are limited in their application to international channels.

Marketing Channels

Research on marketing channels primarily relies on Stern and Reve's (1980) political-economy framework and subsequent extensions of this framework, including the incorporation of environments (Achrol, Reve, and Stern 1983), the adoption of transaction cost economics (cf., John 1984; Rindfleish and Heide 1997), and the

conceptualization of long-term buyer-seller relationships (cf., Dwyer, Schurr, and Oh 1987; Weitz and Jap 1995; Wilson 1995). Though this research stream has important implications for MNC subsidiary channel management, the objective of this literature has been to provide general frameworks for channel management and, thus, two important subsidiary management issues have been overlooked.

First, a MNC subsidiary is a part of a global organization and its functioning and performance depends on other subsidiaries and the headquarters. The headquarters supplies important resources to the subsidiary including, valuable assets like brand names along with technological and marketing know-how. The headquarters also exerts control over the subsidiary. The second issue that marketing channels literature does not address concerns the global environment, which includes both the facets of the local environmental (accounted for in channels research, cf., Achrol and Stern 1988; Dwyer and Oh 1987) and cross-country features of the industry (not researched in the channels literature). To sum, aspects of headquarter-subsidiary relationship and the cross-country features of MNC environment are neither the focus of channels research nor are dealt with in traditional channels research.

Mode of Entry

Mode of entry determines the institutional arrangement that an organization chooses to enter a foreign market (Root 1994). This decision reflects the resources that a organization is willing to commit to the foreign venture, the control that the firm would exert on the foreign operations, and the risks associated with dissemination of firm-specific knowledge (cf., Anderson and Gatignon 1986; Contractor 1984; Hill, Kim, and Hwang 1990). The mode of entry decision is the first step towards establishing presence

in a foreign market and is likely to influence the nature and extent of subsequent expansion by the MNC in the foreign market, which includes decision-making related to distribution channel management.

Though the entry mode decision is one determinant of MNC subsidiary channel structure, the research on mode of entry does not focus on either the nature or the determinants of channel structures and processes for MNC subsidiaries. I hasten to add that investigating subsidiary channel structures and processes is not an objective of this research stream. In summary, the mode of entry literature does not concern itself with governance structures and managerial processes beyond the entry mode decision.

Standardization of Marketing Mix

The literature on standardization versus customization of marketing mix across nations has focused on determinants of degree of standardization (or adaptation) for multinational strategy and marketing mix variables (cf., Buzzell 1968; Jain 1989; Levitt 1983; Szymanski, Bharadwaj, and Varadarajan 1993). Specifically, the emphasis is on determining desired level of standardization and its influence of on performance (Douglas and Wind 1987; Rosenbloom, Larsen, and Mehta 1997; Samiee and Roth 1992). Though researchers have examined the effect of degree of standardization of marketing mix variables on performance (cf., Szymanski, Bharadwaj, and Varadarajan 1993), they have also recognized that the possible degree of standardization varies across the marketing mix variables.

The emphasis of standardization research has been on the marketing mix elements over which a firm has control, such has product, price, and promotion decisions (e.g., price; cf., Szymanski, Bharadwaj, and Varadarajan 1993). While distribution channels

are considered to be more difficult to standardize or customize in comparison to other marketing mix elements and, therefore, have been largely overlooked (Quelch and Hoff 1986). For instance, zoning laws in France restrict the location of retail outlets and the Chinese government insists that foreign auto manufacturers entering the Chinese market form joint ventures with Chinese partners (Johansson 1997). Even the Coca-Cola Company, which is known to emphasize standardization, allows local managers and local bottlers to take decisions related to distribution programs (Quelch and Hoff 1986).

In their conceptual piece, Rosenbloom, Larsen, and Mehta (1997), examine standardization of channel design (viewed in terms of number and intensity of levels in the channel and types of intermediaries) and management (operationalized as the motivation of channel members). They conceptualized the standardization of channel design and management as being contingent on the distribution function performed by the MNC and the differences between business culture across the two countries. My framework adds to the work of Rosenbloom, Larsen, and Mehta (1997) in two main ways. First, I rely on the political economy framework (Stern and Reve 1980) to have a broader conceptualization of channel structures and processes (see next section). Second, I examined a larger gamut of antecedent variables, including strategic, environmental, and MNC specific. To sum, the research stream on standardization offers insights into various marketing mix variables, but examines a limited conceptualization of distribution channel structures and processes.

International Channels Literature

Before proposing an integrative conceptualization in the area of international channels it is fruitful to summarize the exiting research in international channels to delineate the

issues which have been addressed and subject-matter which has been overlooked. At the nucleus of channel research is the political economy framework, which considers how the interactions between economic and sociopolitical forces influences channel management and performance (Stern and Reve 1980). The political economy framework provides a parsimonious yet a comprehensive means of understanding and classifying internal channels issues. I use the political economy framework to categorize extant international channels research in order to identify gaps in the literature.

But like most conceptualizations, Stern and Reve's (1980) political economy framework has its limitations (cf., Achrol, Reve, and Stern 1983). Pertinent to international channels is the lack of focus on both environment and worldwide strategic motives of the MNC subsidiary. Achrol, Reve, and Stern (1983) adopted an open systems perspective and incorporated environments into the Stern and Reve's (1980) political economy framework. Typically, facets of the environment were purported to influence the internal political economy of marketing channels. While reviewing international channels research, I remain cognizant of facets of the environment and attempt to discern studies that incorporate both the global industry and the local host country environments.[3] Likewise, as I discussed in the previous section, a MNC subsidiary is to an extent constrained by imperatives of its headquarters, which I capture by the MNC's emphasis on various worldwide strategic motives. Though I discuss strategic motives in the subsequent section, to portray as complete a picture as possible of

[3] Congruent with contemporary literature on environments in marketing (cf., Achrol 1991; Gundlach and Achrol 1993), organizational theory (cf., Oliver 1991), and international business (cf., Rosenzweig and Singh 1991), we conceptualize the local environment in terms of task and institutional environments. See the integrative conceptual framework (next section) for details.

international channels research, I do elaborate on both the lack of focus and the limitations of emphasis on strategic motives.[4]

Specifically, the political economy framework conceptualizes channel performance and durability as being contingent of channel structures and processes, which are bifurcated into economic and sociopolitical domains. Economic structures define the type of transactional form linking channel constituents (Stern and Reve 1980, p. 55), which can theoretically range from spot transactions to relational forms to vertically integrated distribution channels (Rindfleish and Heide 1997). Sociopolitical structures determine the nature of the power-dependence relationship between channel members, which can range from minimal or shared power to completely centralized power (Stern and Reve 1980, p. 57). Economic processes refers to the nature of decision-making mechanisms utilized by channel constituents (Stern and Reve 1980, p. 55-56), which have primarily been captured by the degree of centralization, formalization, and participation in decision making (John and Reve 1982; Dwyer and Oh 1988). Sociopolitical processes illustrate the dominant channel sentiments like cooperation, conflict, commitment, and satisfaction (Stern and Reve 1980, p. 57). Table 2.1 displays the classification of exiting international channels research along these dimensions and also identifies gaps in this research stream.

[4] Consistent with current literature on international strategy (cf., Ghoshal 1987; Kogut 1989), we view MNC strategic motives in terms of efficiency, flexibility, and learning. For details see the integrative conceptual framework (next section).

Table 2.1

Classification of Exiting International Channels Research and Identification of Potential Research Opportunities

Theoretical Issues	Existing Research [a]	Future Research Possibilities [b]
Economic Structures: Type of transactional form used in the channel.	• Level of channel integration (cf., Anderson and Coughlan 1987; Aulakh and Kotabe 1997; Klein, Frazier, and Roth 1990). • Antecedent variables investigated: strategic, transaction specific, & environmental. • Fit between environment and export channel structures (cf., Yeoh and Jeong 1995).	• Issue of dual and multiple channels used to distribute the same product. • Limited conceptualization of facets of the global environment.
Sociopolitical Structures: Nature of power-dependence relationship between channel members.	• Relation between perception of power and relationship quality cf., Johnson et al 1993; Raven, Tanushaj, and McCullough 1993). • Influence of transaction specific variables and market volatility on export channel coordination mechanism and channel performance (cf., Bello and Gilliland 1997.	• Research context has primarily been exporters and their distributors. Need to examine MNC subsidiary operations. • Influence of a MNC's worldwide strategic motives. • Impact of facets of the global environment.
Economic Processes: Nature of decision making among channel constituents.		• Strategic, and environmental determinants of centralization formalization, and participation, in international channel decision making. • Influence of the nature of decision making on relationship quality and channel performance.

Sociopolitical Processes: Dominant channel sentiments.	• Influence of cultural distance between exporter and its distributor as antecedent to conflict in the export channels (cf., LaBahn and Harich 1997; Shoham, Rose, and Kropp 1997).	• Influence of a MNC's worldwide strategic motives. • Influence of the facets of the global environment. • Need to move beyond export channels and examine issues related to higher levels of integration, like joint ventures and wholly owned sales subsidiaries.

[a] Research referenced here is a mere illustration and not an exhaustive list.

[b] Illustrative propositions for these future research issues and underlying theoretical foundations are discussed in more details in the next section, where I develop an integrative conceptual framework.

Economic Structures

The main focus of research on international channels has been on economic structures, specifically level of integration (cf., Anderson 1985; Coughlan 1985; John and Weitz 1988). Typically, level of channel integration has been conceptualized as either a dichotomous (Anderson and Coughlan 1987) or a polychotomous variable (Aulakh and Kotabe 1997; Klein, Frazier, and Roth 1990). In addition, many variables antecedent to the level of channel integration have been examined, including a firm's international strategy (global integration and differentiation), asset specificity, firm size, international experience, and facets of the local environment like country risks.

Though economic structure is the most researched area of international channels, a few important issues have been overlooked (Table 2.1). For example, the use of dual or multiple channels by exporting firms has been ignored. Typically, research on level of channel integration models the most dominant (usually in terms of sales) channel

governance mechanism, but in the limitations section acknowledges that the results may be biased due to the existence of multiple channels (cf., Aulakh and Kotabe 1997; Klein, Frazier, and Roth 1990).

Similarly, the conceptualization of environment has been primarily limited to country risks and uncertainty, at the neglect of other environmental facets like environmental munificence and dependence on local institutions (cf., Achrol, Reve, and Stern 1983; DiMaggio and Powell 1983; Scott 1987). Research on domestic marketing channel has developed a broad conceptualization of environments, which is characterized by multiple facets, each influencing internal channels structures and processes (cf., Achrol and Stern 1988; Dwyer and Oh 1987; Dwyer and Welsh 1985; Gundlach and Achrol 1993). These insights offered by research on marketing channels are important for developing an understanding of economic structures in international channels, but addition issues need to be examined. For instance, domestic channels research does not study the interactions between a MNC's worldwide strategic motives and the facets of the local environment. Likewise, interactions between a MNC's internal factors, like its international experience and interdependence between the MNC headquarter and its subsidiary, and facets of the local environment are important in developing an holistic theory for MNC subsidiary channel management.

Sociopolitical Structures

Research in international channels on sociopolitical structures examines the nature of power-dependence relationship between channel constituents and its influence of relationship quality (cf., Johnson et al 1993; Raven, Tanushaj, and McCullough 1993). In addition, researchers have studied the influence of transaction specific variables like

resource adequacy and psychic distance along with market volatility on export channel coordination and control mechanisms (cf., Bello and Gilliland 1997).

The primary limitation of research on sociopolitical structures has been its context (Table 2.1), i.e., export channel, at the neglect of other levels of channel integration (Klein, Frazier, and Roth). Literature on multinational mode of entry and international expansion stresses that exports is one of the many ways, including licensing, strategic alliances, and wholly-owned subsidiaries, for a MNC to organize or govern its foreign operations (Anderson and Gatignon 1986; Hill, Hwang and Kim 1990; Root 1994). For purposes of empirical generalization and development of normative theory, investigations of sociopolitical structures across levels of channel integration and entry modes are needed.

Like economic structures (cf., Anderson and Coughlan 1987; Aulakh and Kotabe 1997; Klein, Frazier, and Roth 1990), sociopolitical structures are likely to be determined by MNC's strategic variables and facets of the global environment. For instance, the global industry characteristics, such as pressures for standardization (or adaptation), influence MNC strategies along with their structures and processes (Cavusgil and Zou 1994; Johansson and Yip 1994; Porter 1990; Yip 1995). These global industry characteristics determines the stakes that the MNC has in its subsidiary operations and the degree of control which the MNC exerts on its subsidiaries (Bartlett and Ghoshal 1986; Doz and Prahalad 1981, 1984). In turn, the stakes that a MNC has in its subsidiary operations are likely to influence the power structure between the MNC subsidiary and its channel constituents.

Economic Processes

Economic processes, which reflect the nature of decision making among channel members (Stern and Reve 1980), have been largely ignored (Table 2.1). Typically, in marketing channels research, the nature of decision making is conceptualized in terms of centralization (the extent to which decision-making authority is concentrated), formalization (the extent to which decision making is regulated by explicit rules and procedures), and participation (the degree of cooperation and partaking among channel members in decision making; cf., Dwyer and Oh 1987; John 1984; John and Reve 1982). Empirical research in marketing channels investigates both antecedents like environmental uncertainty and consequences such as relationship quality of centralization, formalization, and participation in decision making (cf., Dwyer and Oh 1987; Dwyer and Welsh 1985; John 1984).

In international channels literature both antecedents and consequences of the nature of decision making among international channels constituents for all levels of channel integration need to be explored. For instance, antecedents like facets of the environment (Achrol, Reve, and Stern 1983), transaction specific investments (Rindfleish and Heide 1997), worldwide strategic motives (Ghoshal 1987), and the nature of communications (cf., Mohr and Nevin 1990) along with consequences like relationship quality and channel performance (Weitz and Jap 1995) are critical for developing a holistic understanding of channel management (Wilson 1995).

Sociopolitical Processes

Sociopolitical processes characterize dominant channel sentiments (Stern and Reve 1980). These too are under researched in international channels (Table 2.1).

Research on sociopolitical processes has also been limited to export channels and has examined the influence of cultural distance on channel conflict (Shoham, Rose, and Kropp 1997; LaBahn and Harich 1997). Like in traditional marketing channels research, empirical generalizations and development of normative theory for sociopolitical processes is likely to be facilitated by examining these processes across levels of channel integration and entry modes. In addition, like economic (cf., Anderson and Coughlan 1987) and sociopolitical (Johnson et al. 1993) structures, sociopolitical processes are likely to be determined by MNC's strategic variables and facets of the global environment.

Integrative Conceptual Framework

To provide the theoretical basis to develop a framework, I rely on literature in international management (cf., Doz and Prahalad 1984), multinational strategy (cf., Bartlett and Ghoshal 1995), organizational theory (cf., Dess and Beard 1984), institutional theory (cf., DiMaggio and Powell 1983), economics (cf., Williamson 1991) , and political science (cf., Boddewyn and Brewer 1994), in addition to the three streams of research in marketing mentioned earlier.

The framework rests on the strategy-environment coalignment principle (Aldrich 1979; Porter 1980; Venkatraman and Prescott 1990). Briefly, this principle states that a fit between an organization's strategy and its context - which includes both the environment and factors internal to the organization - influences the organization's structures and processes (Chandler 1962; Gupta and Govindarajan 1984; Hofer 1975). In the context of multinational subsidiary management, the strategy-environment coalignment principle implies that in addition to the MNC-specific factors (internal

factors), the subsidiary channel structures and processes depend on the fit between the multinational's worldwide strategy (organizational strategy) and the global environment. Consistent with this principle, I conceptualize multinational subsidiary channel structures and processes: (1) to be directly determined by the multinational's worldwide strategy, the global environment, and MNC-specific variables and (2) to be dependent on the interactions between multinational's worldwide strategic motives and the facets of the global environment (Douglas and Wind 1987; Porter 1980; Prahalad and Doz 1987). I also theorize (3) a MNC's internal factors to determine the strategic motives that the MNC is likely to emphasize.

To demonstrate the usefulness of the framework, I develop illustrative proposition for the influence of these three categories of variables on MNC subsidiary channel management. The process model I develop is summarized in Figure 2.1. In this figure I indicate important sub-constructs for each of the three variable categories, along with proposition numbers for each link. Note that these propositions are mere illustrations and not an exhaustive list.

Strategic Motives

A number of perspectives have been proposed to explain the impact of complex and turbulent global competitive environments on the appropriate strategic motives for MNCs. For instance, Levitt (1983) advocates a uniform strategy of marketing mix standardization. But Hout, Porter, and Rudden (1982) recommend exploiting both economies of scale and synergy benefits. While Hamel and Prahalad (1985) espouse extracting benefits from shared investments across businesses and markets. Though there might be a debate on a MNC's appropriate strategic posture, scholars seem to agree that

businesses that do not either think or act globally are at a competitive disadvantage (Levitt 1983; Ohmae 1989). These and other researchers emphasize that MNC's should strive to derive benefits from a standardized strategy (Porter 1980, 1986a; Prahalad and Doz 1987; Yip 1995). Described as ***global efficiency*** by Bartlett and Ghoshal (1995), this strategic motive reflects a MNC's capacity to manage both costs and revenues.

Researchers arguing for recognition of local market needs while devising MNC strategies, have highlighted the success of regional strategies in diverse industries, including pharmaceuticals (Morrison, Ricks, and Roth 1991) and white goods (Baden-Fuller and Stopford 1991). These and other researchers have argued that too much stress on global efficiency could be harmful and a balance between emphasis on globalization and localization is needed (cf., Birkinshaw, Morrison, and Hulland 1995; Douglas and Wind 1987; Kogut 1989; Quelch and Hoff 1986). This emphasis on localization, described as ***multinational flexibility*** (Bartlett and Ghoshal 1995; Ghoshal 1987; Kogut 1985b), stresses developing skills to respond to unique needs of local consumers, business partners, and institutional constituents. With the advent of flexible manufacturing systems along with advances in information, communication, and transportation technologies, these two seemingly opposing objectives of global efficiency and multinational flexibility became congruent, as the emphasis shifted from economies of scale to both economies of scope and benefits from synergy (cf., Douglas and Wind 1987; Kogut 1985b; Morrison and Roth 1992; Prahalad and Doz 1987).

These advances in information and communication technology have also ushered us into the age of information with emphasis on knowledge acquisition and learning processes (Glazer 1991; March 1991; Sinkula 1994). Organizational learning has been

purported to influence internal organizational processes and assist in making the organization market oriented, which enhances performance (Deshpande, Farley, and Webster 1993; Jaworski and Kohli 1993; Slater and Narver 1994). MNC's are in a unique position to learn from diverse geographically dispersed environments, which results in higher innovation rates and better understanding of the global environment (Ghoshal 1987; Kim, Hwang, and Burgers 1993; Simonin 1997). This exposure to wide array of demand characteristics and variety of competitors, suppliers, and partners, leads to richer knowledge structures (Abrahamson and Fombrun 1994; Miller and Chen 1994, 1996) and is captured by the strategic motive of ***worldwide learning*** (Achrol 1991; Bartlett and Ghoshal 1995).

Summarizing the organizational capabilities needed to manage the complex modern day environments, Achrol (1991, p. 77) succinctly states that one needs "an ambidextrous organization, simultaneously demanding efficiency, innovation, and flexibility." To be consistent with contemporary beliefs in multinational strategy, I examine a three dimensional conceptualization of worldwide strategic motives, viz. Global Efficiency, Multinational Flexibility, and Worldwide Learning (cf., Bartlett and Ghoshal 1995; Duncan 1976; Powell 1987).

Global Efficiency

Global efficiency views MNCs as input-output systems (Ghoshal 1987) and emphasizes management of both costs and revenues (Doz, Bartlett, and Prahalad 1981; Porter 1980). Achieving cost reduction implies obtaining advantages from national differences in factor costs (Kogut 1985a; Porter 1990), exploiting scale economies (Jain 1989; Levitt 1983), and deriving benefits from shared investments across markets and

businesses (Hamel and Prahalad 1985; Ohmae 1985). Boosting revenues involves maintaining a strong portfolio of brands, developing powerful distribution systems, and having access to key leading and strategic markets (Hout, Porter, and Rudden 1982; Porter 1985). Obtaining benefits of low cost and increased revenues implies developing efficient and specialized facilities for research, manufacturing, logistics, and sourcing at a global scale (Bartlett and Ghoshal 1995; Ghoshal 1987).

The development of efficient and specialized facilities and the resulting accumulation of proprietary information and knowledge is likely to be diffused and utilized by efficient centralized management. Centralized management implies close coordination and control of worldwide operations. Which, in turn suggests that the pressure is put on the subsidiaries to coordinate and control[5] the behavior of their local business partners, including channel constituents. Thus, I expect emphasis on global efficiency by a manufacturing MNC to result in a high degree of control that the subsidiary exerts on its distribution partners.

P_{11} *The greater the emphasis on global efficiency as a MNC's strategic motive, the higher will be the control that the MNC subsidiary exerts on its distributors.*

Multinational Flexibility

A MNC's capability to capitalize on volatility and diversity of the global environment is referred to as multinational flexibility (Ghoshal 1987; Kogut 1985b, 1989). Traditionally, European MNCs, which had a relatively small home market and headquarters' dwarfed by several subsidiaries, emphasized multinational flexibility as

[5] In marketing channels research, a manufacturer's control over its distributor implies that the distributor resigns some degree of autonomy over its decisions to the manufacturer. Considered to be an

their strategic motive (Bartlett and Ghoshal 1995). A MNC emphasizing multinational flexibility stresses deriving benefits from country-specific or regional macro economic risks (e.g., currency exchange rate fluctuations), political risks arising from policies of national governments, competitive risks from both local and global competitors, and resource risks, which reflects scarcity of critical resources (Aaker and Mascarenhas 1984; Kogut 1985b; Srinivasula 1981). The construct of multinational flexibility captures the MNC's capacity to manage risks arising from market changes in comparative advantage of nations (Porter 1990), balancing economies of scale with operational flexibility (Hout, Porter, and Rudden (1982), and maintaining a diverse portfolio of product markets to cover eventualities which may arise in the future (Kogut 1985b).

An emphasis on multinational flexibility implies that opportunism in the development of strategy is given emphasis over long-term planning, with the objective of being responsive to differences in political-economies across nations (Bartlett and Ghoshal 1995; Ghoshal 1987; Kogut 1985b). MNCs espousing this motive scan the international markets to detect changes, discontinuities, and opportunities, and embrace an unique approach or response to each situation. With emphasis on economies of scope, multinational flexibility enables multinationals to satisfy unique needs of local country-specific product markets (Kogut 1985b, 1989).

From a subsidiary perspective, more freedom is given to country managers and more weight is put on local conditions. In terms of channel decision making[6], the spirit

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outcome of power, control is a firm's attempt to modify the behavior of its business partners (cf., Anderson and Narus 1984; Celly and Frazier 1996; Gaski 1984).

[6] In marketing channels literature, John and Reve (1982) combined perspectives of Aldrich (1979), Van de Ven (1976), and Warren (1979) to conceptualize decision making in terms of centralization, formalization, and interaction. Centralization is "the degree to which power to make and implement

of being responsive to local conditions, ingrained in multinational flexibility, implies that the opinions of business partners are sought and their expertise is valued. Therefore, I expect channel decision making for MNC subsidiaries to be characterized by relatively higher participation and lower levels of both formalization and centralization.

P_{12} *The greater the emphasis on multinational flexibility as a strategic motive by a MNC, (a) lower the level of centralization, (b) lower the level of formalization, and (c) the higher the level of participation, in decision making among channel members for the MNC subsidiary.*

Worldwide Learning

Research on knowledge acquisition and development processes view MNCs as having exposure to diverse environments, thereby having a richer store of existing knowledge base and capabilities (Barkema and Vermeulen 1998; March 1991; Sinkula 1994; Slater and Narver 1995). In the multinational strategy literature, the construct of *worldwide learning* is used to capture a MNC's propensity to acquire and assimilate knowledge from its diverse experience (cf., Bartlett and Ghoshal 1995; Kogut 1989; Gupta and Govindarajan 1991). Specifically, worldwide learning reflects a MNC's capacity to assimilate knowledge from societal differences in organizational procedures as well as managerial processes and systems across nations (Rapp 1983; Ronstadt and Krammer 1982; Terpstra 1977).

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decisions within the dyadic relationship is concentrated at one vertical level" (John and Reve 1982, p. 518). Formalization is the extent to which channel constituents rely on formal rules, coded behavior, and written contracts (John and Reve 1982; Dwyer and Oh 1988). Subsequent to the conceptualization of interaction by John and Reve (1982), Dwyer and Oh (1987, 1988) relied on Duncan (1972) and Hall (1977) to refine the concept of interaction to the construct of participation. Following Dwyer and Oh (1988, p. 23) we view participation as the channel partners "degree of input to decisions, including idea generation, decision-making involvement, and goal formulation."

Factors contributing to increased benefits to a MNC from worldwide leaning include the MNC's ability to derive advantages from knowledge accumulated across organizational components in different markets and businesses along with the MNC's capability to integrate the acquired knowledge into its day-to-day operations (Madhok 1997). In terms of organizational processes this requires close coordination between subsidiary operations, with frequent and open lines of communication, and transfer of know-how (Ghoshal 1987; Kogut 1989). The open channel of communication is reflected in the managerial philosophy of the MNC subsidiary, which in turn would emphasize high levels of quality communication with its channel constituents.

P_{13} *The greater the emphasis on worldwide learning as a strategic motive of a MNC, the higher will be the level of communication between the MNC subsidiary and its channel partners.*

Internal Factors

The internal factors capture a MNC's ability and limitations, which influence the MNC's capacities and motivations to follow a desired course of action (Bartlett and Ghoshal 1995; Porter 1980, 1986a). Consistent with the strategy-environment coalignment principle, in addition to determining the strategic motives that a MNC is likely to emphasize, these internal factors are also likely to directly influence MNC subsidiary channel structures and processes.

Internal factors likely to influence multinational subsidiary operations include the subsidiary's method of founding (Barkema and Vermeulen 1998), the international experience of the MNC (Douglas and Craig 1989), key assets and skills of the MNC (Day and Wensley 1988), product characteristics (Cavusgil, Zou, and Naidu 1993), cultural

distance between the headquarters and the subsidiary (Bello and Gilliland 1997), and the size of both the MNC and the subsidiary (Cavusgil and Zou 1994). Now I elaborate on and develop illustrative propositions for these factors.

Method of Founding

The method by which MNC subsidiary is founded, i.e., greenfield versus acquisition, is of immense importance in developing an understanding of the structures and processes that the MNC utilizes in its subsidiary operations (Barkema and Vermeulen 1998; Hitt et al. 1996; Prahalad and Hamel 1990; Wernerfelt 1984). For instance, acquisition of an exiting business allows a firm to acquire new managerial and/or technological resources, which may substitute for internal skill development. Besides this apparent advantage, acquisition comes with its baggage of problems, including the issue of cultural distance between the acquired and acquiring firms (Calori, Lubatkin, and Very 1994; Hofstede 1980, 1983; Weber, Shenkar, and Raveh 1996). In fact, research on acquisition has shown that cultural distance decreases the probability of the acquisition failing, specifically if the concerned firms are rooted in different national cultures (cf., Barkema, Bell, and Pennings 1996; Hofstede 1980, 1983; Schneider and DeMeyers 1991).

Though I explicitly focus on cultural distance subsequently, I do emphasize here that changing or adapting the culture of an acquired organization is the major challenge in acquisition (cf., Levitt and March 1988; Nelson and Winter 1982; Weber, Shenkar, and Raveh 1996). Changing culture, the "programming of the mind" (Hofstede 1991, p. 5), is often difficult, if not impossible. Further, the acquired firm has to unlearn old routines, rules, procedures, strategies, and beliefs (cf., Bettis and Prahalad 1995; Prahalad and

Bettis 1986). Controlling subsidiary operations is very critical in MNC management (Bartlett and Ghoshal 1986; Doz and Prahalad 1981, 1984). The headquarters control over acquired subsidiaries, in comparison to greenfield subsidiaries, is likely to be lower due to the prevalent differences between their cultures and beliefs. This lack of control is likely to impede the headquarters' ability to pursue and the resultant effectiveness of strategic objectives like global efficiency, which require high levels of control over subsidiary operations.

P_{21} *The MNC's emphasis on and the effectiveness of the strategic motive of global efficiency would be greater for greenfield subsidiaries in comparison to acquired subsidiaries.*

International Experience

Organizational knowledge development and learning processes are extremely important for building and sustaining competitive advantages (cf., Fiol and Lyles 1985; Glazer 1991; Huber 1991; Sinkula 1994). Specifically, a learning organization benefits by being more market oriented (Slater and Narver 1995), which results in goal orientation (Sujan, Weitz, and Kumar 1994) and eventually leads to enhanced performance (cf., Deshpande, Farley, and Webster 1993; Jaworski and Kohli 1993; Narver and Slater 1990; Slater and Narver 1994).

Experience is considered to be a prime source of learning in organizations (Barkema and Vermuelen 1998; Penrose 1959; Sinkula 1994). Though experiential learning has its limitations and can constrain an organization by leading it into competency traps (Levinthal and March 1993; March 1991; Simon 1991, 1993), it has been hypothesized to enhance organizational performance and competencies in managing

varied situations (Huber 1991; Simonin 1997; Sinkula, Baker, and Noordeweir 1997). In the context of international business, both the extent and the diversity of MNC's international experience are important (Ingram and Baum 1997; Barkema and Vermeulen 1998).

Diversity of experience is reflected in both geographic diversity and product diversity. Geographic diversity captures a firm's exposure to a rich array of environments characterized by varying demand characteristics, along with a variety of competitors, suppliers, and partners (cf., Abrahamson and Fombrun 1994; Ghoshal 1987; Kim, Hwang, and Burgers 1993; Miller and Chen 1994). Like geographic diversity, product diversity gauges a firm's exposure to multiple and diverse product markets (cf., Argyres 1996; Barkema and Vermeulen 1998). Both geographic diversity and product diversity lead to richer knowledge structures and enhanced organizational capabilities to manage diverse environments, including ability to manage disparate channel structures. But learning from diverse experience has its limitations. For instance, researchers have argued that as the number of product markets exceed the cognitive limits of a firm's managerial resources, product diversity stymies knowledge development and utilization (cf., Bettis and Prahalad 1995; Prahalad and Bettis 1986). Thus, provided firms can overcome constraints of cognitive limits, one expects higher exposure to both product diversity and geographic diversity to increase a MNC's ability to effectively manage diverse channel structures.

P_{22} *As diversity of a MNC's experience expands, the ability of the MNC to effectively manage diverse channel structures increases.*

Key Assets and Skills

Internal processes of organizations create resource bundles, which have the potential to become the means of creating and sustaining competitive advantage (Barney 1991; Conner 1991; Penrose 1959; Wernerfeldt 1984). The two key premises for these resources to create sustainable competitive advantage are that they must (1) determine a firm's performance and that they (2) should be rare and valuable. In other words, resources should create "barriers to imitation" (Rumelt 1984) and should be nonsubstitutable. Resources embody "anything that can be thought of as a strength or weakness of a given firm," which include both tangible and intangible assets (Wernerfeldt 1984, p. 172). Examples include: Patents, brand names, technical and creative talent, organizational culture, coordination skills, among others. The value of any resource depends on the fit of the resource to the firm's strategy combined with the fit of the strategy to the firm's environment (Black and Boal 1994; Day and Wensley 1988). A firm's resources contribute to the resource heterogeneity in a particular industry at a given point in time, which leads to disequilibrium due to creative destruction of the resources (Schumpeter 1950; Barney 1991).

Various typologies have been developed to categorize firm-specific resources (Barney 1991; Grant 1991). For instance, Barney (1991) lists three classes for firms resources: Physical capital resources, human capital resources, and organizational capital resources. Similarly, Grant (1991) categorizes resources into six groups: Financial, physical, human, technological, reputation, and organizational. Likewise, in empirical investigations firm-specific assets have been operationalized as *customer assets* like consumer loyalty and brand equity, *channel assets* such as channel participant loyalty,

input assets like supplier network and knowledge of imperfect factor markets, *process assets* such as product-market specific experience and proprietary processes, and *market knowledge assets* like experience on behavior of competitors and understanding of demand trends (Markides and Williamson 1996; Verdin and Williamson 1994).

These resources and assets have the potential to generate future rents for a firm owning them and thereby imbue the firm with power. For multinational subsidiary operations, such resources are likely to attract other firms, including potential business partners in the host country. If the resources are valuable, the host country operations are likely to be dependent on these resources and by virtue of its ownership of the resources, the MNC subsidiary will have power over its local business partners, including distribution channel partners.

P_{23} *The greater the perceived flow of rents from a MNC's resources, the higher the degree of power that the MNC subsidiary has over its channel partners in the host country.*

Product Characteristics

Product characteristics include the complexity of the product, cultural-specificity of the product, and service or maintenance requirements for the product (Cavusgil and Zou 1994; Cooper and Kleinschmidt 1985; McGuiness and Little 1981). The characteristics of the product or the process involved in the subsidiary operations affect the positional competitive advantage (Day and Wensley 1988) and are likely to influence the MNC's choice of strategic motives (Cavusgil, Zou, and Naidu 1993; Cook 1983; Prahalad and Doz 1987). For the purpose of illustration, now I elaborate on product complexity.

Product complexity represents the extent of differentiation of competing products in a product market (Cavusgil and Zou 1994; McGuiness and Little 1981). The extent to which the products marketed by a MNC can be differentiated from competitors' offerings has two important implications for channel management in a foreign market. For one, local channel partners prefer differentiated products as they do not directly compete with other products they carry (Angelmar and Pras 1984). For another, the channel members become dependent on the MNC for the product, resulting in power advantage in favor of the MNC subsidiary (Bello and Lohtia 1995). Further, in comparison to commodities and simple products, marketing complex products requires a higher level of technical competence and extensive after sales service, necessitating increased level of monitoring of the distributor so that the MNC is able to maintain its reputation (Celly and Frazier 1996).

P_{24} *The greater the complexity of the product marketed by a MNC, the higher the need for the MNC subsidiary to monitor its channel partner.*

Cultural Distance

Cultural distance between a MNC headquarters and its subsidiaries reduces the headquarters' ability to manage, control, and evaluate the subsidiary (Anderson and Gatignon 1986; Klein and Roth 1990). Cultural distance also degrades the quality of communication between the two entities, including message content, modality, and frequency (Mohr and Nevin 1990). In the case of a MNC, as the cultural distance between the headquarters and its subsidiary increases the frequency and quality of communication between the two decreases, thereby having a detrimental effect of the headquarters' ability to monitor and direct its subsidiary (Bello and Gilliland 1997).

Therefore, cultural distance between a MNC headquarter and its subsidiary would decrease the control of the headquarters' over the subsidiary. Finally, the ability of the headquarters' to promote specific strategic motives that require high levels of control over the subsidiary operations like global efficiency would be reduced.

P_{25} *The greater the cultural distance between a MNC headquarters' and its subsidiary, the lower the emphasis of the headquarters on the strategic motive of global efficiency.*

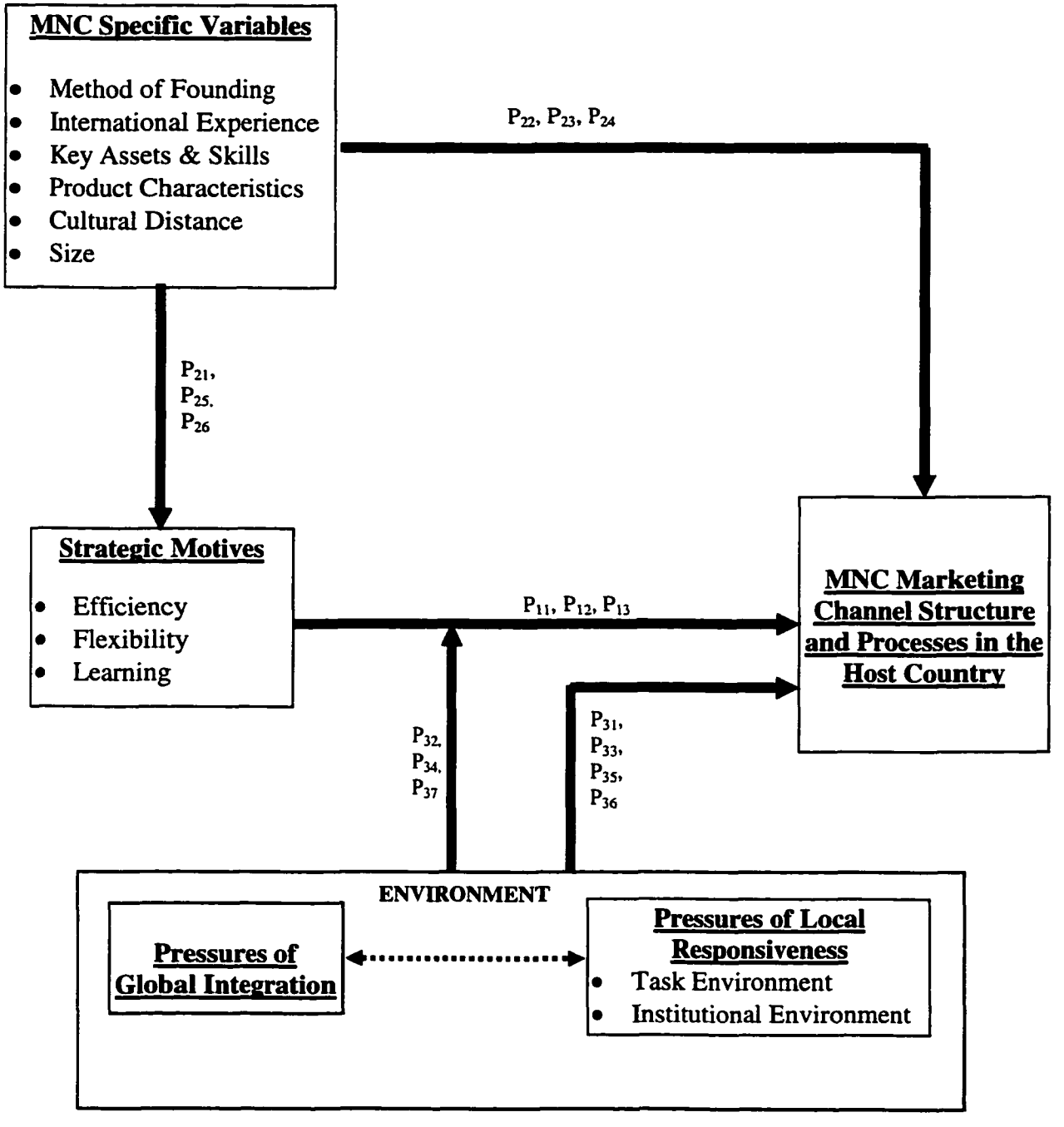
Size of the MNC and the Subsidiary

On an average, the size of a subsidiary relative to its headquarters grossly indicates the relative power of these two entities. Other things being equal, as the size of a subsidiary increase so does the autonomy the subsidiary is likely to have in its decision making. Perhaps the most potent example of this is the relationship between the headquarters of Phillips and its US subsidiary. Acting against the mandate of the headquarters, the US subsidiary adopted the VHS format for its VCR's in favor of its own in-house V2000 format. The reduced power of the headquarters over its subsidiary due to the lower relative size of the headquarters, is likely to deplete the headquarters' ability to promote strategic motives, like worldwide learning, which requires close coordination with its subsidiary.

P_{26} *The greater the size of a MNC subsidiary operations with respect to its headquarters, the lower the emphasis of the headquarters on the strategic motive of worldwide learning.*

Figure 2.1

Conceptual Model: Determinants of Channel Structure and Processes for MNC Subsidiary Operations



External Environment

Before examining the influence of environment on MNC subsidiary channel structures and processes, I would like to emphasize the importance of interactions between strategy and environment. Scholars in international business have time and again emphasized that the contingent nature of the influence of a MNC's strategic motives (cf., Bartlett and Ghoshal 1986; Carpano, Chrisman, and Roth 1994). Specifically, they suggest that MNCs have to adjust their strategies to local conditions, which in turn moderate the influence of these strategic motives (also see, Ghoshal 1987; Kogut 1985b; Porter 1986b). This view is consistent with the strategy-environment coalignment principle (Chandler 1962; Gupta and Govindarajan 1984) and the contingency perspective on organizational strategy (Burns and Stalker 1961; Lawrence and Lorsch 1986). Therefore, while delving into MNC's local environment, I remain cognizant of its strategic motives and develop propositions for interactions between a MNC's strategic motives and the facets of the global environment (also see Bartlett and Ghoshal 1991).

Unlike domestic or local firms, MNCs have to deal with two, often contradictory, pressures. On one hand is the imperative of the headquarters to control subsidiary resulting in pressures towards *global integration.* On the other hand, the demands of the host country institutional constituents and distinct needs of the host country product market results in pressures towards *local responsiveness* (cf., Boddewyn and Brewer 1994; Prahalad and Doz 1987).

Pressures of Global Integration

Global integration refers to "centralized management of geographically dispersed activities on an ongoing basis" (Prahalad and Doz 1987, p. 14). The pressures for global integration arise due to the importance of multinational customers, presence of multinational competitors, high investment intensity, high technological intensity, pressures for cost reduction, universal consumer/customer needs, and access to raw materials. To be efficient and effective under high pressures of global integration the MNC has to coordinate and control its worldwide operations. This results in the *dependency* of the subsidiary on the headquarters for critical resources, *replication* of structures and processes across subsidiaries, and headquarters *imperative of control* over foreign operations (cf., Bartlett and Ghoshal 1995; Rosenzweig and Singh 1991).

Also referred to as industry drivers of globalization (cf., Cavusgil and Zou 1994; Yip 1995), the pressures of global integration necessitate close coordination of the worldwide operations of a MNC, which in turn require the MNC to exert a high level of control over its subsidiaries operations. In turn, for a close coordination strategy to be successful the subsidiaries have to manage and tightly control their local business partners, including distribution channel constituents. In addition, pressures of global integration should facilitate strategies aimed at achieving global economies and worldwide coordination of operations, such as global efficiency.

P_{31} *The higher the pressures for global integration, the greater the motivation for the MNC subsidiary to control its local channel partners.*

P_{32} *The higher the pressures of global integration, more effective would be the strategic posture of global efficiency.*

Pressures of Local Responsiveness

Local responsiveness refers to "resource commitment decisions taken autonomously by a subsidiary in response to primary local competitive or customer demand" (Prahalad and Doz 1987, p.14-15). Pressures for local resposiveness arise from unique customer needs, heterogeneity in market structure, and availability of substitutes, as well as specific demands of the host country government.

Rosenzweig and Singh (1991) suggest that the *task environment* and the *institutional environment* of the host country are primary sources for the pressures of local responsiveness. The motivations for local responsiveness from both the task and the institutional environments are consistent with the open systems perspective (Achrol, Reve, and Stern 1983), but the two sectors differ in the premises and bases of their conceptualization. Following Rosenzweig and Singh (1991) and environmental scholars in marketing (Achrol, Reve, and Stern 1983; Dwyer and Oh 1987; Gundlach and Achrol 1993), I develop propositions linking each of these environments to subsidiary channel structures and processes.

Task Environment

Task environments foster development of rationalized structures to manage environmental uncertainty and reward organizations for effective management and efficient performance (Meyer and Scott 1983). In organization theory and marketing channels literature two dominant perspectives have been used to conceptualize the task environment (Aiken and Hage 1968; Achrol and Stern 1988; Dill 1958; Dwyer and Welsh 1985). First, consistent with the resource dependence perspective, the task environment has been viewed as stocks of resources (cf., Pfeffer and Salancik 1978), which raises

issues of organizational *dependence* on the environment for critical resources (Aiken and Hage 1968; Emerson 1962). The construct of munificence has been used to capture this characteristics of the task environment and to distinguish between rich and lean markets (cf., Dess and Beard 1984; Dwyer and Oh 1987; Sharfman and Dean 1991). The fundamental resource implication of munificence is reflected in the input and output sectors, each having implications for supply and demand management respectively (Achrol, Reve, and Stern 1983; Dwyer and Oh 1987). For the purpose of explication and to be consistent with the demand-management perspective of marketing, I develop an illustrative proposition for munificence in the output sector of the host country.

From a manufacturing MNC perspective, rich markets are likely to favor a downstream channel members (Dwyer and Oh 1987). Therefore, the downstream channel partners are more like to have a say in decision making in rich markets in comparison to lean markets. In addition, this downstream advantage is going to make it imperative for the manufacturing MNC to take host country channel partners beliefs and opinions into consideration while taking strategic decisions, thereby lowering the level of control the headquarters has on the subsidiary and moderating the influence of the strategic motive of attaining global efficiency.

P_{33} *Greater the munificence in the output sector of the host country, the lower the control that a manufacturing MNC subsidiary exerts over its local channel partners*

P_{34} *Munificence in the output sector of the host country is likely to moderate the attempts of a manufacturing MNC in attaining the strategic motive of global efficiency.*

The second task environment perspective views the environment as an information source resulting in the problem of *uncertainty* about external conditions. Uncertainty about external conditions is reflected in the decision maker's need to assimilate and anticipate environmental conditions (Achrol and Stern 1988; John and Weitz 1988; Gundlach and Achrol 1993). This information perspective, exemplified by Dill (1958), Duncan (1972), and Weick (1969), examines the influence of environmental uncertainty, which stems from both heterogeneity and variability in the environment. Environmental scholars claim that organizations attempt to mirror the complexity of the environment on to their organizational structures (cf., Dess and Origer 1987). For example, heterogeneity in environmental entities in the host country mandates the use of multiple strategies to address the multiplicity of demands and constraints, thereby making channel configurations more complex.

P_{35} *In comparison to homogenous country-markets, heterogeneous country-markets will be characterized with more complex channel configurations.*

Institutional Environment

In contrast to task environments, institutional environments are characterized by elaboration of rules and requirements to which individual organizations must conform in order to receive legitimacy and support (DiMaggio and Powell 1983; Meyer and Rowan 1977; Meyer and Scott 1983; Zucker 1977). For instance, DiMaggio and Powell (1983, p. 150) observe that organizations "compete not just for resources and customers, but for political power and institutional legitimacy, for social as well as economic fitness." The institutional perspective complements the task perspective and, when taken together,

provides a holistic conceptualization of organizational environments (Oliver 1991; Rosenzweig and Singh 1991).

The focus on institutional environment brings issues related to political power and institutional legitimacy to the forefront, which are critical for organizational survival (Baum and Oliver 1991, 1992; Meyer and Zucker 1989). Sources of institutional pressures include public opinions, societal and cultural ideologies, professional associations, educational systems, laws, courts, government endorsements and requirements, certification and accreditation bodies, among others. Pressures from and demands of these institutional constituents force organizations to modify and adapt their structures and processes resulting in isomorphisms among organizations facing similar institutional expectations (DiMaggio and Powell 1983; Scott 1987).

The critical issue for isomorphism among organizations stemming from demands of the institutional constituents concerns the *structure* of the institutional environment. Typically, the structure of the institutional environment is conceptualized as both the number of competing authorities and the relative distribution of power among them (Carrol, Delacroix, and Goodstein 1988; Carroll, Goodstein, and Gynes 1988; Oliver 1991).

In international business institutional environments take on greater significance as MNCs have to deal with perceptions of being foreigners and manage multiple sovereignties (Boddewyn and Brewer 1994; Prahalad and Doz 1987; Rosenzweig and Singh 1991). The structure of the host country institutional environment will determine the extent to which the MNC's subsidiary operations are dependent on the these institutional constituents. As the number of relevant institutional constituents increases,

the diversity of the demands made by the institutional constituents is also like to increase and the power of individual institutional members is likely to decrease. Therefore, as the number of relevant institutional constituents increases the *dependence* of the MNC subsidiary on the institutional environment is likely to decrease.

In addition, a large number of institutional constituents leads to a *fragmented* institutional environment characterized by contradictions in demands among these institutional members (Carroll, Goodstein, and Gyenes 1988; Oliver 1991). The constructs of dependence of MNC subsidiary on the institutional environment, along with fragmentation of institutional environment, which results in the multiplicity (defined as the degree of contradictions in demands made by institutional constituents of the host country) of demands made by institutional constituents have ramifications for MNC channel management.

For instance, as the dependence of the MNC subsidiary on the local institutional environment increases, the clout of the subsidiary with its channel partners decreases, resulting in power shift in favor of the local channel partner. Similarly, a fragmented institutional environment is likely to be characterized by ambiguity and uncertainty resulting in impediments for MNCs espousing close coordination and control of their subsidiary operations, which are essential to achieve the strategic objectives of worldwide learning. Reasoning in a similar manner one can easily develop propositions concerning the direct and moderating effects of the structure of institutional environment on the MNC subsidiary channel management.

P_{36} *Greater the dependence of a MNC subsidiary on the local institutional constituents, lower the power of the MNC subsidiary over its channel partners.*

P_{37} *Fragmentation of the host country institutional constituents is likely to moderate the attempts of a MNC in achieving the strategic motive of worldwide learning.*

Conclusion

Prompted by the paucity of conceptual and empirical research in international channels, the main objective of this chapter is to develop a framework for the determinants of channel structures and processes for subsidiary operations of MNCs. With the objective of painting the larger picture and demonstrating the limitations of current research, I review the sparse literature in international channels and identify gaps in this research stream. Subsequently, I adopt the strategy-environment coalignment perspective and view MNC subsidiary channel structures and processes to be determined by the MNC's worldwide strategic motives, the global environment, and factors internal to the MNC.

A MNC's worldwide strategic motives are conceptualized in terms of emphasis on global efficiency, multinational flexibility, and worldwide learning. The global environment is viewed in terms of the forces of global integration and the pressures of local responsiveness, which in turn are visualized as stemming from either the task environment or the institutional environment. Further, MNC specific variables include the subsidiary's method of founding, the international experience of the MNC, the value of firm assets used in the subsidiary operations, characteristics of the product(s) marketed by the subsidiary, the cultural distance between the MNC headquarters and its subsidiary, and the relative size of the subsidiary in relation to the headquarters. Finally, to demonstrate the utility of the framework I develop illustrative propositions for the effect of these three categories of variables on channel structures and processes, along with

interactions between these variables (Figure 2.1). The framework will enable researchers to explore this important yet neglected research arena.

Chapter 3

Manufacturing Multinational's Use of Formal Control Mechanisms and Distributor's Performance: The Significance of Worldwide Strategic Motives and the Local Environment

Overview

Success of a multinational corporation (MNC) is contingent on its foreign subsidiary operations. In turn, the performance of the subsidiary depends on effective management of its local business partnerships including those with its distributors. This chapter studies a manufacturing MNC subsidiary's use of formal control and coordination mechanism to manage its distributor. Specifically, the influence of the multinational's worldwide strategic motives and the facets of the host country environment on the use of process and output control mechanism by the MNC subsidiary to manage its distributors is studied. The results show that the distributor's performance is determined by the extent to which a MNC utilizes process and output control mechanisms along with the munificence and volatility in the local task environment. The extent to which the manufacturing MNC uses these two control mechanisms in turn depends on the local environment, including munificence, dependence, and multiplicity, along with the worldwide strategic motives of the MNC. Also, the results confirm the mediational hypotheses and demonstrate that the local environment serves as a filter for the influence of the strategic motives on a MNC's use of formal control and coordination mechanisms.

Introduction

Control and coordination lie at the heart of multinational subsidiary management (cf., Doz and Prahalad 1981, 1984; Gupta and Govindarajan 1991). The effective and efficient management of multi-country firms need sophisticated formal control and coordination mechanisms that can respond to differences in local environments while taking advantage of global opportunities (Bartlett and Ghoshal 1995; Prahalad and Doz 1987). While many researchers have examined the internal processes related to control and coordination within multinational and its subsidiary network (cf., Doz and Prahalad 1981, 1984; Egelhoff 1982), few have studied control and coordination issues for external linkages of MNC subsidiaries. Management of these linkages, like business partners of the MNC subsidiary, is critical for both organizational survival and performance in the global market place (Kogut 1988). In this chapter I focus on the distribution channel partners for subsidiaries of manufacturing MNCs.

One way to circumscribe distribution alliances is to vertically integrate and have one's own distribution network. Though vertical integration into foreign markets enables high degrees of control over foreign operations, it may not be a practical option due to either lack of foreign market knowledge or dearth of financial, operational, or strategic capabilities (Anderson and Coughlan 1987; Bello and Gilliland 1997). In comparison with company-owned distribution, use of distributors affords advantages of lower capital investment and greater flexibility (Celly and Frazier 1996; Corey, Cespedes, and Rangan 1989), but coordinating relationships with distributors is a challenge.

Typically, researchers use the construct of channel integration to study a MNC's choice of distribution setup in a foreign market (Anderson and Coughlan 1987; Aulakh

and Kotabe 1997; Klein, Frazier, and Roth 1990). Channel integration captures the multinational's choice of channel governance system, which can vary from vertically integrated distribution systems to the use of direct exports with distribution alliances (Klein, Frazier, and Roth 1990).

Scholars have drawn on control theorist (Jaworski 1988; Ouchi and Maguire 1975) to study coordination mechanisms used in export channels (Bello and Gilliland 1997; Johnson et al 1993; LaBahn and Harich 1997). Specifically, these researchers examine issues related to sociopolitical structures and processes, including power-dependence relationship (Johnson et al. 1993) and the use of formal and informal control mechanisms (Bello and Gilliland 1997). But these studies have been limited to the context of export channels.

Literature on multinational mode of entry and international expansion stresses that export is one of the many ways (the others being licensing, strategic alliances, joint ventures, and wholly-owned subsidiaries; cf., Root 1994) for a MNC to organize or govern its foreign operations (Anderson and Gatignon 1986; Hill, Hwang and Kim 1990). In fact export is considered to be the first step in the internationalization process of MNCs (Root 1994). In terms of MNC's involvement in the subsidiary operations, export is at the low end of the spectrum. As export is one of the many ways for a MNC to organize its foreign subsidiary operations, developing an understanding of the drivers of multinational subsidiary processes across various governance mechanisms is of relevance to both practitioners and academicians.

I build on scant research in international channels and study the use of formal control mechanisms by manufacturing MNC subsidiaries in foreign markets.

Specifically, I examine the use of formal control mechanisms across various levels of channel integration. To develop an understanding of the extent of usage of formal control mechanisms, I study the influence of a MNC's strategic motives and facets of the local host country environment. These two categories of variables have been referred to as the most important constructs in MNC management (Bartlett and Ghoshal 1995; Cavusgil and Zou 1994; Prahalad and Doz 1987).

This chapter make four important contributions to literature on international and multinational distribution channels. First, I move beyond exports channels to examine the role of global and local factors in shaping a MNC subsidiary's use of formal control and coordination mechanisms to manage its distribution partners. Second, I conceptually develop and empirically examine theoretical facets of both the task environment and the institutional environment (Oliver 1991). Third, I develop and validate a process model, with direct and mediational effects, for the influence of MNC's strategic motives and local environmental factors on use of formal control mechanisms.[7] Fourth, in response to scarce research on channel performance (Weitz and Jap 1995), the chapter contributes to developing an understanding of the antecedents of distributor performance.

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[7] Before embarking on hypotheses development, I would like to clarify what I mean by mediational influence (Exhibit 3.1). In Exhibit 3.1, I have three variables, viz., X, Y, and Z. Note that in addition to Y directly influencing Z, X directly effects both Y and Z. But Y also mediates the influence of X on Z (Note that we do not suggest that that two direct effects (X on Y and Y on Z) implies a mediational effects. In fact, we explicitly argue for mediational influences while we develop our hypotheses. For instance, when one is boiling eggs in water, the heat travels from the fire to the eggs via the water. In other words, the water acts as a mediator for the influence of fire on the eggs.). Conceptually, the mediational influence of X on Z via Y does not require the presence of the direct influence of X on Z. In addition, if the direct effect is present, the mediational influence could either enhance the direct influence or reduce it. For instance, lets say that all the three effects in Exhibit 3.1 are positive. Then X has a positive direct influence on Z and this direct effect is enhanced by the positive indirect influence of X on Z via Y. But if either the influence of X on Y or that of Y on Z is negative, then the mediational influence of X on Z reduce the influence of the direct positive effect of X on Z. Finally, for the mediational effect to be significant, one requires both the direct influence of X on Y and the direct effect of Y on Z to be significant.

The remainder of the chapter is organized along the following lines. In the next section I review relevant literature and develop the research hypotheses. Then I enumerate on the data collection and analysis methodology. Subsequently, I present the results and end with a few concluding remarks on limitations and possible future research directions.

Conceptual Background and Research Hypotheses

Control is the outcome of power and reflects the success a firm has in modifying its partner's behavior (cf., Anderson and Narus 1984; Gaski 1984). Within the context of marketing channels, the manufacturer's control over its distributor implies that the distributor resigns some degree of autonomy over its decisions. Control theorist in marketing (cf., Jaworski 1988; Jaworski, Stathakopoulos, and Krishnan 1993) and management (cf., Hofstede 1978; Ouchi 1979; Ouchi and Maguire 1975) distinguish between ***process control*** and ***output control*** mechanisms based on the timing of manufacturer's intervention. Process control captures manufacturer's attempts to influence means or behavior of distributors to achieve desirable ends, while output controls are used to directly affect the ends or performance of the distributors (Bello and Gilliland 1997; Celly and Frazier 1996).

Apparatus for process control includes a manufacturer's efforts directed at influencing distributor's selling procedures, promotional practices, and other day-to-day marketing actions (Celly and Frazier 1996; Fram 1992). Process control mechanisms guide distributors actions, by forcing them to modify their selling techniques and resource allocation decisions in favor of the MNC. Providing directions to distributors is of

immense importance in multinational management and improves distributor performance in two ways (Munro and Beamish 1987).

First, the time and effort that a distributor devotes to a MNC's products depends on the interests that the MNC shows in the distributor and the host country operations (Anderson and Oliver 1987). Second, process control mechanisms gives a distributor the opportunity to exploit the diverse international experience of the MNC in selling its products in numerous countries. Utilizing MNC's expertise about its products is an asset that distributors utilize to ensure greater efficiency in selecting, planning, and implementing marketing strategies (Sachdev, Bello, and Pilling 1994). In addition, empirical research on export channels shows that higher emphasis on process control mechanism by the manufacturers improves export channel performance (Cavusgil and Zou 1994). Thus, I hypothesize:

H_1: *The use of process control by a MNC subsidiary increases the performance of the distributor of the MNC subsidiary.*

Output control mechanisms monitor a distributor's tangible performance including sales volume, market penetration, and customer satisfaction (Jaworski 1988; Ouchi and Maguire 1975). In the context of multinational subsidiaries, output control implies measuring distributor's economic performance with respect to predetermined goals. The primary objective of monitoring outcomes is to ensure distributor's contract compliance (Anderson and Oliver 1987). The motivation behind output control mechanisms is the contention that the distributor is more knowledgeable about the local environment and are left to themselves to achieve predetermined objectives (Bello and Gilliland 1997; Root 1994). Output control mechanisms focus distributor's attention on

the manufacturer's products and monitor against possible opportunistic behavior on part of the distributor (Rubin 1990). In addition, they also provide signals about the manufacturers most vital performance goals (Celly and Frazier 1996) and distributors are expected to strive to achieve "favorable ratings on whatever indices the organization employees to measure performance" (Anderson and Chambers 1985, p. 11). Therefore, output control mechanisms enhance distributors performance by making them focused on manufacturer's products (Eliashberg and Michie 1984), increasing their accountability (Anderson and Oliver 1987), and reducing potential conflict by pre-specifying objectives (Eisenhardt 1985). Finally, empirical research on export channel performance support the positive relationship between output control and channel performance (Bello and Gilliland 1997; Rosson and Ford 1982). Thus, I hypothesize:

H_2: *The use of output control by a MNC subsidiary increases the performance of the distributor of the MNC subsidiary.*

Environmental Antecedents to Formal Control Mechanisms

Following contemporary research in organizational theory and multinational environments, I conceptualize local environment in the host country in terms of the *task environment* and the *institutional environment* (Oliver 1991; Rosenzweig and Singh 1991). The motivations for both the task and the institutional environments are consistent with the open systems perspective (Achrol, Reve, and Stern 1983), in that they recognize the importance of the organizational environments, but they differ in the premises and bases of their conceptualization. Now I elaborate on and examine theoretical facets of both the task environment and the institutional environment.

Task Environment

Task environments are those which reward organizations for effective management and efficient performance (Meyer and Scott 1983). In organization theory and marketing channels literature two dominant perspectives have been used to conceptualize the task environment (Aiken and Hage 1968; Achrol and Stern 1988; Dill 1958; Dwyer and Welsh 1985). First, consistent with the resource dependence perspective, the environment has been viewed as stocks of resources (cf., Pfeffer and Salancik 1978), which raises issues of organizational dependence on the environment for critical resources (Aiken and Hage 1968; Emerson 1962). The construct of ***munificence***, which distinguishes between rich and lean markets, is used to capture this characteristic of the task environment (cf., Dess and Beard 1984; Dwyer and Welsh 1985; Sharfman and Dean 1991). The fundamental resource implication of munificence is reflected in the input and output sectors, each having implications for supply and demand management respectively (Achrol, Reve, and Stern 1983; Dwyer and Oh 1987). To be consistent with the demand-management perspective of marketing, I focus on munificence in the output sector of the host country.

From a demand management perspective, munificent local markets have good growth potential, present excellent profit opportunities. In addition, munificent markets result in power advantage for the distributor, the downstream channel partner, in comparison to the manufacturer (Pfeffer and Salancik 1978). This power advantage to the distributor leads to decision making characterized by high levels of participation and low levels of both formalization and centralization (Dwyer and Oh 1987). In the context of international business, the resource dependence perspective suggests that a munificent

environment constrains the relationship management processes for the MNCs, but provides distributors with opportunities for more favorable exchange structures (Pfeffer and Salancik 1978; Rosenzweig and Singh 1991). To manage this asymmetric power setting, a disadvantaged MNC has to show interest in its distributor and devote time and effort to convince the distributor to focus attention on the MNC's products (Anderson and Oliver 1987). This results in increased use of process control mechanisms. In addition, due to their very nature, rich and munificent markets, in comparison to lean and scarce markets, are likely to be characterized by better distributor performance (Pfeffer and Salancik 1978). Thus, I hypothesize:

H_{3a}: *A manufacturing MNC subsidiary rich markets, in comparison to lean markets, is more likely to use of process control over its distributor.*

H_{3b}: *Distributor's performance is likely to be higher in munificent markets in comparison to lean markets.*

The second task environment perspective views the environment as an information source resulting in the problem of *uncertainty* about external conditions. Uncertainty about external conditions results in the decision makers need to assimilate and anticipate environmental conditions (Achrol and Stern 1988; Gundlach and Achrol 1993; John and Weitz 1988). This information perspective, exemplified by Dill (1958), Duncan (1972), and Weick (1969), examines the influence of environmental uncertainty in the host country stemming from variability in the environment. To remain consistent with the demand management perspective of marketing, I use the construct of demand ***volatility*** to capture uncertainty stemming from variability and heterogeneity in consumer demand (Achrol and Stern 1988; Dwyer and Welsh 1985).

Volatile environments offer greater contingencies to organizations (Thompson 1967, p. 73), which creates difficulties in planning, coordinating, and implementing marketing plans and strategies (Dill 1958; Duncan 1972). These contingencies make it difficult for the manufacturer to monitor distributor's activities and actions (Dwyer and Welsh 1985). In addition, in comparison to manufacturers, distributors are closer to the consumers and are in a better position to manage the uncertainty as the source of this environmental uncertainty is the host country consumer environment. As the appropriate knowledge and expertise lie with the distributor, manufacturers are likely to rely on the distributor judgments and decision-making. This implies letting the knowledgeable distributor run the business its way and periodically evaluate distributor performance on pre-specified targets (Celly and Frazier 1996). Therefore, output-based control mechanisms are likely to be emphasized. In addition, research on organizational environments (cf., Dess and Beard 1984; Sharfman and Dean 1991) and on environments in international business (Boddewyn and Brewer 1994; Rosenzweig and Singh 1991) suggests that volatility and the associated uncertainty create greater contingencies for organizations, which have an adverse influence on performance. Therefore, I hypothesize:

H_{4a}: *A manufacturing MNC subsidiary volatile markets, in comparison to stable markets, is more likely to use of output control over its distributor.*

H_{4b}: *Distributor's performance is likely to be decrease in volatile markets in comparison to stable markets.*

Institutional Environment

In contrast to task environments, which reward organizations for effective and efficient management, institutional environments are characterized by elaborate rules and requirements to which individual organizations must conform in order to receive legitimacy and support (DiMaggio and Powell 1983; Meyer and Scott 1983; Zucker 1977). The focus on institutional environment brings issues related to political power and institutional legitimacy to the forefront, which is purported to aid in organizational survival (Baum and Oliver 1991; Meyer and Zucker 1989).

In international business, institutional environments take on greater significance as the MNCs have to deal with perceptions of being foreigners and must manage multiple different sovereignties (Boddewyn and Brewer 1994; Prahalad and Doz 1987). Host country institutional constituents, including the government, professional associations, consumer bodies, and the general public, impose variety of constraints on MNC operations (Rosenzweig and Singh 1991). One consequence of these demands and constraints is that the MNC host country operations become dependent on the relevant institutional constituents (Oliver 1991).

The MNC subsidiary operations can be dependent on the local institutional constituents for critical resources (Pfeffer and Salancik 1978), funds (Salancik 1972), or just the simple right to do business (DiMaggio and Powell 1983). ***Dependence*** on institutional constituents affects an organization's ability to resist demands made by these institutional constituents (DiMaggio and Powell 1983). This dependence also reduces the organization's clout with and incentives to manage its local business partners (Pfeffer and Salancik 1978). MNC subsidiary survival is contingent on conformity with institutional

expectations, which often emphasizes autonomy for distributors (Anderson and Coughlan 1987). The decreased power of the MNC, the increased autonomy of the local distributor, and high need for conformity with local institutional expectations are likely to reduce the use of process control mechanisms, which attempt to control distributors behavior. Thus, I hypothesize:[8]

H_5: *Dependence on local institutional constituents reduces a MNC subsidiary's use of process control over its distributor.*

In addition to dependence, institutional theorist emphasize that the ***multiplicity*** of institutional constituents has ramifications for MNC host country operations (Oliver 1991; Rosenzweig and Singh 1991). For instance, Scott (1983, p. 105) observed that state controls are complex and fragmented, which results in "a jungle of conflicting requirements." Multiplicity captures the environmental complexity stemming from both the large number of institutional constituents and the contradictory nature of demand made by these host country institutions (Oliver 1991).

Multiplicity implies that adhering to the requirements of one institutional constituent precludes a MNC subsidiary from adhering to the demands of another institutional constituent. In turn, managing multiplicity is critical for the survival of MNC subsidiary operations and requires dexterity on part of the MNC, as acquiescence to the institutional expectations is not a possibility (Oliver 1991). The MNC often has to defy or manipulate institutional demands, with heavy reliance on host county business partners. These local business partners, including distributors, by virtue of being local,

[8] Institutional theorists contend that institutional constituents provide legitimacy to organizations, which aids in organizational survival but not organizational performance (DiMaggio and Powell 1983;

possess greater expertise in managing the institutional constituents (Rosenzweig and Singh 1991). As the skills and expertise to manage local institutional constituents are more likely to be available with the distributor (the local firm), the MNC is likely to rely on the distributor for day-to-day decision making and management. In addition, to evaluate the distributor, a manufacturer is likely to rely on a comparison of distributor performance to predetermined targets. Thus, the MNC is likely to resort to heightened use of output control mechanisms and, therefore, I hypothesize:

H_6: *Multiplicity of local institutional constituents increases a MNC subsidiary's use of output control over distribution partners.*

Strategic Antecedents to Formal Control Mechanisms

The complex and turbulent global competitive environments have led to a number of perspectives on the appropriate strategic motives for MNCs. For instance, Levitt (1983) advocates a uniform strategy of marketing mix standardization; Hout, Porter, and Rudden (1982) recommend exploiting both economies of scale and synergy benefits; while Hamel and Prahalad (1985) espouse extracting benefits from shared investments across businesses and markets. Though there might be a debate on a MNC's appropriate strategic posture, scholars seem to agree that businesses that do not either think or act globally are at a competitive disadvantage (Levitt 1983; Ohmae 1989; UNCTAD 1993). These and other researchers emphasize that MNC's should strive to derive benefits from a standardized strategy (Porter 1980, 1986a; Prahalad and Doz 1987; Yip 1995). Described as ***global efficiency*** by Bartlett and Ghoshal (1995), this strategic motive reflects a MNC's capacity to manage both costs and revenues.

Meyer and Zucker 1989). Consistent with this literature, we do not hypothesize a link with theoretical

Researchers arguing for recognition of local market needs while devising MNC strategies, have highlighted the success of regional strategies in diverse industries, including pharmaceuticals (Morrison, Ricks, and Roth 1991) and white goods (Baden-Fuller and Stopford 1991). These and other researchers have argued that too much emphasis on global efficiency could be harmful and a balance between emphasis on globalization and localization is needed (cf., Birkinshaw, Morrison, and Hulland 1995; Douglas and Wind 1987; Quelch and Hoff 1986). This emphasis on localization has been described as ***multinational flexibility*** (Bartlett and Ghoshal 1995), which stresses developing skills to respond to unique needs of local consumers, business partners, and institutional constituents. With the advent of flexible manufacturing systems along with advances in information, communication, and transportation technologies, these two seemingly opposing objectives of global efficiency and multinational flexibility became congruent, as the emphasis shifted from economies of scale to economies of scope (cf., Douglas and Wind 1987; Morrison and Roth 1992; Prahalad and Doz 1987).

These advances in information and communication technology have also ushered us into the age of information with emphasis on knowledge acquisition and learning processes (Glazer 1991; March 1991; Sinkula 1994). Organizational learning has been purported to influence organizational internal processes and assist in making the organization market oriented, which enhances performance (Deshpande, Farley, and Webster 1993; Jaworski and Kohli 1993; Slater and Narver 1994). MNC's are in a unique position to learn from diverse geographically dispersed environments, which results in higher innovation rates and better understanding of the global environment

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facets of institutional environment and distributor performance.

(Ghoshal 1987; Kim, Hwang, and Burgers 1993; Simonin 1997). This exposure to wide array of demand characteristics and variety of competitors, suppliers, and partners, leads to richer knowledge structures (Abrahamson and Fombrun 1994; Miller and Chen 1994, 1996) and is captured by the strategic motive of ***worldwide learning*** (Achrol 1991; Bartlett and Ghoshal 1995).

Summarizing the organizational capabilities needed to manage the complex modern day environments, Achrol (1991, p. 77) succinctly states that to manage the complex modern day environments one needs "an ambidextrous organization, simultaneously demanding efficiency, innovation, and flexibility." To be consistent with contemporary beliefs in multinational strategy, I examine a three dimensional conceptualization of worldwide strategy, viz. Global Efficiency, Multinational Flexibility, and Worldwide Learning (cf., Bartlett and Ghoshal 1995; Duncan 1976; Powell 1987).

Scholars in international business also emphasize the contingent nature of the influence of MNC strategic motives (cf., Bartlett and Ghoshal 1986; Carpano, Chrisman, and Roth 1994). Specifically, they suggest that MNCs have to adjust their strategies to local conditions, which in turn mediate the influence of these strategic motives (also see, Ghoshal 1987; Kogut 1985a; Porter 1986b). This view is consistent with the strategy-environment coalignment principle (Chandler 1962; Gupta and Govindarajan 1984) and the contingency perspective on organizational strategy (Burns and Stalker 1961; Lawrence and Lorsch 1986). Therefore, while delving into MNC's strategic motives, I remain cognizant of local environment and also examine mediational influences of these strategic motives.

Global Efficiency

Global efficiency reflects a MNC's capability to manage both costs and revenues. Achieving cost reduction implies obtaining advantages from national differences in factor costs, exploiting scale economies, and deriving benefits from shared investments across markets and businesses (Levitt 1983). Boosting revenues involves maintaining a strong portfolio of brands, developing powerful distribution systems, and having access to key leading and strategic markets (Hout, Porter, and Rudden 1982). Obtaining benefits of low cost and increased revenues implies developing efficient and specialized facilities for research, manufacturing, logistics, and sourcing at a global scale, along with centralized management of these facilities (Bartlett and Ghoshal 1995).

Effective centralized management of worldwide operations requires a subsidiary to have control over its local business partners, including distributors (Kogut 1988). With emphasis on global efficiency, local distributors are expected to adhere to standardized plans and procedures, with performance monitoring being used to identify and rectify weak links (Doz and Prahalad 1981, 1984). As performance monitoring implies heightened use of output control mechanisms, I expect an emphasis on global efficiency as an strategic motive to increases the likelihood for the use of output control mechanisms.

H_{7a}: *The strategic motive of global efficiency increases a MNC subsidiary's use of output control over its distributor.*

Munificent markets present high growth opportunities and are more attractive in comparison to lean markets (Dwyer and Oh 1987; Pfeffer and Salancik 1978). Effectively managing these munificent markets is critical for the MNC to achieve its

performance objectives, as they provide high growth and profit opportunities. In addition, munificence results in power advantage in favor of the local distributor, who has knowledge and expertise about the host country market (Pfeffer and Salancik 1978; Rosenzweig and Singh 1991). To manage this asymmetric power setting, the disadvantaged manufacturers has to show interest in distributors and devote time and effort to convince and make the distributors focus attention on their products (Anderson and Oliver 1987). Process control mechanisms provide the requisite tools to the MNC to guide and control the distributor's behavior, which is critical for attainment of global efficiency. Thus, in munificent markets, emphasis on global efficiency should increase the use of process control (i.e., an indirect effect of global efficiency on process control via munificence).

H_{7b}: *Munificence mediates the positive influence of global efficiency on process control.*

Multinational Flexibility

A MNC's capability to capitalize on the volatility and diversity of the global environment is referred to as multinational flexibility (Kogut 1985b). Traditionally, European MNCs, which had a relatively small home market and headquarters' dwarfed by several subsidiaries, emphasized multinational flexibility as their strategic motive (Bartlett and Ghoshal 1995). A MNC emphasizing multinational flexibility thrives in deriving benefits from country-specific or regional macro economic risks, political risks arising from policies of national governments, competitive risks from both local and global competitors, and resource risks, which captures scarcity of critical resources. The construct of multinational flexibility captures a MNC's capacity to manage risks arising

from market changes in comparative advantage of nations (Porter 1990), balancing economies of scale with operational flexibility (Hout, Porter, and Rudden (1982), and maintaining a diverse portfolio of product markets to cover eventualities which may arise in the future (Kogut 1985b).

An emphasis on multinational flexibility implies that opportunism in the development of strategy is given more importance than long-term planning, with the objective of being responsive to differences in political-economies across nations (Bartlett and Ghoshal 1995). MNCs espousing this motive scan the international markets to detect changes, discontinuities, and opportunities, and embrace an unique approach or response to each situation. Multinational flexibility implies that more autonomy is given to subsidiaries and local business partners in goal setting along with development and implementation of strategies (Kogut 1985b). The headquarters lays down broad guidelines, within which the subsidiary operations are expected to function (Bartlett and Ghoshal 1995). In the case of local distributors, as both strategy formulation and implementation are in their hands, the MNC is likely to monitor adherence to its broadly specified guidelines. Thus, emphasis is on observing behavior and credit is likely to be given for appropriate and desired actions. To achieve these objectives the MNC subsidiary is likely to lay emphasis on process control mechanisms to manage its local business partners (Celly and Frazier 1996).

H_{8a}: *The strategic motive of multinational flexibility increases a subsidiary's use of process control over its distributor.*

When MNC subsidiary operations are dependent on the host country institutional constituents, process control mechanisms are not a viable option (see H_5). The two

primary motivations behind this behavior are: (1) the reduced incentives for the MNC to manage the local business; and (2) the diminished clout of the MNC with local business partners (Boddewyn and Brewer 1994; Rosenzweig and Singh 1991). Even though the strategic motive of flexibility drives and initiates the use of process control mechanisms, the motivation and ability to use the mechanism is lowered as the dependence of host country operations on local institutional constituents increases. Therefore, I expect dependence to mediate and mitigate the influence of multinational flexibility on process control.

H_{8b}: *Dependence mediates the negative influence of multinational flexibility efficiency on process control.*

Finally, the importance of flexibility in managing local partners increases with volatility in demand conditions and with multiplicity of institutional constituents (Kogut 1985b). The logic behind this conjecture is simple. Volatility implies difficulty in predicting demand and assimilating information, which in turn suggests that a MNC subsidiary needs to be flexible in its resource allocation decisions (Achrol and Stern 1988). Likewise, multiplicity results from the contradictory nature of expectations and constraints levied on a MNC subsidiary by various local institutional members, which increases the need to manipulate institutional expectations and the emphasis is on versatility in managing institutional constituents (Oliver 1991). Both these environmental conditions emphasize high needs for output control mechanisms. Therefore, I expect to observe an indirect effect of multinational flexibility on output control via volatility and multiplicity.

H_{8c}: *Both multiplicity and volatility mediate the positive influence of multinational flexibility on output control.*

Worldwide Learning

Research on knowledge acquisition and development processes view MNCs as having exposure to diverse environments, resulting in a richer store of existing knowledge and capabilities (Barkema and Vermeulen 1998; March 1991; Sinkula 1994; Slater and Narver 1995). In the multinational strategy literature, the construct of *worldwide learning* is used to capture a MNC's propensity to acquire and assimilate knowledge from its diverse experience. Specifically, worldwide learning reflects a MNC's capacity to assimilate knowledge from societal differences in organizational processes as well as managerial processes and systems across nations (Hamel and Prahalad 1985). In addition, it captures a MNC's ability to derive benefits from shared learning across organizational components in different markets and businesses along with the MNC's capability to integrate the acquired knowledge into its day-to-day operations (Madhok 1997).

A MNC's capacity to acquire, evaluate, assimilate, integrate, diffuse, deploy, and exploit knowledge is vital in deriving benefits from worldwide learning. In terms of organizational processes this requires close coordination among subsidiary operations, with frequent and open lines of communication and transfer of know-how (Bartlett and Ghoshal 1995). Host country business partners, including distributors, are expected to adhere to MNC's standardized plans and procedures, with performance monitoring being used to identify weak links (Gupta and Govindarajan 1991). Emphasis on performance

monitoring implies increased use of output control mechanisms. Therefore, I hypothesize:

H_{9a}: *The strategic motive of worldwide learning increases a subsidiary's use of output control over its distributor.*

Finally, as the dependence of local operations on institutional constituents increases, striving to learn from local conditions increases, as these conditions (high dependence on institutional constituents) are fairly common in international business (cf., Anderson and Coughlan 1987; Prahalad and Doz 1987). The objective of such learning endeavors is to accumulate knowledge on how to manage institutional constituents, which is likely to be facilitated by process control mechanisms. Thus, I hypothesize an indirect positive influence of worldwide learning on process control via dependence.

H_{9b}: *Dependence mediates the positive influence of worldwide learning on process control.*

Volatility in demands conditions in the host country create difficulties in planning, coordinating, and implementing strategies and plans (Duncan 1972; Thompson 1967). These impediments are likely to stymie learning in two ways. For one, complex and uncertain environments make learning difficult, and for another, unique environments (a consequence of demand volatility) implies reduced benefits from learning. Thus, I expect multiplicity to mediate and mitigate the influence of learning on output control.

H_{9c}: *Multiplicity mediates the negative influence of worldwide learning on output control.*

Methodology

Sample and Data Collection Procedure

The sample consisted of German and Japanese subsidiaries in the United States. The sample for German MNCs was drawn from the Directory of Subsidiaries of German Firms in the US (1996-97) and the sample for the Japanese firms was drawn from the Directory of Japanese-Affiliated Companies in the USA & Canada (1995-96). The lists consist of approximately 1800 German subsidiaries and 2000 Japanese subsidiaries.

Initially, MNCs from the sampling frames were contacted by phone to identify the name and designation of the person heading the marketing function. Subsequently, a cover letter on University letter head along with the questionnaire, self addressed pre-paid return envelope, a questionnaire re-directing form, and an incentive of $1 were mailed to these managers. The cover letter stated that the data were being collected to investigate issues related to distribution management for foreign multinational subsidiaries in the US and promised a copy of the findings, as an added incentive (along with the dollar bill enclosed) to participate in the study. In addition, the cover letter stated that if somebody else in that organization was more appropriate to fill the survey, then the person could fill the "Questionnaire Re-directing Form" and I would mail another copy of the questionnaire to that respondent. The cover letter and the questionnaire re-directing form had the name of the individuals along with the name of their organizations. The cover letter for redirected questionnaires, also stated the name of the person to whom I had mailed the original survey. Two weeks after mailing the original surveys I mailed post

card reminders to each potential respondent.[9] This procedure was followed for both the pretest and the final study.

Operational Measures

Multiple items were used to measure the exogenous and endogenous constructs, which were all conceptualized to be unidimensional. Given that I have a large number of constructs and one needs 3-5 items to measure unidimensional constructs (Bagozzi and Baumgartner 1994), I used 3 or 4 items to measure each construct. I first discuss the operationalization for the three strategic variables, follow it with the four environmental variables, and then move on to the three distributor-specific variables.

Strategic Motives. I relied on Bartlett and Ghoshal's (1995) detailed description of the strategic motives to develop 4 items to measure each construct (Table 3.1). The items for global efficiency measured the extent to which the worldwide strategy of the MNC emphasizes extracting benefits from wage differences across nations, exploiting scale economies in marketing and distribution, and benefiting from scale economies in manufacturing and R&D.[10] For multinational flexibility, the items measured stress deriving benefits from diversity in environments across countries, flexibility in managing political risks , and versatility in allocation of human capital.[11] Finally, the items for worldwide learning lay stress on learning from differences in organizational processes

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[9] For the questions related to the distributor, i.e., process control, output control, and distributor performance, the focal distributor was defined as one of the following four. (1): The distribution department of a vertically integrated subsidiary (i.e., they carried out their own distribution). In this case we measured the perceptions of the marketing department concerning the distribution department. (2): The largest (in terms of sales) distribution partner, if the partner accounts for 75% of sales AND the second largest distribution partner accounts for less than 10% of the sales. (3): The second or third largest distribution partner if the firm had fewer than five distributors. (4): The third or fourth largest distribution partner if the firm had five or more distributors.

[10] The fourth item, deleted after the pretest, asked: "We typically share investments and costs across businesses."

across countries, emphasized shared learning between organizational components across nations, and stressed sharing innovations in products and organizational processes across subsidiaries.[12]

Table 3.1

Measurement Model: Confirmatory Factor Analysis and Scale Reliability

Item [a]	Item Description [b]	Standardized Loading	t-value
Global Efficiency ($\rho_c = 0.75$). Aspects of your organizations worldwide strategy:			
GE1	Our worldwide strategy emphasizes extracting benefits from differences in wages across countries.	0.43	6.59
GE2	We emphasize scale economies in distribution and marketing.	0.89	14.08
GE3	We seek to exploit potential scale economies in manufacturing and R&D.	0.64	10.25
Multinational Flexibility ($\rho_c = 0.73$). Aspects of your organizations worldwide strategy:			
MF1	We seek to derive benefits from diversity in environments across countries.	0.58	9.37
MF2	Our global strategy reflects high levels of flexibility in managing political risks arising due to differences between nations.	0.66	11.08
MF3	Our worldwide strategy emphasizes versatility in allocating human capital.	0.73	12.32
Worldwide Learning ($\rho_c = 0.91$). Aspects of your organizations worldwide strategy:			
WL1	We stress learning form differences in organizational processes across subsidiaries.	0.88	17.12
WL2	We emphasize shared learning across organizational	0.91	18.19

[11] The item deleted after the pretest said: "We seek a high level of flexibility in allocating key resources."

[12] The item deleted after the pretest read: "We put emphasis on learning from differences in managerial systems across countries."

	components in different businesses.		
WL3	We share innovations in products and organizational processes across subsidiaries.	0.65	11.51
Munificence ($\rho_c = 0.90$)			
MUNF1	The market in the US is growing at a faster rate than the rest of the world.	0.66	11.37
MUNF2	Our industry has good growth potential in the US.	0.86	15.62
MUNF3	The growth potential of our US subsidiary operations are good.	0.83	15.01
Volatility ($\rho_c = 0.76$)			
VOL1	The demand of our customers varies a lot.	0.43	6.36
VOL2	In our industry, the product and brand features vary a lot.	0.88	10.98
VOL3	In our industry, the price/quality demanded by customers vary a lot.	0.59	8.30
Dependence ($\rho_c = 0.88$). For the US institutional environment:			
DEP1	Our US subsidiary operations are highly dependent on the institutional constituents.	0.75	13.02
DEP2	Success of our business rests on favorable US national, state, and municipal government policies.	0.67	11.42
DEP3	The success of our business in the US depends on the institutional constituents.	0.82	14.65
Multiplicity ($\rho_c = 0.90$). For the US institutional environment:			
MULT1	Sometimes the demand made by one institutional constituent contradicts the demand made by another institutional member.	0.71	12.46
MULT2	Number of institutional constituents making demands of our subsidiary operations exceeds those in the other industries.	0.79	14.25
MULT3	Substantial number of institutional constituents	0.83	15.16

monitor our US subsidiary operations.

Process Control (ρ_c = 0.97). We have substantial influence:

PC1	Over the distributor's promotional activity for our product.	0.90	18.56
PC2	On the way the distributor manages our new products.	0.90	18.31
PC3	Over the distributor's selling policy and procedures for our product.	0.84	16.57

Output Control (ρ_c = 0.95). We market substantial effort to monitor the distributor's:

OC1	Performance on market penetration of new products.	0.86	17.16
OC2	Performance on increasing the customer base in their market.	0.94	19.88
OC3	Performance on sales volume of our product.	0.80	15.52

Distributor Performance (ρ_c = 0.90, see Table 3.2 for items)

Strategic	four-item scale for strategic performance	0.86	16.54
Selling	three-item scale for selling performance	0.75	13.63
Economic	four-item scale for economic performance	0.88	17.18

Fit for confirmatory factor analysis: $\chi^2_{(360)} = 543.32$, $p = 0.00$, GFI = 0.89, CFI = 0.95, NNFI = 0.94, PNFI = 0.72, RMSEA = 0.044, $p_{(RMSEA < 0.05)} = 0.92$.

[a] Composite scale reliability $\rho_c = [(\sum \lambda_i)^2 \text{ var}(\xi)] / [(\sum \lambda_i)^2 \text{ var}(\xi) + \sum \theta_{ii}]$ (see Bagozzi and Yi 1988, p. 80). Covariance matrix used as input matrix.

[b] All items are measured on a seven-point semantic differential scale, with 1 = disagree and 7 = agree. All responses were for the major product involved in the US operations, unless otherwise indicated. Listwise deletion is used to delete incomplete responses, which gave us 268 complete and usable responses.

Environment. Based on the construct definition and discussion of munificence in Dwyer and Oh (1987), Dwyer and Welsh (1985), and Etgar (1977) I developed three items to measure the construct. The first of the three items compared the growth potential

of US market with the rest of the world, the second measured the industry growth potential, and the third gauged the growth potential of the US subsidiary. Volatility in demand conditions was measured by adapting the three items used by Achrol and Stern (1988). The items measured variability in customer needs, product and brand features, and price/quality. As this is the first attempt to measure the facets of the institutional environment, I relied on the definition of these constructs to develop the items. The first of the three items for dependence directly measured the dependence of US operations on institutional constituents. The second item measured the extent to which the success of US business dependent on the US government policies. And the third item asked about the reliance of US operations on the local institutional constituents. The first of the three items used to measure multiplicity gauged the contradictory nature of demand made by US institutional members. The second item measured the relative number of relevant institutional constituents and the third item asked about the absolute number of institutional constituents monitoring the US subsidiary operations.

Distributor-specific variables. Process control was operationalized was adapting three items from Ouchi and Maguire (1975) and Jaworski and MacInnis (1989), which described MNC's effort to influence local distributor's procedures and activities. The three items reflect the multinational's emphasis on selling procedures, promotional practices, and new product introduction behavior (Nevin 1995). For output control three items reflecting multinational effort at monitoring distributor's performance are adapted from Ouchi and Maguire (1975) and Jaworski and MacInnis (1989). Specifically, these items reflect the multinational's effort to monitor distributor's performance in terms of sales volume, market penetration, and increasing customer base. I relied on extant

research on organizational performance (Venkatraman and Ramanujam 1986) and international marketing (Bello and Gilliland 1997) to conceptualize distributor performance in terms of three dimensions: strategic, selling, and economic. For strategic and selling performance two sets of four and three respectively were adapted from Bello and Williamson (1985). The items for strategic performance measured the distributor's effectiveness in pursuing distribution, marketing, pricing, and promotion strategies. Selling performance assessed the distributor's effectiveness in calling on customers, maintaining contact with customers, and servicing customers. For economic performance four items describing distributor's accomplishment of sales, profit, growth, and economic goals were adapted from Madsen (1987).

Pretest

The objective of the pretest was to fine tune the data collection protocol and to make sure that the scales were adequate enough. I mailed 400 surveys to a random sample of 200 respondents from each of the two mailing lists. Two weeks after mailing the original surveys I mailed post card reminders to each informant. I received 91 responses and 16 questionnaire re-directing forms after four weeks, on re-mailing the 16 surveys to newly identified respondents, I received 6 additional responses. In all 97 responses were received out of which 76 were complete and usable. I used item-to-total correlations to access the validity of measurement instruments with multiple items. Items with correlation coefficients greater than 0.80 were retained for the final study.

Table 3.2

Distributor Performance Measurement Model: Confirmatory Factor Analysis and Scale Reliability [a]

Item [b]	Item Description	Standardized Loading	t-value
Strategic Performance ($\rho_c = 0.97$)			
STR1	Marketing strategy for the US market.	0.95	22.27
STR2	Distribution strategy for the US market.	0.91	19.71
STR3	Pricing strategy for the US market.	0.89	18.14
STR4	Promotion strategy for the US market.	0.90	20.21
Selling Performance ($\rho_c = 0.93$)			
SEL1	Maintaining Contacts with customers.	0.92	17.47
SEL2	Calling on customers in person.	0.88	17.33
SEL3	After-sales servicing of customers.	0.88	19.00
Economic Performance ($\rho_c = 0.97$)			
ECON1	Return on investment goals for the US market.	0.92	20.72
ECON2	Sales goals for the US market.	0.96	23.63
ECON3	Profit goals for the US market.	0.93	24.44
ECON4	Growth goals for the US market.	0.90	22.27

Fit for confirmatory factor analysis: $\chi^2_{(41)} = 77.91$, $p = 0.00$, GFI = 0.92, CFI = 0.998, NNFI = 0.998, PNFI = 0.74, RMSEA = 0.058, $p_{(RMSEA < 0.05)} = 0.24$.

[a] The respondents indicated how effectively the distributor performed strategic and selling related activities for the major product/process involved in the US operations. For economic performance the respondents indicated the effectiveness with which the distributor accomplished its economic objectives. Response scale were seven-point Likert-type scale with 1 = unsatisfactory and 7 = satisfactory.

[b] Composite scale reliability $\rho_c = [(\sum \lambda_i)^2 \text{ var}(\xi)] / [(\sum \lambda_i)^2 \text{ var}(\xi) + \sum \theta_{ii}]$ (see Bagozzi and Yi 1988, p. 80). Asymptotic covariance matrix used as input matrix.

Final Study

An additional 1000 questionnaires, 500 from each list were mailed for the final study. The same procedure as in the pretest was followed. 201 responses and 50 Questionnaire Re-directing Forms were received. On re-mailing these forms I received another 20 responses. In all 221 responses were received of which 192 were usable.

Measure Validation

Confirmatory factor analysis was used to assess the convergent and discriminant validity for the measurement model (Gerbing and Anderson 1988). To accommodate the multidimensional nature of distributor performance, I first estimate a measurement model for the three performance sub-constructs (Table 3.2). The results show good fit for the performance model (GFI = 0.92, CFI = 0.998, NNFI = 0.998, PNFI = 0.74, RMSEA = 0.058), though the χ^2 statistic is significant ($\chi^2_{(41)} = 77.91, p = 0.00$). All factor loading are above the recommended 0.4 and are statistically significant, in addition, the reliabilities are above the 0.7 cut-off (Nunnally and Bernstein 1994). Further, the phi's are statistically different from 1, thereby establishing discriminant validity (Anderson and Gerbing 1982).

Subsequently, the items for each performance sub-construct were averaged to develop a three indicator the performance construct. These three indicators were in turn used as input in a confirmatory factor analysis model with items for the remaining nine constructs. Table 3.1 shows the results of confirmatory factor analysis for the 30 item, 10 construct measurement model. The results show a reasonable fit (GFI = 0.89, CFI = 0.95, NNFI = 0.94, PNFI = 0.72, RMSEA = 0.044) with the exception of the χ^2 statistic, which is again significant ($\chi^2_{(360)} = 543.32, p = 0.00$). Further, all factor loadings are greater the

0.4 cut-off and are statistically significant (Nunnally and Bernstein 1994). In addition, the reliabilities are greater than 0.7 and the phi's are statistically different from 1 (Anderson and Gerbing 1982). Finally, following Armstrong and Overton (1977), I assessed non-response bias by comparing the responses the early respondents with those for the late respondents and found no statistical difference in the means for the ten measures.[13] I provide the descriptive statistics for the constructs, along with the correlations among these constructs in Table 3.3.

Table 3.3

Correlations, Means, and Standard Deviations (n = 268)

Construct	X_1	X_2	X_3	X_4	X_5	X_6	X_7	X_8	X_9	X_{10}
Global Efficiency X_1										
Multinational Flexibility X_2	.53									
Worldwide Learning X_3	.33	.58								
Munificence X_4	.18	.07	.07							
Volatility X_5	.02	.06	.06	.19						
Dependence X_6	.20	.27	.12	.01	-.01					
Multiplicity X_7	.08	.13	-.04	-.05	.02	.55				
Process Control X_8	.04	.26	.17	.02	.01	-.02	-.07			
Output Control X_9	.21	.29	.16	.08	.10	.13	.11	.37		
Performance X_{10}	.09	.15	.19	.16	-.12	.00	-.03	.40	.55	
Mean	3.73	4.02	4.06	4.63	4.33	3.12	3.06	4.63	5.07	4.87
Standard Deviation	1.14	1.08	1.30	1.37	1.24	1.37	1.37	1.70	1.43	1.13

[13] While comparing early respondents with late respondents we combined the early respondents (obtained by median split) from the pretest with those of the final study and repeated this procedure for the late respondents. For each variable aggregate responses were created by averaging the responses on the items for that measure. The independent sample t-test gave t-values of -0.14, 0.32, -0.94, -0.39, 0.07, 0.37, -0.53, -0.26, 1.47, and 1.28 for global efficiency, multinational flexibility, worldwide learning, munificence, volatility, dependence, multiplicity, process control, output control, and distributor performance respectively.

Results

Full information maximum likelihood estimates for the proposed model (Figure 3.1) are presented in Table 3.4. Control theorist observe that process and output control are substitutes (Eisenhardt 1985; Ouchi and Maguire 1975) and the research operationalizing these constructs shows them to be positively correlated (Bello and Gilliland 1997; Jaworski and MacInnis 1989). Therefore, while obtaining the estimates I correlated the structural errors between these constructs. Similarly, task environment scholars indicate that both munificence and volatility rely on demand conditions and should be positively correlated (Dess and Beard 1984; Dwyer and Welsh 1985). Following a similar logic, institutional theorist indicate that the dimensions of the institutional environment should be positively correlated (DiMaggio and Powell 1983; Oliver 1991). Thus, I correlated the structural errors among the two task environment dimensions and the two institutional environment constructs.

The proposed model has reasonably good fit for the data (GFI = 0.88, CFI = 0.95, NNFI = 0.95, PNFI = 0.76, RMSEA = 0.041), though the χ^2 is significant ($\chi^2_{(382)}$ = 555.08, $p = 0.00$). To show greater confidence in the proposed model (the theoretical model M_T), I tested the model against two unconstrained alternatives. For the first alternative (M_{U1}), I relaxed the four paths from environment variables to the control variables i.e., VOL $\Rightarrow$ PC, MULT $\Rightarrow$ PC, MUNF $\Rightarrow$ OC, and DEP $\Rightarrow$ OC. The χ^2 difference test (CDT), recommended by Anderson and Gerbing (1988) is used to test the null hypothesis: $M_T - M_{U1} = 0$. The CDT gives a nonsignificant χ^2 statistic ($\chi^2 = 3.72$, d. f. = 3), indicating that the restricted model is statistically equivalent to the unconstrained

model M_{U1}. For the second unconstrained model (M_{U2}), I relaxed the three paths from strategic variables to distributor performance, i.e., GE ⇒ PERF, MF ⇒ PERF, and WL ⇒ PERF. Again the CDT test gives a nonsignificant χ^2 statistic ($\chi^2 = 0.44$, d. f. = 4), indicating the two models to be equivalent.

In terms of the direct effect hypothesis, two of the possible eleven hypotheses are not supported (Table 3.4). The findings show that both process control (H_1: b = 0.253, t = 3.14) and output control (H_2: b = 0.248, t = 3.07) mechanisms positively influence distributor performance. These results imply that effort on part of the multinational to either monitor distributor's behavior or performance, improves distributors productivity. As was anticipated, the two task environment facets, i.e., munificence (H_{3b}: b = 0.224, t = 3.25) and volatility (H_{4b}: b = -0.206, t = -2.88) also influence distributor performance in the hypothesized directions. Therefore, the distributor's performance improves in munificent markets but declines as demand volatility increases.

The four hypotheses concerning the influence of environment on the MNC's use of control mechanisms are supported, with the exception of the effect of munificence on process control (H_{3a}: b = -0.008, t = -0.14). One possible explanation of this result is that the downstream shift in power in munificent markets (Dwyer and Oh 1987) puts the distributor in command and the distributor is able to dictate its terms to the multinational, implying the multinational does not exert control over the distributor. As was hypothesized, demand volatility increases the use of output control mechanisms (H_{4a}: b = 0.078, t = 1.36), implying that under high demand volatility the multinational relies on the distributor to take appropriate actions but monitors its performance. Likewise, the data support the negative influence of dependence on process control (H_5: b = -0.111, t = 1.58)

and the positive influence of multiplicity on output control (H_6: b = 0.120, t = 1.94). Thus, as the dependence of host country operations on the local institutional constituents increases the multinational reduces reliance on process control mechanisms, but as the multiplicity of local institutional constituents increases the multinational relies more heavily on output control mechanisms.

The two out of three hypotheses concerning the influence of strategic variables on use of control mechanism are supported by the data. Specifically, emphasis on global efficiency increases the use of output control mechanisms (H_{7a}: b = 0.293, t = 4.37), and as theorized, strategic motive of multinational flexibility increases the reliance on process control mechanisms (H_{8a}: b = 0.293, t = 3.82). Therefore, early intervention and observing business partner's behavior is emphasized by multinationals pursuing flexibility as a strategic goal. Finally, emphasis on worldwide learning does not seem to increase the use of output control (H_{3a}: b = -0.008, t = 0.14).

For the mediational effects, I expect both the path coefficient to be significant to show support for a hypothesis. The results support five of the six mediational hypothesis. Specifically, global efficiency does not have an indirect influence through munificence on the use process control mechanisms (H_{7b}: $b_1 = 0.281$, $t_1 = 3.87$, $b_2 = -0.008$, $t_2 = -0.14$). Therefore emphasis on achieving efficiency in operations across countries does not influence the use of process control mechanisms in munificent markets. Dependence mediates the influence of multinational flexibility on process control (H_{8b}: $b_1 = 0.506$, $t_1 = 3.53$, $b_2 = -0.111$, $t_2 = -1.58$) and multinational flexibility has an indirect positive influence on output control via volatility (H_{8c}: $b_1 = 0.147$, $t_1 = 1.94$, $b_2 = 0.078$, $t_2 = 1.36$) and multiplicity (H_{8c}: $b_1 = 0.404$, $t_1 = 2.93$, $b_2 = 0.120$, $t_2 = 1.94$). Finally, volatility

Figure 3.1

Proposed Model

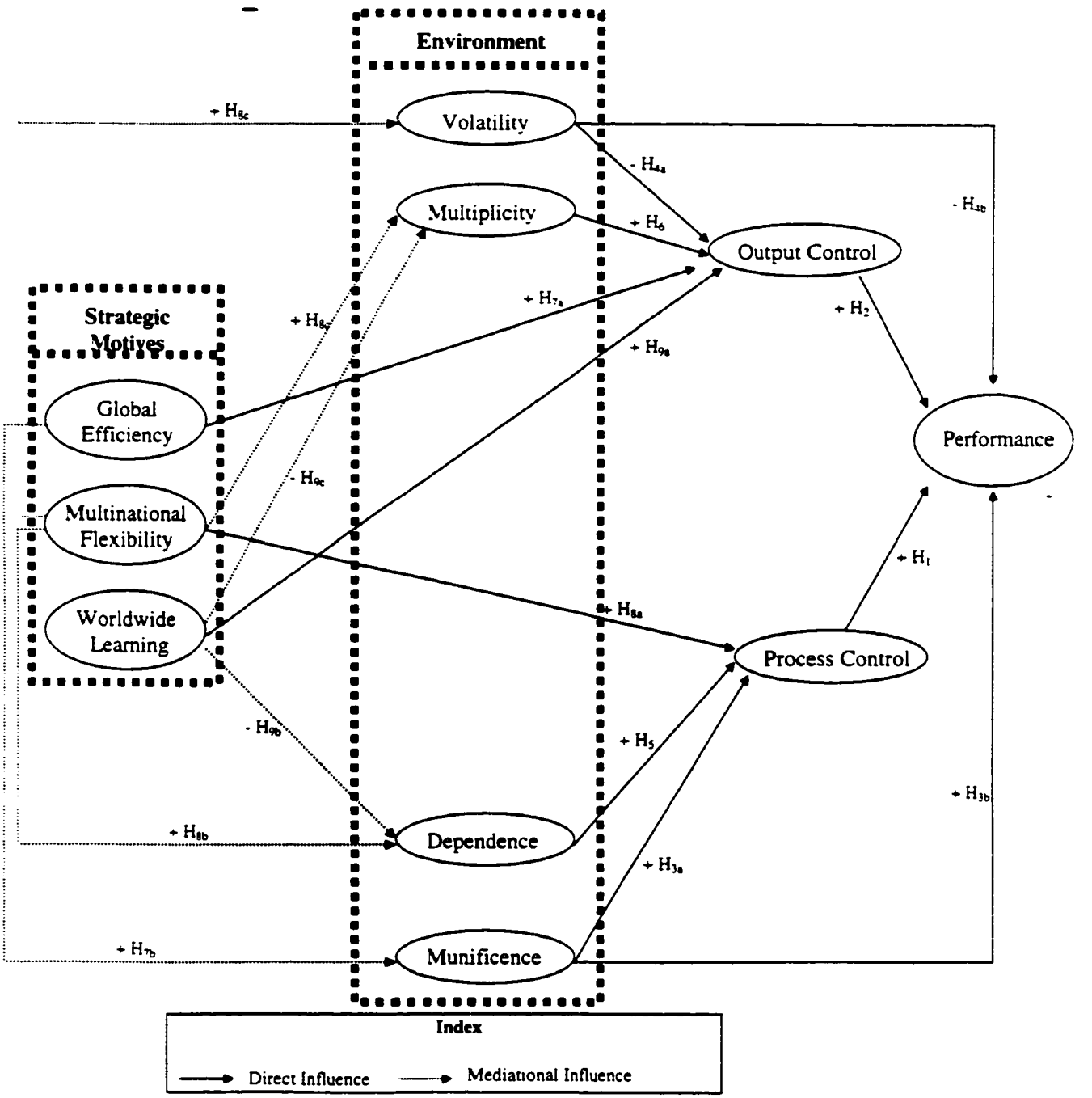


Table 3.4

Structural Model Results

Linkages in the model	Hypotheses Number	Hypotheses Sign	Parameter Estimate	t-value
Direct Influence				
PC ⇒ PERF	H_1	+	0.253	3.14
OC ⇒ PERF	H_2	+	0.248	3.07
MUNF ⇒ PC	H_{3a}	+	-0.008 *	-0.14
MUNF ⇒ PERF	H_{3b}	+	0.224	3.25
VOL ⇒ OC	H_{4a}	+	0.078	1.36
VOL ⇒ PERF	H_{4b}	-	-0.206	-2.88
DEP ⇒ PC	H_5	-	-0.111	-1.58
MULT ⇒ OC	H_6	+	0.120	1.94
GE ⇒ OC	H_{7a}	+	0.293	4.37
MF ⇒ PC	H_{8a}	+	0.293	3.82
WL ⇒ OC	H_{9a}	+	0.079 *	1.26
Indirect and Mediational Influences (both coefficient should be significant to support the hypothesis; direction is product of the two coefficient; first parameter estimate and t- value followed by the second).				
GE ⇒ MUNF ⇒ PC	H_{7b}	+	0.281, -0.008 *	3.87, -0.14
MF ⇒ DEP ⇒ PC	H_{8b}	-	0.506, -0.111	3.53, -1.58
MF ⇒ VOL ⇒ OC	H_{8c}	+	0.147, 0.078	1.94, 1.36
MF ⇒ MULT ⇒ OC	H_{8c}	+	0.404, 0.120	2.93, 1.94
WL ⇒ DEP ⇒ PC	H_{9b}	+	-0.271, -0.111	-2.12, -1.58
WL ⇒ VOL ⇒ OC	H_{9c}	-	-0.238, 0.078	-1.84, 1.36

$\chi^2_{(382)} = 555.08$, $p = 0.00$, GFI = 0.88, CFI = 0.95, NNFI = 0.95, PNFI = 0.76, RMSEA = 0.041, $p_{(RMSEA < 0.05)} = 0.98$.

INDEX

GE - Global Efficiency. MF - Multinational Flexibility WL - Worldwide Learning
MUNF - Munificence VOL - Volatility DEP - Dependence
MULT - Multiplicity PC - Process Control OC - Output Control
PERF - Performance * Nonsignificant at $p < 0.10$

mediates the influence of worldwide learning on output control (H_{9b}: $b_1 = -0.271$, $t_1 = -2.12$, $b_2 = -0.111$, $t_2 = -1.58$) and worldwide learning has an indirect positive effect on process control through dependence (H_{9c}: $b_1 = -0.238$, $t_1 = -1.84$, $b_2 = 0.078$, $t_2 = 1.36$).

Discussion

In summary, the results show that a local distributor's performance is determined by the extent to which the MNC utilizes process and output control mechanisms along with the munificence and volatility in the local task environment. The extent to which a manufacturing MNC uses these two control mechanisms in turn depends on the local environment, including munificence, dependence, and multiplicity, along with the worldwide strategic motives of the MNC. Finally, I also examine mediational effects and find that the local environment serves as a filter for the influence of the strategic motives on the MNC's use of formal control mechanisms.

Implications

Theoretically, I integrate research on multinational strategy and environment to examine the subsidiary-distributor relationship. I move beyond the export channels context and investigate the influence of headquarters' imperative to control its subsidiaries on the subsidiary's use of formal coordination mechanisms over its local distributors. In this complex relational puzzle of headquarters-subsidiary-distributor, I incorporate the influence stemming from the facets of the local task and institutional environments. The results support the theoretical hypotheses that both worldwide strategy and local environment are important in explaining the subsidiary's use of formal control mechanisms. Specifically, the results highlight four important aspects of multinational subsidiary distribution management.

First, unlike recent research on export channels (Bello and Gilliland 1997), the data show that the use of process control mechanisms by the multinational has positive effects on distributor performance. The use of formal control mechanisms signal the distributor that the multinational is interested in the host country operations and values the distributor's contributions, thereby enhancing distributor performance.

Second, I move beyond research on channel integration (cf., Anderson and Coughlan 1987; Klein, Frazier, and Roth 1990), which assumes extent of control to be completely dependent on the degree of multinational channel integration in a foreign market. In addition, I incorporate heterogeneity in nature of control stemming from the time of multinational's interference in distributor's activities (Celly and Frazier 1996; Jaworski 1988). I do recognize that research on channel integration in international markets provides important insights, but I build on this research and explicitly focus on relationship management process for MNC subsidiaries.

Third, relying on research in organizational theory (DiMaggio and Powell 1983; Oliver 1991), I develop the theoretical facets of the institutional environment, which are critical in the modern world (Boddewyn and Brewer 1994; Prahalad and Doz 1987). By incorporating these constructs with those of the task environment, I develop a holistic perspective on multinational environment and study its influence on subsidiary channel management.

Fourth, I develop and test a process model, with explicit emphasis on mediational effects. The results show that environmental facets mediate the influence of strategic motives on the use of control mechanisms. Specifically, dependence on local institutional constituents reduces the effect of multinational flexibility on the use of process control

mechanism. Similarly, demand volatility makes learning difficult and reduces attractiveness of the local market, thereby decreasing the influence of worldwide learning on output control. Likewise, the findings show that the influence of multinational flexibility on output control and the effect of worldwide learning on process control is contingent on appropriate environmental conditions.

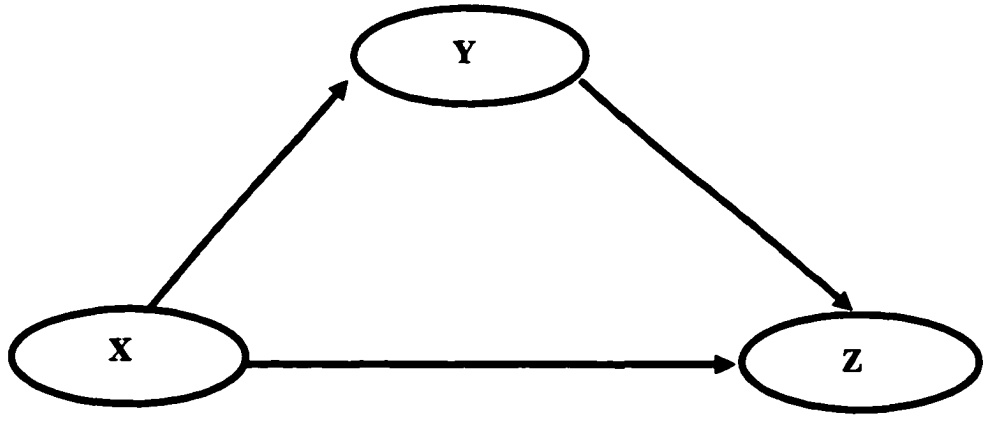
Finally, the research has two important implications for multinational managers, though I do recognize that I am limited by the research context and the findings should be cautiously interpreted. First, formal control and coordination mechanisms seem to signal multinational's interest in local business and help reap benefits from the multinational's diverse knowledge and capabilities as exhibited in increased distributor performance. Second, I show that the influence of strategic motives is contingent on the environment. Therefore, the appropriate strategy should be developed by taking both the task and the institutional environments into consideration.

Limitations and Future Research Directions

The findings are subject to some limitations, which are also fruitful avenues for future research. Conceptually I restrict myself to formal control mechanisms, but extensions incorporating theoretical facets of informal control mechanisms should be beneficial (Jaworski 1988). In addition, future research should examine the influence of MNC specific variables like asset specificity, psychic distance, and value of firm-specific knowledge among others. Empirically, I am constrained by the context of the study - German and Japanese subsidiaries in the US. Extensions to developing countries and emerging powers like China, Brazil, and Mexico among others would aid in generalizations of the theory.

Exhibit 3.1

Mediational Effects



Chapter 4

Environment-Strategy Coalignment and Multinational Subsidiary Performance: An Empirical Examination

Overview

The performance of a multinational subsidiary not only determines the success of the multinational's foreign operations but also that of the multinational's worldwide operations. This chapter uses the strategy-environment coalignment perspective to study the influence of (1) the factors internal to a multinational corporation (MNC) and (2) the fit between a MNC's worldwide strategy and the facets of the host country environment on MNC subsidiary performance. The results show that demand munificence enhances subsidiary performance, though demand volatility in the host country does not have a significant influence. The conjectures of institutional theorist concerning the non-significant influence of the facets of the local institutional environment on subsidiary performance are supported, though institutional environment moderated the influence of worldwide learning. In addition, as hypothesized psychic distance between a MNC headquarters and its subsidiary tends proves detrimental for the subsidiary performance, while MNC performance increases with the value of firm-specific knowledge. Finally, the results support the hypothesis that the influence of a MNC's worldwide strategic motives is contingent on the local environment.

Introduction

> *Global competition is pervasive. From semiconductors to cleaning services, no industry is free from the impact of global competition... The very distinction between 'domestic' and 'global' businesses is open to challenge.*
>
> Prahalad and Hamel (1994, p. 5-6).

The effective and efficient management of operations scattered across countries is receiving increasing attention from both international business and marketing scholars (Bartlett and Ghoshal 1995; Cavusgil and Zou 1994; Kogut 1985a; Kotabe 1990; Porter 1990; Prahalad and Hamel 1994). In the increasingly global world, organizational performance and survival is to a large extent contingent on its foreign subsidiary operations. The study of the determinants of organizational performance has been at the heart of marketing research, though the empirical research has been primarily limited to domestic firms (cf., Buzzell and Gale 1987; Jacobson 1990; Phillips, Chang, and Buzzell 1983). The handful of studies that examine organizational success in the international context have explicitly focused on export market ventures (cf., Bello and Gilliland 1997; Cavusgil and Zou 1994; McGuiness and Little 1981).

The literature on multinational mode of entry and international expansion stresses that exports is one of the many ways, including licensing, strategic alliances, joint ventures, and wholly-owned subsidiaries, for a firm to organize its foreign operations or structure its governance mechanisms (Anderson and Gatignon 1986; Hill, Hwang and Kim 1990; Root 1994). As exporting is one of many ways for a MNC to organize its foreign subsidiary operations it becomes important to develop an understanding of the drivers of multinational subsidiary performance across various governance mechanisms.

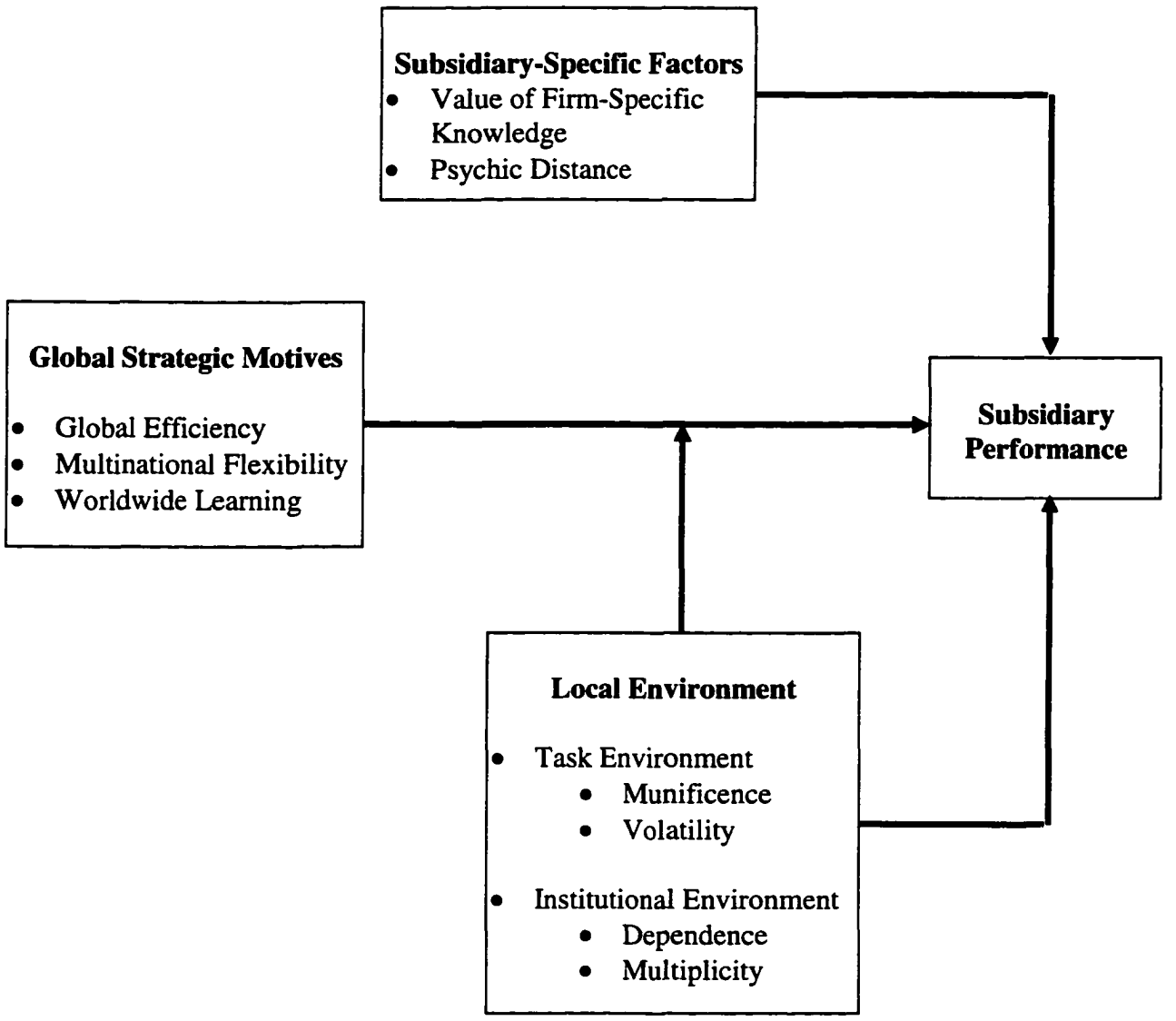
The main objective of this research is to study MNC subsidiary performance across various governance mechanisms that MNCs use to organize their subsidiary operations. To achieve this objective, I rely on contemporary research on export channels (cf., Cavusgil and Zou 1994), multinational strategy (cf., Bartlett and Ghoshal 1995), organizational environments (cf., Rosenzweig and Singh 1991), and institutional theory (cf., DiMaggio and Powell 1983) to develop and test a model for the drivers of multinational subsidiary performance.

Specifically, I adopt the strategy-environment coalignment perspective (Aldrich 1979; Porter 1980; Venkatraman and Prescott 1990), which states that a fit between organizational strategy and its context - both external environment and internal factors - has an influence on organizational performance (Chandler 1962; Gupta and Govindarajan 1984; Hofer 1975). In the case of multinational subsidiary management, the strategy-environment coalignment principle implies that in addition to the internal factors (MNC-specific factors) the subsidiary performance depends on the fit between a MNC's worldwide strategy (organizational strategy) and the facets of the host country environment (external environment). Consistent with this principle, I conceptualize multinational subsidiary performance (1) to be directly determined by a MNC's worldwide strategy, the local environment, and subsidiary-specific variables and (2) to be dependent on the interactions between the MNC's worldwide strategic motives and the facets of the local environment (see Figure 4.1; Douglas and Wind 1987; Porter 1980; Prahalad and Doz 1987).

This chapter makes four major contributions to literature on multinational performance in foreign markets. First, I identify the crucial and overlooked aspect of

Figure 4.1

Conceptual Model



multinational subsidiary performance (across various governance mechanisms) and examine the empirical link between multinational's worldwide strategy and subsidiary performance. Second, I do not treat the local environment as a homogenous unidimensional construct and examine theoretical facets of both the task environment and the institutional environment (Oliver 1991). Third, I conceptually develop and empirically test the influence of the interactions between the theoretical facets of multinational strategy and components of the local environment, for both the local task and the host country institutional environments. This contingency perspective brings to focus the adjustments that the multinational corporations (MNCs) have to make to adopt their strategy to the local environment. Fourth, recognizing that foreign direct investment into the US has been growing at unprecedented rates (Rosenzweig 1994), I test the model for the Japanese and German subsidiaries in the US.

The remainder of the chapter is organized along the following lines. In the next section I review relevant literature and develop my research hypotheses. Then, I elaborate on the data collection and analysis methodology. Subsequently, I present the results and end with a few concluding remarks on limitations and possible future research directions.

Conceptual Background and Research Hypotheses

Multinational corporations are unique in the sense that they have to manage the pressures of coordinating and controlling diverse country operations, each with its own unique political-economy and idiosyncratic demands (Boddewyn and Brewer 1994; Prahalad and Doz 1987). Prahalad and Doz (1987) succinctly summarized these environmental forces as the pressures of global integration and local responsiveness. These seemingly opposing pressures of global integration and local responsiveness result in multinationals

needs to be efficient with emphasis on low cost strategies and to be flexible enough to satisfy unique country-specific needs with stress on differentiated strategies (Bartlett and Ghoshal 1995; Porter 1980). Consistent with the strategy-environment coalignment principle, I conceptualize multinational subsidiary performance to be contingent on the local host country environment, subsidiary-specific factors, and the multinational's worldwide strategy. Now I elaborate on the theoretical facets of the host country environment and components of a MNC's strategic motives to develop my research hypotheses.

Environmental Antecedents to MNC Subsidiary Performance

Following contemporary research in organizational theory and multinational environments, I conceptualize local environment in the host country in terms of the *task environment* and the *institutional environment* (Oliver 1991; Rosenzweig and Singh 1991). The motivations for both the task and the institutional environments are consistent with the open systems perspective (Achrol, Reve, and Stern 1983), in that they recognize the importance of the organizational environments, but differs in the premises and bases of their conceptualization. Now I elaborate on and examine the theoretical facets of the task environment, followed by components of the institutional environment.

Task Environment

Task environments are those that reward organizations for effective and efficient management (Meyer and Scott 1983). In organization theory and marketing literature two dominant perspectives have been used to conceptualize the task environment (Aiken and Hage 1968; Achrol 1991; Dill 1958; Dwyer and Welsh 1985; Heide and Weiss 1995). First, consistent with the resource dependence perspective, the task environment has been

viewed as stocks of resources (cf., Pfeffer and Salancik 1978), which raises issues of organizational *dependence* on the environment for critical resources (Aiken and Hage 1968; Emerson 1962).

The construct of ***munificence***, which distinguishes between rich and lean markets, is used to capture the extent of organizational dependence on the environment for critical resources (cf., Dess and Beard 1984; Dwyer and Welsh 1985; Sharfman and Dean 1991). The fundamental resource implication of munificence is reflected in the input and output sectors, each having implications for supply and demand management respectively (Achrol, Reve, and Stern 1983; Dwyer and Oh 1987). To be consistent with the demand-management perspective of marketing, I focus on munificence in the output sector of the host country. From the demand management perspective, munificence measures the extent to which the environment provides sufficient resources for the firms present in it (Aldrich 1979; Dess and Beard 1984; Starbuck 1976) and the degree of competition for these resources (Aldrich 1979; Mintzberg 1979; Sharfman and Dean 1991). Therefore, munificent markets have both good industry and firm growth potential (Pfeffer and Salancik 1978; Sharfman and Dean 1991).

As far as the subsidiary performance goes, due to their very nature, rich and munificent markets, in comparison to lean and scarce markets, are likely to be characterized by enhanced subsidiary performance (Rosenzweig and Sing 1991). This conjecture is drawn from the fact that munificent markets, by definition, are characterized by abundance of resources (demand for the firm's product) and lack of competition. Thus, I hypothesize:

H_1: *MNC subsidiary performance is likely to be higher in munificent environments in comparison to lean markets.*

The second task environment perspective views the environment as an information source resulting in the problem of *uncertainty* about external conditions. Uncertainty about external conditions results in the decision makers need to assimilate and anticipate environmental conditions (Achrol and Stern 1988; John and Weitz 1988; Gundlach and Achrol 1993). This information perspective, exemplified by Dill (1958), Duncan (1972), and Weick (1969), examines the influence of environmental uncertainty in the host country stemming from variability in the environment. To remain consistent with the demand management perspective of marketing, I use the construct of demand ***volatility*** to capture uncertainty stemming from changes in demand and the consumer/customer environment (Achrol and Stern 1988; Dwyer and Welsh 1985).

Volatile environments offer more contingencies to organizations (Thompson 1967, p. 73), which create difficulties in planning, coordinating, and implementing marketing plans and strategies (Achrol 1991; Glazer 1991; Heide and Weiss 1995). Research on organizational environments (cf., Aldrich 1979; Dess and Beard 1984; Sharfman and Dean 1991) and on environments in international business (Boddewyn and Brewer 1994; Rosenzweig and Singh 1991; Sundaram and Black 1992) suggests that volatility and the associated uncertainty are likely to make the local market difficult to manage and thereby have an adverse influence on performance. Therefore, I hypothesize:

H_2: *MNC subsidiary performance is likely to be reduced in volatile markets in comparison to stable environments.*

Institutional Environment

In contrast to task environments, which reward organizations for effective and efficient management, institutional environments are characterized by elaborate rules and requirements to which individual organizations must conform in order to receive legitimacy and support (DiMaggio and Powell 1983; Meyer and Scott 1983; Zucker 1977). The focus on institutional environment brings issues related to political power and institutional legitimacy to the forefront, which are purported to aid in organizational survival (Baum and Oliver 1991; Meyer and Zucker 1989).

In international business, institutional environments take on greater significance as the MNCs have to deal with perceptions of being foreigners and manage multiple different sovereignties (Boddewyn and Brewer 1994; Prahalad and Doz 1987; Rosenzweig and Singh 1991). Host country institutional constituents, including the government, professional associations, consumer bodies, and the general public, impose variety of constraints on MNC operations (Rosenzweig and Singh 1991). One important consequence of these demands and constraints is that a MNC's host country operations become *dependent* on the relevant institutional constituents (Oliver 1991).

A MNC's subsidiary operations can be dependent on local institutional constituents for critical resources (Pfeffer and Salancik 1978), funds (Salancik 1972), or just the simple right to do business (DiMaggio and Powell 1983). ***Dependence*** on local institutional constituents adversely influences organizational ability to resist demands made by these institutional constituents (DiMaggio and Powell 1983) and reduces its incentives to manage its local business (Pfeffer and Salancik 1978). In addition, the survival of a MNC subsidiary is highly dependent on local institutional constituents and

is contingent on conformity or isomorphism with the institutional environment (DiMaggio and Powell 1983; Oliver 1991).

The question of interest is the performance implications of the dependence of a MNC's subsidiary operations on local institutional constituents. Institutional theory emphasizes that dependent organizations surrender autonomy to the local institutional constituents (DiMaggio and Powell 1983). This loss of autonomy is likely to make the host country market less attractive. Further, a MNC's motivations and commitments are likely to be greater towards attractive markets in comparison to unattractive markets. Classic research on organizations supports this assertion and shows that high degree of both motivation and commitment positively influences performance (cf., Lawrence and Lorsch 1986; Thompson 1967). I rely on this classic research and hypothesize an adverse influence of dependence on MNC subsidiary performance.

Note that this conjecture of the adverse influence of dependence on MNC subsidiary performance is contrary to popular beliefs of institutional theorist, who contend that institutional environments provide legitimacy to organizations, which aids in organizational survival but not organizational performance (Baum and Oliver 1991, 1992; DiMaggio and Powell 1983; Meyer and Zucker 1989). Consistent with this literature, I do propose an alternative hypothesis, which states that dependence on host country institutional constituents will have no influence on MNC subsidiary performance.

H_3: *Higher the dependence of a MNC subsidiary on local institutional constituents lower the performance of the MNC subsidiary.*

H_{3alt}: *Dependence of a MNC subsidiary on local institutional constituents will not influence the MNC subsidiary performance.*

In addition to dependence, institutional theorist emphasize that the ***multiplicity*** of institutional constituents has ramifications for MNC host country operations (Oliver 1991; Rosenzweig and Singh 1991). For instance, Scott (1983, p. 105) observed that state controls are complex and fragmented, which results in "a jungle of conflicting requirements." Multiplicity captures the environmental complexity stemming from large number of institutional constituents imposing variety of contradictory laws, regulations, and expectations on organizations (Oliver 1991).

Multiplicity implies that adhering to the requirements of one institutional constituent precludes a MNC subsidiary from satisfying the demands of another institutional member. In turn, managing multiplicity is critical for the survival of a MNC's subsidiary operations and requires dexterity on part of the MNC, as acquiescence with the institutional expectations is not a possibility (Oliver 1991). This multiplicity is likely to adversely influence MNC subsidiary performance in two ways. First, it makes a MNC subsidiary focus on and utilize time and resources to manage the institutional environment. These resources could have been spend on other performance enhancing activities. Second, the MNC subsidiary is unlikely to satisfy all institutional constituents, which implies that sanctions from institutional members are a taken for granted reality. Therefore, either due to resources spent on managing the institutional constituents or because of sanctions from the institutional members, the subsidiary performance is likely to be adversely influenced by the multiplicity in the institutional environment.

But institutional theorist contend that institutional constituents provide legitimacy to organizations, which aids in organizational survival but not organizational performance (Baum and Oliver 1991; DiMaggio and Powell 1983; Meyer and Zucker 1989).

Consistent with this literature, I do propose an alternative hypothesis, which says that multiplicity of institutional demands will have no influence on MNC subsidiary performance.

H_4: *Greater the multiplicity of local institutional demands lower the performance of a MNC subsidiary.*

H_{4alt}: *Multiplicity of local institutional demands will not influence MNC subsidiary performance.*

Subsidiary-Specific Antecedents to MNC Subsidiary Performance

The internal forces of a MNC captures the MNC subsidiary's capabilities and limitations, which influences the subsidiary's capacity to follow a desired course of action (Bartlett and Ghoshal 1995; Porter 1980, 1986a). Two such factors are: (1) the value of the MNC's proprietary knowledge and (2) the psychic distance between the MNC headquarters and its subsidiary (cf., Anderson and Gatignon 1986; Hill, Hwang, and Kim 1990; Kogut and Singh 1988). A firm's assets and skills are potential sources of competitive advantage, which enhance the value of firm-specific knowledge (Cavusgil and Zou 1994; Day 1994; Day and Wensley 1988). Psychic distance between the MNC headquarters and its subsidiary is a critical component of international business and is likely to influence the internal processes of the MNC (Anderson and Gatignon 1986; Bello and Gilliland 1997). Now I elaborate on and examine the influence of these two factors, i.e., value of firm-specific knowledge and psychic distance, on MNC subsidiary performance.

Value of Firm-Specific Knowledge

The value of firm-specific knowledge is reflected in a firm's assets and internal processes, which create resource bundles and have the potential to become the means of creating and sustaining competitive advantage (Barney 1991; Conner 1991; Penrose 1959; Wernerfeldt 1984). The two key premises for these resources to create sustainable competitive advantage are that they must (1) determine a firm's performance and that they (2) should be rare and valuable. In other words these resources should create "barriers to imitation" (Rumelt 1984) and should be nonsubstitutable. These resources embody "anything that can be thought of as a strength or weakness of a given firm," which includes both tangible and intangible assets (Wernerfeldt 1984, p. 172). Examples include: Patents, brand names, technical and creative talent, organizational culture, coordination skills, among others.

By their very conceptualization, these resources have the potential to generate future rents for a firm owning them and, thereby, embody the firm with power. As the value of firm-specific proprietary knowledge (i.e., resources) increases, so does the power of the headquarters' over its subsidiaries. The increased ability of the headquarters' to streamline and control subsidiary operations is likely to positively influence subsidiary performance as the headquarters' is able to derive benefits from its worldwide experience and utilize valuable firm know-how (Black and Boal 1994; Day and Wensley 1988).

H_5: *Greater the value of firm-specific knowledge for a MNC, higher the performance of the MNC subsidiary.*

Psychic Distance

Psychic distance measures the extent of difference between cultures, language, and values of a MNC's home and the MNC subsidiary's host countries (Klein and Roth 1990). These differences inhibit communications between the headquarters and its subsidiary, which creates difficulties for the headquarters in the management and the evaluation of the subsidiary (Anderson and Gatignon 1986; Bello and Gilliland 1997). The difficulties in evaluating performance arise due to disagreements over rules and procedures, which result from communication problems (Ouchi 1980; Terpstra and Davis 1991). According to Mohr and Nevin (1990), such breakdown of communication adversely influences message content, frequency, and modality, which is likely to increase transaction cost (costs of doing business) and eventually lower the subsidiary performance (Anderson and Gatignon 1986; Kogut and Singh 1988).

H_6: *Greater the psychic distance between a MNC headquarter and its subsidiary, lower the performance of the subsidiary.*

Strategic Antecedents to MNC Subsidiary Performance

The complex and turbulent global competitive environments have led to a number of perspectives on what should be the appropriate strategic motives of MNCs. For instance, Levitt (1983) advocates a uniform strategy of marketing mix standardization, Hout, Porter, and Rudden (1982) recommend exploiting both economies of scale and synergy benefits, while Hamel and Prahalad (1985) espouse extracting benefits from shared investments across businesses and markets. Though there might be a debate on a MNC's appropriate strategic posture, scholars seem to agree that businesses that do not either think or act globally are at a competitive disadvantage (Levitt 1983; Ohmae 1989;

UNCTAD 1993). These and other researchers emphasize that MNC's should strive to derive benefits from a standardized strategy (Porter 1980, 1986a; Prahalad and Doz 1987; Yip 1995). Described as ***global efficiency*** by Bartlett and Ghoshal (1995), this strategic motive reflect the MNC's capacity to manage both costs and revenues.

Researchers arguing for recognition of local market needs while devising MNC strategies, have highlighted the success of regional strategies in diverse industries, including pharmaceuticals (Morrison, Ricks, and Roth 1991) and white goods (Baden-Fuller and Stopford 1991). These and other researchers have argued that too much stress on global efficiency could be harmful and a balance between emphasis on globalization and localization is needed (cf., Birkinshaw, Morrison, and Hulland 1995; Douglas and Wind 1987; Quelch and Hoff 1986). This emphasis on localization, described as ***multinational flexibility*** (Bartlett and Ghoshal 1995; Ghoshal 1987), stresses developing skills to respond to unique needs of local consumers, business partners, and institutional constituents. With the advent of flexible manufacturing systems along with advances in information, communication, and transportation technologies, these two seemingly opposing objectives of global efficiency and multinational flexibility became congruent, as the emphasis shifted from economies of scale to economies of scope and benefits from synergy (cf., Douglas and Wind 1987; Morrison and Roth 1992; Prahalad and Doz 1987).

These advances in information and communication technology have also ushered us into the age of information with emphasis on knowledge acquisition and learning processes (Glazer 1991; March 1991; Sinkula 1994; Slater and Narver 1995). Organizational learning has been purported to influence organizational internal processes and assist in making the organization market oriented, which enhances performance

(Deshpande, Farley, and Webster 1993; Jaworski and Kohli 1993; Slater and Narver 1994). MNC's are in a unique position to learn from diverse geographically dispersed environments, which results in higher innovation rates and better understanding of the global environment (Ghoshal 1987; Kim, Hwang, and Burgers 1993; Simonin 1997). This exposure to a wide array of market characteristics and variety of competitors, suppliers, and partners, leads to refined knowledge structures (Abrahamson and Fombrun 1994; Miller and Chen 1994, 1996) and is captured by the strategic motive of ***worldwide learning*** (Achrol 1991; Bartlett and Ghoshal 1995).

Summarizing the organizational capabilities needed to manage the complex modern day environments, Achrol (1991, p. 77) succinctly states that to manage the complex modern day environments one needs "an ambidextrous organization, simultaneously demanding efficiency, innovation, and flexibility." Indeed, I examine a three dimensional conceptualization of worldwide strategic motives, viz. Global Efficiency, Multinational Flexibility, and Worldwide Learning (cf., Bartlett and Ghoshal 1995; Duncan 1976; Powell 1987).

Scholars in international business also emphasize the contingent nature of the influence of a MNC's strategic motives (cf., Bartlett and Ghoshal 1986; Carpano, Chrisman, and Roth 1994). Specifically, they suggest that MNCs have to adjust their strategies to local conditions, which in turn moderate the influence of these strategic motives (also see, Ghoshal 1987; Kogut 1985a; Porter 1986b). This view is consistent with the strategy-environment coalignment principle (Chandler 1962; Gupta and Govindarajan 1984) and the contingency perspective on organizational strategy (Burns and Stalker 1961; Lawrence and Lorsch 1986). Therefore, while delving into MNC's

strategic motives, I remain cognizant of the local environment and also examine the influence of the interactions between a MNC's strategic motives and key facets of the local environment (also see Bartlett and Ghoshal 1991).

Global Efficiency

Global efficiency views MNCs as input-output systems (Ghoshal 1987) and reflects a MNC's capability to manage both costs and revenues, both of which have performance implications (Doz, Bartlett, and Prahalad 1981; Porter 1980). Achieving cost reduction implies obtaining advantages from national differences in factor costs (Kogut 1985a; Porter 1990), exploiting scale economies (Jain 1989; Levitt 1983), and deriving benefits from shared investments across markets and businesses (Hamel and Prahalad 1985; Ohmae 1985). Boosting revenues involves maintaining a strong portfolio of brands, developing powerful distribution systems, and having access to key leading and strategic markets (Hout, Porter, and Rudden 1982; Porter 1985). Obtaining benefits of low cost and increased revenues implies developing efficient and specialized facilities for research, manufacturing, logistics, and sourcing at a global scale, along with centralized management of these facilities (Bartlett and Ghoshal 1995; Ghoshal 1987). The development of efficient and specialized facilities results in accumulation of proprietary information and knowledge, which is dispersed and utilized by efficient centralized management, eventually leading to enhanced subsidiary performance (Bartlett and Ghoshal 1995; Levitt 1983; Prahalad and Doz 1987). Thus, I hypothesize:

H_{7a}: *Greater the emphasis of a MNC on the strategic motive of global efficiency higher the performance of the MNC subsidiary.*

Munificent markets present high growth opportunities and are more attractive in comparison to lean markets (Pfeffer and Salancik 1978). Effectively managing these munificent markets is critical for a MNC to achieve its performance objectives, as these markets provide high growth and profit opportunities (Dess and Beard 1984; Rosenzweig and Singh 1991). In addition, these attractive markets make it feasible and attractive for organizations to adapt product offering and strategies to the unique needs of the local environment. Emphasis on global efficiency as a strategic motive precludes the possibilities of local adaptation of both products offering and marketing strategy, which hurts the subsidiary in two ways. First, the consumers are likely to prefer products which have been adapted for the country market. Second, the competitors marketing strategies, if adapted to the local conditions, are likely to do a better communicating and selling job in comparison to standardized strategies.

H_{7b}: *Environmental munificence will moderate the positive influence of global efficiency on MNC subsidiary performance.*

Often MNC subsidiaries are dependent on host country institutional constituents for critical resources, funds, or legal reasons (Doz and Prahalad 1981, 1984; Prahalad and Doz 1987). Dependence on local institutional constituents reduces the MNC's ability to resist demands made by these institutional constituents, along with the MNC's incentives to manage its local business (Pfeffer and Salancik 1978). The survival of MNC subsidiary is contingent on conformity to institutional expectations, which often emphasizes higher autonomy for local operations (Anderson and Coughlan 1987). Attempts to control host country operations, which are critical for achieving global efficiency, are met by sanctions from local institutional constituents (Doz and Prahalad

1981). Therefore, I reason that the threats of sanctions and the reduced motivations of the MNC under condition of dependence on local institutional constituents are likely to reduce the influence of global efficiency on performance.

H_{7c}: *Dependence on local institutional constituents will moderate the positive influence of global efficiency on MNC subsidiary performance.*

Multinational Flexibility

A MNC's capability to adapt to the volatility and diversity of the global environment is referred to as multinational flexibility (Ghoshal 1987; Kogut 1985b, 1989). Traditionally, European MNCs, which had a relatively small home market and headquarters' dwarfed by several subsidiaries serving larger markets, emphasize multinational flexibility as their strategic motive (Bartlett and Ghoshal 1995). A MNC emphasizing multinational flexibility stresses deriving benefits from the management of country-specific or regional macro economic risks (e.g., currency exchange rate fluctuations), political risks arising from policies of national governments, competitive risks from both local and global competitors, and resource risks, which reflects scarcity of critical resources (Aaker and Mascarenhas 1984; Kogut 1985b; Srinivasula 1981). The construct of multinational flexibility captures a MNC's capacity to manage risks arising from market changes across nations (Porter 1990), balancing economies of scale with operational flexibility (Hout, Porter, and Rudden (1982), and maintaining a diverse portfolio of product markets to cover eventualities which may arise in the future (Kogut 1985b).

An emphasis on multinational flexibility implies that opportunism in the development of strategy is given more importance than long-term planning, with the

objective of being responsive to differences in political-economies across nations (Bartlett and Ghoshal 1995; Ghoshal 1987). MNCs espousing this motive scan the international markets to detect changes, discontinuities, and opportunities, and embrace an unique approach or response to each situation. With emphasis on economies of scope along with customization of communication and adaptation of the marketing mix, multinational flexibility enables firms to satisfy unique demands of local country markets. This adaptation is likely to increase the effectiveness of communication and marketing strategies of MNC's emphasizing multinational flexibility, which, coupled with customized products should enhance subsidiary performance (Douglas and Wind 1987; Douglas and Craig 1989; Quelch and Hoff 1986; Szymanski, Bharadwaj, and Varadarajan 1993).

H_{8a}: *Greater the emphasis of a MNC on the strategic motive of multinational flexibility higher the performance of the MNC subsidiary.*

The importance of flexibility in multinational strategy increases in munificent markets, as these markets present high growth and profit opportunities. The effective management of these markets is critical for MNC's performance. Munificent and rich markets make it attractive for organizations to adapt product offering and strategies to the unique demands of the local environment (Pfeffer and Salancik 1978; Rosenzweig and Singh 1991). MNC's emphasizing multinational flexibility strive to derive benefits from localization, thus, the influence of multinational flexibility on subsidiary performance should increase in munificent markets.

H_{8b}: *Environmental munificence will enhance the influence of multinational flexibility on MNC subsidiary performance.*

Demand volatility implies difficulty in assimilation information and planning for the future. Managing volatile environments and the uncertainty stemming from them requires concerted efforts devoted towards the local operations (Dess and Beard 1984; Sharfman and Dean 1991). Multinational flexibility by definition, emphasizes responding to the unique needs of local consumers, business partners, and institutional constituents. Therefore, I hypothesize:

H_{8c}: *Environmental volatility will enhance the influence of multinational flexibility on MNC subsidiary performance.*

Worldwide Learning

Research on knowledge acquisition and development processes views MNCs as having exposure to diverse environments, thereby having a richer store of existing knowledge base and capabilities in comparison to domestic firms (Barkema and Vermeulen 1998; March 1991; Sinkula 1994; Slater and Narver 1995). In the multinational strategy literature, the construct of *worldwide learning* is used to capture a MNC's propensity to acquire and assimilate knowledge from its diverse experience (cf., Bartlett and Ghoshal 1995; Kogut 1989; Gupta and Govindarajan 1991). Specifically, worldwide learning reflects a MNC's capacity to assimilate knowledge from societal differences in organizational processes as well as managerial processes and systems across nations (Rapp 1983; Ronstadt and Krammer 1982; Terpstra 1977).

Factors contributing to increased benefits to a MNC from worldwide leaning include a MNC's ability to derive advantages from knowledge accumulated across organizational components in different markets and businesses along with the MNC's capability to integrate the acquired knowledge into its day-to-day operations (Madhok

1997). In terms of organizational processes this requires close coordination among subsidiary operations, with frequent and open lines of communication and transfer of know-how (Ghoshal 1987). Based on both the empirical research (cf., Nonaka 1991; Simonin 1997; Sinkula, Baker, and Noordewier 1997) and the theoretical research (cf., Fiol 1994; March 1991; Sinkula 1994) on organizational learning and multinational strategy (cf., Barkema and Vermeulen 1998; Gupta and Govindarajan 1991), I expect emphasis on worldwide to enhance MNC subsidiary performance.

H_{9a}: *Greater the emphasis of a MNC on the strategic motive of worldwide learning higher the performance of the MNC subsidiary.*

Munificent markets present high growth opportunities and are more attractive in comparison to lean markets. In addition, effective management of these munificent markets is critical for MNC subsidiary performance. These rich markets make it attractive for organizations to adapt product offering and strategies to the unique needs of the local environment (Baden-Fuller and Stopford 1991; Morrison, Ricks, and Roth 1991; Rosenzweig and Singh 1991). Worldwide learning requires close coordination and control of a MNC's global operations, which is facilitated by adopting standardized systems (Ghoshal 1987; Kogut 1985b, 1989). The tight control over subsidiary operations facilitates accumulation and assimilation of information, which is critical for a learning organization (cf., Huber 1991; March 1991; Sinkula 1994; Slater and Narver 1995). Thus, emphasis on worldwide learning as a strategic motive precludes some possibilities of local adaptation of both products offering and marketing strategy. Lack of adaptation is likely to hurt a MNC as consumers are likely to prefer products which have

been adapted for the market and the rich market provides incentives for competing firms to localize their product offering and strategies. Therefore, I hypothesize:

H_{9b}: *Environmental munificence will moderate the positive influence of worldwide learning on MNC subsidiary performance.*

Dependence of a MNC subsidiary on host country institutional constituents for critical resources, funds, or legal reasons, reduces both the MNC's ability to resist institutional demands and the MNC's incentives to manage its local business (Pfeffer and Salancik 1978; Prahalad and Doz 1987). The survival of local operations is contingent on conformity with institutional expectations, which often emphasize giving autonomy to local operations (Anderson and Coughlan 1987). These forces for local autonomy act as barriers for worldwide coordination and control, thereby making it difficult to assimilate information and accumulate knowledge. In addition to reduced learning, under conditions of high dependence on institutional constituents, attempts to control local operations are likely to be met by sanctions from the local government. These sanctions, which threaten the very survival of a MNC subsidiary, are likely to reduce the influence of worldwide learning on the performance of the MNC subsidiary. Thus, I hypothesize:

H_{9c}: *Dependence on local institutional constituents will moderate the positive influence of worldwide learning on MNC subsidiary performance.*

Multiplicity captures the environmental complexity stemming from the contradictory nature of demand made by the host country institutions (Oliver 1991). Though, the multiplicity in demands of institutional constituents makes the host country market complex and unique, it rules out the possibility of complying with institutional expectations. Managing this complexity requires dexterity and expertise on the part of a

MNC. A learning MNC's is more likely to have the skills to administer such environments. Therefore, I expect emphasis on worldwide learning to enhance MNC subsidiary performance in environments characterized by high institutional multiplicity. Hence, I hypothesize:

H_{9d}: *Multiplicity of local institutional constituents will enhance the influence of worldwide learning on MNC subsidiary performance.*

Methodology

Sample and Data Collection Procedure

The sample consisted of German and Japanese subsidiaries in the United States. The sample for German MNCs was drawn from the Directory of Subsidiaries of German Firms in the US (1996-97) and the sample for the Japanese firms was drawn from the Directory of Japanese-Affiliated Companies in the USA & Canada (1995-96). The lists consist of approximately 1800 German subsidiaries and 2000 Japanese subsidiaries.

Initially, MNCs from the sampling frames were contacted by phone to identify the name and designation of the person heading the marketing function. Subsequently, a cover letter on University letter head along with the questionnaire, self addressed pre-paid return envelope, a questionnaire re-directing form, and an incentive of $1 were mailed to these managers. The cover letter stated that the data were being collected to investigate issues related to management of foreign multinational subsidiaries in the US and promised a copy of the findings, as an added incentive (along with the dollar bill enclosed) to participate in the study. In addition, the cover letter stated that if somebody else in that organization was more appropriate to fill the survey, then the person could fill the "Questionnaire Re-directing Form" and I would mail another copy of the

questionnaire to that respondent. The cover letter and the questionnaire re-directing form had the name of the individuals along with the name of their organizations. In the cover letter for redirected questionnaires, I also stated the name of the person to whom I had mailed the original survey. Two weeks after mailing the original surveys I mailed post card reminders to each potential respondent. This procedure was followed for both the pretest and the final study.

Operational Measures

Multiple items were used to measure the exogenous and endogenous constructs, which were all conceptualized to be unidimensional. Given that I have a large number of constructs and one needs 3-5 items to measure unidimensional constructs (Bagozzi and Baumgartner 1994), I used 3 or 4 items to measure each construct. I first discuss the operationalization for the three strategic variables, follow it with the four environmental variables, and then move on to the three distributor-specific variables.

Strategic Motives. I relied on Bartlett and Ghoshal's (1995) detailed description of the strategic motives to develop 4 items to measure each construct (Table 4.1). The items for global efficiency measured the extent to which the worldwide strategy of the MNC emphasizes extracting benefits from wage differences across nations, exploiting scale economies in marketing and distribution, and benefiting from scale economies in manufacturing and R&D.[14] For multinational flexibility, the items measured stress deriving benefits from diversity in environments across countries, flexibility in managing political risks , and versatility in allocation of human capital.[15] Finally, the items for

[14] The fourth item, deleted after the pretest, asked: "We typically share investments and costs across businesses."

[15] The deleted item said: "We seek a high level of flexibility in allocating key resources."

Table 4.1

Measurement Model: Confirmatory Factor Analysis and Scale Reliability

Item [a]	Item Description [b]	Standardized Loading	t-value
Global Efficiency ($\rho_c = 0.77$). Aspects of your organizations worldwide strategy:			
GE1	Our worldwide strategy emphasizes extracting benefits from differences in wages across countries.	0.48	7.90
GE2	We emphasize scale economies in distribution and marketing.	0.83	13.86
GE3	We seek to exploit potential scale economies in manufacturing and R&D.	0.67	11.34
Multinational Flexibility ($\rho_c = 0.74$). Aspects of your organizations worldwide strategy:			
MF1	We seek to derive benefits from diversity in environments across countries.	0.59	10.19
MF2	Our global strategy reflects high levels of flexibility in managing political risks arising due to differences between nations.	0.66	11.72
MF3	Our worldwide strategy emphasizes versatility in allocating human capital.	0.74	13.52
Worldwide Learning ($\rho_c = 0.90$). Aspects of your organizations worldwide strategy:			
WL1	We stress learning form differences in organizational processes across subsidiaries.	0.85	17.60
WL2	We emphasize shared learning across organizational components in different businesses.	0.90	18.94
WL3	We share innovations in products and organizational processes across subsidiaries.	0.64	11.85
Munificence ($\rho_c = 0.90$)			
MUNF1	The market in the US is growing at a faster rate than the rest of the world.	0.66	12.14
MUNF2	Our industry has good growth potential in the US.	0.86	16.82

MUNF3	The growth potential of our US subsidiary operations are good.	0.83	16.12
Volatility ($\rho_c = 0.75$)			
VOL1	The demand of our customers varies a lot.	0.41	6.28
VOL2	In our industry, the product and brand features vary a lot.	0.84	10.76
VOL3	In our industry, the price/quality demanded by customers vary a lot.	0.60	8.76
Dependence ($\rho_c = 0.89$). For the US institutional environment:			
DEP1	Our US subsidiary operations are highly dependent on the institutional constituents.	0.76	14.43
DEP2	Success of our business rests on favorable US national, state, and municipal government policies.	0.68	12.49
DEP3	The success of our business in the US depends on the institutional constituents.	0.83	16.14
Multiplicity ($\rho_c = 0.90$). For the US institutional environment:			
MULT1	Sometimes the demand made by one institutional constituent contradicts the demand made by another institutional member.	0.70	13.19
MULT2	Number of institutional constituents making demands of our subsidiary operations exceeds those in the other industries.	0.78	15.01
MULT3	Substantial number of institutional constituents monitor our US subsidiary operations.	0.84	16.66
Psychic Distance ($\rho_c = 0.90$). [c] Cultural distance between headquarters' and US subsidiary:			
PD1	Customs and values of headquarters' and US employees.	0.86	16.97
PD2	Culture of the countries.	0.89	17.97
PD3	Language of the countries.	0.61	11.24

Value of Firm-Specific Knowledge ($\rho_c = 0.85$). For the major product or process involved

in the US operations:

VFS1	The product/process has good reputation in the world market.	0.94	19.70
VFS2	The perceived quality of the product/process is high.	0.88	17.86
VFS3	International brand name recognition for the product/process is high.	0.53	9.64
Performance ($\rho_c = 0.93$). [d] Performance of the US subsidiary for the major product/process:			
PERF1	Profit goals.	0.75	14.89
PERF2	Sales goals.	0.93	20.14
PERF3	Growth rate objectives.	0.86	18.01

Fit for confirmatory factor analysis: $\chi^2_{(360)} = 574.88$, $p = 0.00$, GFI = 0.89, CFI = 0.95, NNFI = 0.95, PNFI = 0.72, RMSEA = 0.044, $p_{(RMSEA < 0.05)} = 0.93$.

[a] Composite scale reliability $\rho_c = [(\sum \lambda_i)^2 \text{ var}(\xi)] / [(\sum \lambda_i)^2 \text{ var}(\xi) + \sum \theta_{ii}]$ (see Bagozzi and Yi 1988, p. 80). Covariance matrix used as input matrix.

[b] All items are measured on a seven-point semantic differential scale, with 1 = disagree and 7 = agree, unless otherwise indicated. All responses were for the major product involved in the US operations, unless otherwise indicated. Listwise deletion is used to delete incomplete responses, which gave us 308 complete and usable responses.

[c] All items are measured on a seven-point semantic differential scale, with 1 = no problem and 7 = major problem.

[d] All items are measured on a seven-point semantic differential scale, with 1 = unsatisfactory and 7 = satisfactory.

worldwide learning lay stress on learning from differences in organizational processes across countries, emphasized shared learning between organizational components across nations, and stressed sharing innovations in products and organizational processes across subsidiaries.[16]

Environment. Based on the construct definition and discussion of munificence in Dwyer and Oh (1987), Dwyer and Welsh (1985), and Etgar (1977) I developed three

items to measure the construct. The first of the three items compared the growth potential of US market with the rest of the world, the second measured the industry growth potential, and the third gauged the growth potential of the US subsidiary. Volatility in demand conditions was measured by adapting the three items used by Achrol and Stern (1988). The items measured variability in customer needs, product and brand features, and price/quality. As this is the first attempt to measure the facets of the institutional environment, I relied on the definition of these constructs to develop the items. The first of the three items for dependence directly measured the dependence of US operations on institutional constituents. The second item measured the extent to which the success of US business dependent on the US government policies. And the third item asked about the reliance of US operations on the local institutional constituents. The first of the three items used to measure multiplicity gauged the contradictory nature of demand made by US institutional members. The second item measured the relative number of relevant institutional constituents and the third item asked about the absolute number institutional constituents monitoring the US subsidiary operations.

Subsidiary-specific variables. The items for psychic distance measure a MNC headquarters' difficulties with the language, culture, and values of the host country (Klein and Roth 1990). Specifically, I adopted the scale from Bello and Gilliland (1997), which assessed problems that a MNC encounters due to its ignorance of socio-cultural aspects of host country market. The value of firm-specific knowledge was measured by adapting three items from Kim and Hwang (1992). These items evaluate the reputation, quality, and international recognition of the major product/process the MNC used in its US

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[16] The item deleted in the pretest read: "We put emphasis on learning from differences in managerial

operations. Finally, to measure the performance of the US subsidiary for the major product/process, I assess attainment of profit goals, sales goals, and growth rate objectives. These items account for industry differences and firm-specific factors as I measure the performance relative to targets. Such an approach to measure performance is common in marketing studies (cf., Moorman 1995; Slater and Narver 1994).

Pretest

The objective of the pretest was to fine tune the data collection protocol and to make sure that the scales were adequate enough. I mailed 400 surveys to a random sample of 200 respondents from each of the two mailing lists. Two weeks after mailing the original surveys I mailed post card reminders to each informant. I received 91 responses and 16 questionnaire re-directing forms after four weeks, on re-mailing the 16 surveys to newly identified respondents, I received 6 additional responses. In all 97 responses were received out of which 87 were complete and usable. I used item-to-total correlations to access the validity of measurement instruments with multiple items. Items with correlation coefficients greater than 0.80 were retained for the final study.

Final Study

An additional 1000 questionnaires, 500 from each list were mailed for the final study. The same procedure as in the pretest was followed. Overall, 201 responses and 50 Questionnaire Re-directing Forms were received. On re-mailing these forms I received another 20 responses. In all 221 responses were received.

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systems across countries."

Measure Validation

Confirmatory factor analysis was used to assess the convergent and discriminant validity for the measurement model (Gerbing and Anderson 1988). In Table 4.1, I show the results confirmatory factor analysis results for the 30 item 10 construct measurement model. The results show a reasonable fit (GFI = 0.89, CFI = 0.95, NNFI = 0.95, PNFI = 0.72, RMSEA = 0.044) with the exception of the χ^2 statistic, which is significant ($\chi^2_{(360)} = 574.88$, $p = 0.00$). Further, all factor loadings are greater the 0.4 cut-off and are statistically significant (Nunnally and Bernstein 1994). In addition, the reliabilities are greater than 0.7 and the phi's are statistically different from 1 (Anderson and Gerbing 1982). Finally, following Armstrong and Overton (1977), I assessed non-response bias by comparing the responses the early respondents with those for the late respondents and found no statistical difference in the means for the ten measures.[17] I provide the descriptive statistics for the constructs, along with the correlations among them in Table 4.2.

Table 4.2

Correlations, Means, and Standard Deviations (n = 308)

Construct	X_1	X_2	X_3	X_4	X_5	X_6	X_7	X_8	X_9	X_{10}
Global Efficiency X_1										
Multinational Flexibility X_2	.51									
Worldwide Learning X_3	.30	.56								
Munificence X_4	.16	.10	.07							

[17] While comparing early respondents with late respondents we combined the early respondents (obtained by median split) from the pretest with those of the final study and repeated this procedure for the late respondents. For each variable aggregate responses were created by averaging the responses on the items for that measure. The independent sample t-test gave t-values of 1.55, 0.61, -1.36, -1.05, -0.46, -0.18, -0.72, 0.06, -0.46, and -0.94 for global efficiency, multinational flexibility, worldwide learning, munificence, volatility, dependence, multiplicity, cultural distance, value of firm-specific knowledge, and subsidiary performance respectively.

Volatility X_5	.02	.07	.06	.20						
Dependence X_6	.19	.30	.12	.04	.04					
Multiplicity X_7	.12	.18	.02	-.05	.06	.56				
Psychic Distance X_8	-.04	-.21	-.34	-.01	.08	.03	.07			
Value of Firm-Specific Knowledge X_9	.08	.12	.20	.10	.10	-.03	.07	-.16		
Performance X_{10}	.05	.12	.22	.24	.00	-.06	-.03	-.28	.33	
Mean	3.70	4.00	4.10	4.64	4.32	3.08	3.06	3.87	5.63	4.81
Standard Deviation	1.18	1.11	1.29	1.35	1.24	1.38	1.39	1.37	1.03	1.34

Results

To test the hypotheses, I obtained ordinary least square estimates for the model presented in equations 1-4. The variable description along with the parameter estimates are presented in Table 4.3. Typically, indicators for the interaction terms are created by multiplying the concerned independent variables. As this approach is prone to collinearity (cf., Jaccard, Turrisi, and Wan 1990), I took an instrumental variable approach to capture the interaction effects. Specifically, I ran a regression with the product of the two concerned variables as dependent measure and the two variables used to obtain the product term as independent variables. The residual of this estimation was utilized as the instrument for the interaction hypothesis. Conceptually, these residuals are orthogonal to the two variables used to obtain them and in terms of hypothesis testing, they explain variance in addition to that explained by the independent measures.[18]

[18] We use variance inflation factor (VIF) and the condition index to assess collinearity in our sample. The largest VIF was 12.98 and all the other VIF's were below the recommended value of 10 (Marquardt 1970). The condition index (adjusted for the intercept term) equaled 12.33 and is below the recommended cutoff of 30 (Belsley, Kuh, and Welsh 1980). Given the pattern of correlation between independent measures (see Table 2) and our sample size of 308, collinearity does not appear to be an issue (for details see Mason and Perreault 1991).

Table 4.3

Structural Model Results [a]

Independent Measure	Coefficient	Hypotheses Number	Hypotheses Sign	Parameter Estimate	t-value
Constant	β_0	---	---	2.399	1.56
MUNF	β_1	H_1	+	0.309	2.26
VOL	β_2	H_2	-	-0.037 *	-0.28
DEP	β_3	H_3/H_{3alt}	-/ns	-0.111 *	-1.16
MULT	β_4	H_4/H_{4alt}	-/ns	0.099 *	1.10
VALUE	β_5	H_5	+	0.107	4.55
PSYDIS	β_6	H_6	-	-0.198	-3.58
GE	α_0	H_{7a}	+	0.210	1.74
GE*MUNF	α_1	H_{7b}	-	-0.076	-1.75
GE*DEP	α_2	H_{7c}	-	-0.055 *	-1.20
MF	γ_0	H_{8a}	+	-0.270 *	-1.47
MF*MUNF	γ_1	H_{8b}	+	0.155	2.85
MF*VOL	γ_2	H_{8c}	+	-0.020 *	-0.35
WL	δ_0	H_{9a}	+	0.247	2.06
WL*MUNF	δ_1	H_{9b}	-	-0.113	-2.81
WL*DEP	δ_2	H_{9c}	-	-0.069	-1.54
WL*MULT	δ_3	H_{9d}	+	0.092	1.91

* Nonsignificant at $p < 0.10$.

[a] The Breusch Pagan statistic for test of hetroskedasticity was significant ($\chi^2 = 32.309$, d. f. = 16, $p < 0.01$; Breusch and Pagan 1979), therefore I report results with White's (1978) consistent estimator for the variance-covariance matrix. Overall fit of the model: $R^2 = 0.272$, $p < 0.001$.

Key

GE - Global Efficiency.
MUNF - Munificence
MULT - Multiplicity
PERSUB - Performance of Subsidiary
MF - Multinational Flexibility
VOL - Volatility
VALUE - Value of Firm-Specific Knowledge
WL - Worldwide Learning
DEP - Dependence
PSYDIS - Psychic Distance
ns - non-significant

$$PERSUB_i = \beta_0 + \beta_1 MUNF_i + \beta_2 VOL_i + \beta_3 DEP_i + \beta_4 MULT_i + \beta_5 VALUE_i + \beta_6 PSYDIS_i + \beta_{7i} GE_i + \beta_{8i} MF_i + \beta_{9i} WL + \varepsilon_i \quad (1)$$

where, for an individual *i*:

$$\beta_{7i} = \alpha_0 + \alpha_1 MUNF_i + \alpha_2 DEP_i \quad (2)$$

$$\beta_{8i} = \gamma_0 + \gamma_1 MUNF_i + \gamma_2 VOL_i \quad (3)$$

$$\beta_{9i} = \delta_0 + \delta_1 MUNF_i + \delta_2 DEP_i + \delta_3 MULT_i \quad (4)$$

The results support the hypothesis concerning the influence of demand munificence (H_1: b = 0.309, p < 0.05), but volatility in demand conditions has a non-significant influence on MNC subsidiary performance (H_2: b = -0.037, p = 0.49). For the theoretical facets of the institutional environment, the alternative hypotheses, which hypothesize a non-significant influence, were supported for both the dependence of the MNC subsidiary on local institutional constituents ($H3_{alt}$: b = -0.111, p = 0.12) and the multiplicity of the demands of the institutional constituents (H_{4alt}: b = 0.099, p = 0.86). Further, both the value of firm-specific knowledge (H_5: b = 0.107, p < 0.01) and psychic distance (H_6: b = -0.198, p < 0.01) hypotheses are supported.

Emphasis on the strategic motive of global efficiency (H_{7a}: b = 0.210, p < 0.05) and worldwide learning (H_{9a}: b = 0.247, p < 0.05) has positive significant influence on subsidiary performance, though the influence of multinational flexibility was non-significant (H_{8a}: b = -0.270, p = 0.92). For the seven interaction hypothesis, the results supported all but two - one each for global efficiency and multinational flexibility. As hypothesized, global efficiency is not a viable strategy in munificent markets (H_{7b}: b = -

0.076, $p < 0.05$), though the interaction between global efficiency and dependence on host country institutional constituents is not statistically significant (H_{7c}: b = -0.055, p = 0.12). Multinational flexibility seems to be the appropriate strategy in munificent markets (H_{8b}: b = 0.155, $p < 0.01$), but its interaction with demand volatility is non-significant (H_{8c}: b = -0.020, p = 0.64). All interaction hypothesis for worldwide learning were supported. Worldwide learning is the right strategy in local markets where the multiplicity of demands among the local institutional constituents is high (H_{9d}: b = 0.092, $p < 0.05$), but is not a good strategy in either munificent markets (H_{9b}: b = -0.113, $p < 0.01$) or when the subsidiary is dependent on the local institutional constituents (H_{9c}: b = -0.069, $p < 0.10$).

Discussion

In this chapter, I developed and tested strategy-environment coalignment model for the performance of MNC subsidiary. The findings show that subsidiaries in munificent markets perform better than subsidiaries in scarce markets, but demand volatility in the host country does not have a statistically significant influence on subsidiary performance. The hypotheses of institutional theorist concerning the influence of the facets of the local institutional environment on subsidiary performance were supported, though the institutional environment moderated the influence of worldwide learning. Further, as hypothesized psychic distance between a MNC headquarters and its subsidiary tends to bring down subsidiary performance, while MNC performance increases with the value of firm-specific knowledge.

Stress on global efficiency as an strategic motive improves MNC performance, but just like worldwide learning, this is not a strategy to be emphasized for munificent markets. This finding supports speculation in the literature that a standardized strategy

with emphasis on global efficiency is not always beneficial. In munificent markets, the strategy of multinational flexibility should be embraced. In fact, the results show that strategic posture of flexibility is only helpful in munificent markets, i.e., in lucrative country markets. Taken together these findings imply that efficiency should be emphasized in all markets, with the exception of munificent markets, where flexibility and adaptation of strategy is appropriate. Emphasis on worldwide learning enhanced MNC subsidiary performance and was a good strategy in environments characterized by high levels of multiplicity in the expectations of institutional constituents. But for both munificent markets and markets characterized by high dependence of the MNC subsidiary on institutional constituents, worldwide learning should not be advocated. At the very least, the results support the hypotheses about the contingent nature of the influence of MNC strategy on the performance of its subsidiaries.

Limitations and Future Research Directions

The findings of this study are subject to some limitations, which are also fruitful avenues for future research. Conceptually I restrict myself to economic performance, though I account for varying objectives of MNCs by measuring performance relative to targets. Future research should use a broader conceptualization of MNC performance (for details see Cavusgil and Zou 1994). Empirically, I am constrained by the context - German and Japanese subsidiaries in the US. Extensions to developing countries and emerging powers like China, Brazil, and Mexico among other would aid in generalizations of the theory.

Chapter 5

Global Environment, Decision Framing, and Judgment Uncertainty: An Examination into the Nature of Multinational Corporations' Entry Mode Decision.

Overview

This chapter investigates the implications of decision framing and judgment uncertainty on theory development for multinational corporations entry mode decision. Specifically, the study examines the two decision frames adopted by entry mode researchers. First, the available entry mode options are viewed as discrete alternatives ordered with respect to the level of resource commitment. Second, the entry mode decision is framed as the choice between discrete unordered alternatives. The study conceptually demonstrate that framing of the entry mode decision is likely to determine the hypotheses a researcher tests. Though the findings do not conclusively establish which of the two decision frames is better, they do show that examining both decision frames provides richer insights into the entry mode decision. To study judgment uncertainty, the chapter relies on the basic psychological premise that, to an extent, all judgments are fuzzy and, therefore, embody two components: judgment magnitude and judgment uncertainty. The results supports this premise and illustrates the importance of investigating both judgment magnitude and uncertainty for the entry mode decision.

Introduction

In the increasingly global economy, cross-national business is a growing reality and developing an enhanced understanding of multinational corporation (MNC) decision

making is high on the priority of business scholars (Caves 1998; Prahalad and Hamel 1994). One such strategic decision is a MNC's chosen mode of entry into a foreign market. After having decided to enter a foreign market, the first decision that a MNC has to take concerns its choice of entry mode. Mode of entry is the institutional arrangement that a MNC chooses to initially organize and conduct its country specific operations (Root 1994). Typically, the entry mode decision involves choosing one discrete governance structure over the other available alternatives. At the very least, the choice of entry mode is an important determinant of the initial success of a MNC's foreign operations (cf., Anderson and Gatignon 1986; Erramilli and Rao 1993; Hill, Hwang, and Kim 1990).

It is my objective to study the nature of the entry mode decision, which I hope to accomplish by investigating two aspects of this decision. First, I investigate the implications of varying decision frames adopted by researchers while studying the entry mode decision. Framing is considered to be an important first step in the process of decision making and has been purported to provide focus to decision-makers (Eisenhardt and Zbarack 1992; Mintzberg, Raisinghani, and Theoret 1976; Nutt 1993, 1998). The relative attractiveness of options available to decision-makers is dependent on the manner in which the decision is framed or formulated (Kahneman and Tversky 1979, 1984; Tversky and Kahneman 1981).

Typically, scholars have framed the entry mode decision in one of the two ways. First, the entry mode decision has been viewed as a question of the level of resource commitment, which provides a hierarchical order to the available entry mode alternatives (cf., Gatignon and Anderson 1988; Kim and Hwang 1992). For instance, if I were to

consider choice between the three generic entry modes, viz., exports, joint ventures, and wholly owned subsidiaries, the level of resources committed would be the lowest for exports, followed by joint ventures, and wholly owned subsidiaries respectively (Root 1994). Therefore, if a MNC is interested in minimizing risks associated with its subsidiary operations, exports is the default choice of entry mode.

The entry mode decision has also been framed as the choice between discrete unordered options, in which case paired comparisons of available entry mode alternatives are carried out to identify the most attractive option (cf., Agarwal and Ramaswami 1992; Kogut and Singh 1988). For example, for choosing between exports, joint ventures and wholly owned subsidiaries, in addition to comparing a joint venture with a wholly owned subsidiary, one would compare the attractiveness of exporting to both joint ventures, and wholly owned subsidiaries. The final choice would be best of the three available alternatives obtained by direct comparisons between them.

The contributions of research on the entry mode decision are contingent on the decision frame that a researcher adopts. In other words, development of theory may be prejudiced due to the framing of the research question. My objective is to provide insights into possible biases in previous research by empirically comparing the descriptive and predictive validity of these two decision frames.

The second aspect of the nature of the entry mode decision that I study concerns the judgment uncertainty associated with the decision. I rely on the basic psychological premise that, to an extent, all judgments are fuzzy and, thereby, embody two components: judgment magnitude and judgment uncertainty. In the case of the entry mode decision, judgment magnitude is the entry mode that the MNC chooses and judgment uncertainty is

reflected in the conviction or the certainty that the decision-maker has in the chosen entry mode. Typically, judgment magnitude has been studied by entry mode researchers (cf., Erramilli and Rao 1993; Gatignon and Anderson 1988; Kim and Hwang 1992), while judgment uncertainty has not been investigated. Decision making scholars have asserted and shown that studying drivers of both decision magnitude and uncertainty provide greater insights into the process by which judgments are formed, utilized, and altered (Chandrashekaran and Marinova 1998; Gigerenzer, Hoffrage, and Kleinbolting 1991; Wallesten and Vallejo 1994). Motivated by these developments in contemporary psychological literature on decision making, I attempt to discern the additional insights that can be gained by simultaneously studying both judgment magnitude and judgment uncertainty.

Specifically, I investigate the environmental drivers for the choice between the generic entry modes, i.e., exports, joint ventures, and wholly owned subsidiaries. One of the primary reasons for developing new theories for MNCs is the unique environment they face (cf., Ghoshal 1987; Kogut 1985b; Sundaram and Black 1992). Unlike domestic or local firms, MNCs have to deal with two, often contradictory, environmental pressures (cf., Bartlett and Ghoshal 1995; Boddewyn and Brewer 1994; Prahalad and Doz 1987). On one hand, the MNC needs to effectively control and coordinate subsidiary operations across countries. On the other hand, the MNC has to be flexible to respond to the idiosyncratic needs of host country institutional environment and distinct needs of the host country product markets. These forces of ***global integration*** and ***local responsiveness*** make the management of MNC's unique and complex. Responding to the environmental challenge facing the MNC, I examine the influence of the facets of the

global environment on the MNC's choice of entry mode and the ensuing uncertainty associated with the decision.

The remainder of the chapter is organized along the following lines. In the next section I examine decision process for the entry mode decision. Then, I elaborate on judgment uncertainty and the entry mode decision. Next, I enumerate my data collection and analysis methodology. Finally, I present the results and end with a few concluding remarks on limitations and possible future research directions.

Decision Framing and the Choice of Entry Mode

In contemporary international business research the entry mode decision has been framed in one of the two ways. First, scholars have viewed the entry mode decision as a question of the level of resource commitment, which provides a hierarchical order to the available entry mode alternatives (cf., Gatignon and Anderson 1988; Kim and Hwang 1992). Second, researchers have framed the entry mode decision as the choice between discrete unordered alternatives, in which case paired comparisons of available entry mode alternatives are carried out to identify the most attractive option (cf., Agarwal and Ramaswami 1992; Kogut and Singh 1988).

The contributions of research on the entry mode decision towards development of theory are contingent on the decision frame that the researcher adopts. For the purpose of illustration let's examine the three generic entry modes of exports, joint ventures, and wholly owned subsidiaries (Root 1994). Further, let's say that the entry mode decision is contingent on one variable - the demand volatility in the host country. Now if I consider the three generic modes as ordered alternatives, then current research on environments in international business would suggest that volatile environments are difficult and riskier to

manage, which lowers their attractiveness. International business literature suggests that in high risk markets a low resource commitment decision is favored over a high resource commitment decision (cf., Gatignon and Anderson 1988; Prahalad and Doz 1987; Rosenzweig and Singh 1991). Thus, exports, the least risky of the three entry modes should be chosen.

Further, if the decision is framed in terms of unordered alternatives, in volatile environments joint venture with a local business partner would be preferred over the other two alternatives. The reasoning behind this prediction is simple. Local firms have the expertise and the knowledge base to manage business in the local environment, which is characterized by high demand volatility. A joint venture with a local business partner provides the MNC the opportunity to exploit the skills of the local partner, thereby making joint ventures the preferred entry mode (cf., Astley and Sachdeva 1984; Astley and Zajac 1990; Kogut 1988; Toyne 1989). Thus, depending on the decision frame, the theoretical choice of entry mode would be either exports or joint ventures.

Given the importance of decision framing[19] in the development of theory for entry mode decision, it is important discern explanatory power of both the decision frames. To the best of my knowledge, research on entry mode decision has framed the research question as either one of ordered alternatives (cf., Gatignon and Anderson 1988; Kim and Hwang 1992) or unordered options (cf., Agarwal and Ramaswami 1992; Kogut and Singh 1988). No attempt has been used to compare and contrast the two decision frames. I

[19] In this chapter decision framing is used to refer to the conceptualization of the entry mode decision. In other words, whether the entry mode decision is conceptualized as the choice between discrete unordered alternatives or the choice between discrete ordered alternatives.

focus on comparing the predictions of these the two decision frames and investigate the role of multinational environment in determining the choice of entry mode.

Multinational Environment

One of the primary reasons for developing new theories for MNC's is the unique and complex environment they face (cf., Prahalad and Doz 1987; Prahalad and Hamel 1994; Sundaram and Black 1992). Specifically, the environment of MNCs is characterized by two, often contradictory, pressures of *global integration* and *local responsiveness* (cf., Boddewyn and Brewer 1994; Prahalad and Doz 1987; Rosenzweig and Singh 1991).

Global integration refers to "centralized management of geographically dispersed activities on an ongoing basis" (Prahalad and Doz 1987, p. 14). The pressures for global integration arise due to the importance of multinational customers, presence of multinational competitors, high investment intensity, high technological intensity, pressures for cost reduction, universal consumer/customer needs, and access to raw materials. To be efficient and effective under high pressures of global integration the MNC has to effectively coordinate and control its worldwide operations. This results in the *dependency* of the subsidiary on the headquarters for critical resources, *replication* of structures and processes across subsidiaries, and headquarters *imperative of control* over foreign operations (cf., Bartlett and Ghoshal 1995; Rosenzweig and Singh 1991).

Local responsiveness refers to "resource commitment decisions taken autonomously by a subsidiary in response to primary local competitive or customer demand" (Prahalad and Doz 1987, p.14-15). Pressures for local resposiveness arise from unique customer needs, heterogeneity in market structure, and availability of substitutes,

as well as specific demands from the host country government. Rosenzweig and Singh (1991) suggest that the *task environment* and the *institutional environment* of the host country are primary sources for the pressures of local responsiveness. The motivations for both the task and the institutional environments are consistent with the open systems perspective (Achrol, Reve, and Stern 1983), in that they recognize the importance of the organizational environments, but differ in the premises and bases of their conceptualization.

To fully comprehend the impact of a MNC's environment on its entry mode decision I examine both the pressure of global integration and local responsiveness. Further, following Rosenzweig and Singh (1991) and environmental scholars in marketing (Achrol, Reve, and Stern 1983; Dwyer and Welsh 1985; Gundlach and Achrol 1993; Heide and Weiss 1995), I examine facets of both the task environment and the institutional environment.

Pressures of Global Integration

The pressures of global integration necessitate close coordination and control of the worldwide operations of a MNC. Coordination and control are considered to be integral for management of complex organizations (cf., Katz and Kahn 1966), including MNCs (Baliga and Jaeger 1984; Cray 1984; Roth and Nigh 1992). The survival and performance of a MNC is based in part on its ability to manage these cross border linkages (Doz and Prahalad 1984; Porter 1986b). In terms of the entry mode decision, high need for integration motivates both high levels of control over subsidiary operations and close coordination of worldwide operations (Ghoshal 1987; Prahalad and Doz 1987). The high levels of coordination and control are facilitated by high resource commitment

decision. Therefore, a wholly owned subsidiary should be the most preferred entry mode, followed by a joint venture (cf., Anderson and Gatignon 1986; Root 1994).

H_1: *In comparison to markets characterized by low pressures of global integration, in markets characterized by high needs for global integration, high resource commitment entry mode decision is likely to be preferred.*

Task Environment

Task environments foster development of rationalized structures to manage environmental uncertainty and reward organizations for effective management and efficient performance (Meyer and Scott 1983). Many task environment researchers view the environment as a source of information with emphasis on managing *uncertainty* about external conditions (cf., Achrol and Stern 1988; Bello and Gilliland 1997; Dwyer and Welsh 1985; Gatignon and Anderson 1988). Uncertainty about external conditions is reflected in the decision-maker's need to assimilate and anticipate environmental conditions (Achrol and Stern 1988; John and Weitz 1988; Gundlach and Achrol 1993). This information perspective, exemplified by Dill (1958), Duncan (1972), and Weick (1969), examines the influence of environmental uncertainty, which stems from variability in the environment.

Consistent with the demand-management orientation in marketing, I focus on environmental uncertainty stemming from variability in host country demand conditions, i.e., I compare environments with volatile demand to those with stable demand (Achrol and Stern 1988; Dwyer and Welsh 1985). Volatile environments, in comparison to stable environments, offer greater contingencies to organizations (Thompson 1967, p. 73), which create difficulties in planning, coordinating, and implementing marketing plans

and strategies (Achrol 1991; Glazer 1991; Heide and Weiss 1995). Research on organizational environments (cf., Aldrich 1979; Dess and Beard 1984; Sharfman and Dean 1991) and on environments in international business (Boddewyn and Brewer 1994; Rosenzweig and Singh 1991; Sundaram and Black 1992) suggests that volatility and the associated uncertainty are likely to make the local market difficult to manage and less attractive. Mode of entry literature suggests that in riskier, difficult to manage, and less attractive markets, MNC's are likely to choose low resource commitment decisions (cf., Gatignon and Anderson 1988; Kim and Hwang 1992).

H_{2a}: *In comparison to markets characterized by volatile demand conditions, in markets characterized by stable demand conditions, high resource commitment entry mode decision is likely to be preferred.*

Alternatively, volatile environments, in comparison to stable environments, are more unique and idiosyncratic (cf., Pfeffer and Salancik 1978; Sharfman and Dean 1991). A distinctive set of expertise and skills is needed to manage unique challenges posed by volatile environments (cf., Dess and Origer 1987). Local firm's by virtue of their experience in the host country, are more likely to possess the expertise and the knowledge base to effectively manage business in the local volatile environment. As the choice of entry mode follows the decision concerning which country to enter, the chosen foreign market is an attractive market for the MNC (Root 1994). Therefore, to enter an attractive yet risky market, with local firms likely to have the skills to effectively manage the volatile environment, joint venture with a local firm is likely to be the preferred choice of entry mode. Thus, as an alternative to hypothesis H_{2a}, I propose:

H_{2b}: *In comparison to markets characterized by volatile demand conditions, in markets characterized by stable demand conditions, joint ventures are likely to be the preferred entry mode.*

Institutional Environment

In contrast to task environments, institutional environments are characterized by elaboration of rules and requirements to which individual organizations must conform in order to receive legitimacy and support (DiMaggio and Powell 1983; Meyer and Rowan 1977; Meyer and Scott 1983; Zucker 1977). For instance, DiMaggio and Powell (1983, p. 150) observe that organizations "compete not just for resources and customers, but for political power and institutional legitimacy, for social as well as economic fitness." The institutional perspective complements the task perspective and, when taken together, provides a holistic conceptualization of organizational environments (Oliver 1991; Rosenzweig and Singh 1991).

The focus on institutional environment brings issues related to political power and institutional legitimacy to the forefront, which are critical for organizational survival (Baum and Oliver 1991, 1992; Meyer and Zucker 1989). Sources of institutional pressures include public opinions, societal and cultural ideologies, professional associations, educational systems, laws, courts, government endorsements and requirements, certification and accreditation bodies, among others. Pressures from and demand of these institutional constituents force organizations to modify and adapt their structures and processes resulting in isomorphisms among organizations facing similar institutional expectations (DiMaggio and Powell 1983; Scott 1987).

In international business institutional environments take on greater significance as MNCs have to deal with perceptions of being foreigners and manage multiple sovereignties (Boddewyn and Brewer 1994; Prahalad and Doz 1987; Rosenzweig and Singh 1991). Perhaps the most powerful and predominant environmental force that MNC subsidiaries face is the host country government. The government imposes legal and regulatory constraints on host country MNC operations (Doz, Bartlett, and Prahalad 1981; Rosenzweig and Singh 1991) and often favors domestic firms over MNCs (cf., Anderson and Gatignon 1986; Kogut and Singh 1988). Therefore environments characterized by high levels of government regulations and controls are likely to be perceived as being risky by a MNC (cf., Gatignon and Anderson 1988; Kim and Hwang 1992; Williamson 1985). In high risk environments, in comparison to low risk environments (i.e., MNC friendly host country government), low resource commitment decisions are likely to be preferred (cf., Anderson and Coughlan 1987; Kogut and Singh 1988).

H_{3a}: *In comparison to markets characterized by MNC friendly local government, in markets characterized by high levels of governmental controls over MNCs, low resource commitment entry mode decision is likely to be preferred.*

Many scholars of international business consider government to be a variable, rather than a constraint or a given, as international firms face multitude of political economies that influence their entry, daily operations, and exit (cf., Doz 1979; Fagre and Wells 1982; Gomes-Casseres 1990; Ring, Lenway, and Govekar 1990). Thus, government is taken to be one of the factors of production for a firm's value adding activities, which has to be managed effectively (Boddewyn and Brewer 1994; Weick 1969). These scholars take a positive-sum-game approach to business-government

interactions (cf., Astley and Sachdeva 1984; Astley and Zajac 1990; Kogut 1988; Toyne 1989). In other words, these scholars emphasize that even if the host country government imposes legal restraints on MNC operations, if managed effectively, these restrains can become a source of competitive advantage for the MNC.

Typically, the emphasis for effective management of the hostile local environment is for the MNCs to identify potential business partners with competence in managing the host country environment (Astley and Zajac 1990; Root 1994). Developing long term relationships with objective of learning and acquiring knowledge from these local business partners is the suggested strategy (Kogut 1988; Toyne 1989). Therefore, joint ventures should be the preferred entry mode. Thus, as an alternative to hypothesis H_{3a}, I propose:

H_{3b}: *In comparison to markets characterized by MNC friendly local government, in markets characterized by high levels of governmental controls over MNCs, joint ventures are likely to be the preferred entry mode.*

Pressures of Global Integration and the Task Environment

International business scholars have time and again emphasized that the contingent nature of the influence of the facets of the environment (cf., Bartlett and Ghoshal 1986, 1991; Carpano, Chrisman, and Roth 1994). They suggest that MNCs have to take aspects of both the local country and the global industry environments into consideration while making strategic decisions (also see, Bartlett and Ghoshal 1991; Ghoshal 1987; Kogut 1985b; Porter 1986b). Therefore, I now consider the influence of

the interaction between pressures of global integration and the demand volatility in the host country.[20]

Specifically, I am concerned with the market in which there is a high need for global integration and the demand in the host country is stable. For example, the soft drinks market in the US has a stable demand and there is a high need for integration, as indicated by the presence of a few global firms and universal consumer needs across countries. I have argued that, taken individually, both high need for global integration (in comparison to low need for global integration) and stable demand conditions (compared to volatile demand) favor high resource commitment decisions.

But I hypothesize that when both conditions exist simultaneously, i.e., a product market has stable demand and there is a high need for global integration, low resource commitment decisions will be preferred. The logic behind this expectation is simple and is based on two facts. First, research on standardization of the marketing mix shows that under conditions of high needs for global integration standardized marketing mix strategies are favored (cf., Buzzell 1968; Jain 1989; Levitt 1983; Szymanski, Bharadwaj, and Varadarajan 1993). Second, managing environments characterized by stable demand conditions does not require any special effort on part of the MNC (cf., Dess and Beard 1984; Sharfman and Dean 1991). Taken together, these two facts imply that a standardized marketing mix strategy with no special effort required to develop an understanding of the country market. Implementing a standardized strategy in stable

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[20] Institutional theorist suggest that often governmental requirements are stringent and firms have to comply with them (DiMaggio and Powell 1983; Meyer and Rowan 1977; Oliver 1991; Scott 1987). Research examining political behavior in international business confirm this assertion (Boddewyn and Brewer 1994; Doz 1979; Farge and Wells 1982; Gomes-Casseres 1990). Therefore, conceptually,

environments is not a difficult task, therefore, high levels of control over foreign operations is not needed. Thus, as exporting is likely to be as successful as a wholly owned subsidiary, a low resource commitment decision is likely to be preferred.

H_4: *In markets characterized by both high needs for global integration and stable demand conditions in the host country, low resource commitment entry mode decision is likely to be preferred.*

Decision Uncertainty and the Choice of Entry Mode

Decision making scholars have asserted and shown that all judgments and decisions are overt outcomes of a covert decision making process that involves uncertainty resolution, thereby having some confidence/uncertainty associated with them (Gigerenzer, Hoffrage, and Kleinbolting 1991; Wallesten and Vallejo 1994). In the case of an entry mode decision, the overt response is the choice of entry mode, which is a result of a covert decision making process and, therefore, decision-makers have a certain degree of confidence/uncertainty in their decision. In other words, all judgments and decisions embody two components: the decision and uncertainty associated with the decision, i.e., decision uncertainty.

Contemporary research on drivers of decision making show that modeling both the decision and decision uncertainty provides greater insights into the process by which decisions are formed, utilized, and altered (Chandrashekaran and Marinova 1998; Gigerenzer, Hoffrage, and Kleinbolting 1991; Wallesten and Vallejo 1994). Motivated by these developments in the current psychological literature, I attempt to discern the

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interaction between facets of the institutional environment and pressures of global integration is not feasible.

additional insights that can be gained by simultaneously studying both the entry mode decision and decision uncertainty associated with it.

The entry mode has been extensively researched (cf., Erramilli and Rao 1993; Gatignon and Anderson 1988; Kim and Hwang 1992), but decision uncertainty has not been investigated. Classic research on organizations has reiterated that uncertainty in decision making stems from lack of knowledge about external conditions and the unpredictable nature of the environment (cf., Lawrence and Lorsch 1986; Pfeffer and Salancik 1978; Thompson 1967; Williamson 1975). Consistent with this classic research, I study the influence of facets of the environment on decision uncertainty for the entry mode decision. Specifically, I focus on uncertainty stemming from utilization of incomplete information and knowledge. In terms of Juslin and Olsson's (1997) typology I engage in Brunswikian origins of uncertainty.

Pressures of Global Integration

By definition, globally integrated industries are characterized by similar needs and requirements across countries (cf., Prahalad and Doz 1987; Roth and Morrison 1990; Rosenzweig and Singh 1991). Based on this premise, the contemporary literature on multinational strategy advocates standardized strategies in globally integrated industries (cf., Bartlett and Ghoshal 1995; Jain 1989; Levitt 1983). Therefore, in globally integrated industries, in comparison to industries characterized by low needs for global integration, there is lower requirement for acquiring and utilizing country specific knowledge. Thus, this low need to assimilate and accumulate information is likely to boost the decision-makers confidence in their decisions.

H_{5a}: *In comparison to markets characterized by low pressures for global integration, in markets characterized by high needs for global integration, decision uncertainty associated with the chosen mode of entry is likely to be low.*

Task Environment

Volatile environments, in comparison to stable environments, create difficulties in planning, coordinating, and implementing strategic plans and programs (cf., Achrol 1991; Dess and Beard 1984; Glazer 1991). Volatility and the uncertainty stemming from it make the local market difficult to manage and less attractive (cf., Heide and Weiss 1995; Rosenzweig and Singh 1991; Sharfman and Dean 1991). By its very definition, demand volatility is a source of uncertainty, which is affirmed by empirical research (Achrol and Stern 1988; Sharfman and Dean 1991). Therefore, I hypothesize:

H_{5b}: *In comparison to markets characterized volatile demand conditions, in markets characterized by stable demand conditions, decision uncertainty associated with the chosen mode of entry is likely to be low.*

Institutional Environment

Often the host country government imposes legal and regulatory constrains on MNC operations and governmental policies favor domestic firms over MNCs (cf., Anderson and Coughlan 1987; Doz 1979; Ring, Lenway, and Govekar 1990). Such governmental policies make the host country environment riskier for the MNC, which is frequently treated as a second class citizen. Research investigating political behavior in international business supports the assertion that MNCs, generally, have to comply with institutional expectations, which may be deleterious to their local operations. But under these environmental conditions, the MNC is likely to choose a low resource commitment

entry mode (H_{3a}). Therefore, even though the environment is risky, the choice of entry mode is congruent with environmental expectations. Thus, I hypothesize that under conditions of high levels of governmental control over MNC subsidiary operations, in comparison to low levels of governmental control, judgment uncertainty associated with the decision will be low

H_{5c}: *In comparison to markets characterized by low levels of governmental control, in markets characterized by high levels of governmental controls over MNCs, decision uncertainty associated with the chosen mode of entry is likely to be low.*

Pressures of Global Integration and the Task Environment

In markets characterized by both high needs for global integration and stable demand conditions, standardized strategies with low control governance mechanisms are favored (H_4). As no special effort is needed to either to adapt the marketing mix to local conditions (i.e., high pressures for global integration) or to develop an understanding of local demand conditions (i.e., stable demand conditions), decision-makers confidence is their decisions is likely to be high.

H_{5d}: *In markets characterized by high needs for global integration and stable demand conditions in the host country, decision uncertainty associated with the chosen mode of entry is likely to be low.*

Methodology

Data Collection and Measures

I use scenarios in a factorial array to test the research hypothesis. This approach has two advantages over the traditional measurement approach. First, fictitious scenarios make it possible to capture and evaluate rare events like environmental conditions high

on both integration and responsiveness. Second, though the approach sacrifices generalizability to some extent, it also provides for increased control over the design variables.

Exhibit 5.1

Decision Making Scenario

One of the important questions that Multinational Corporation (MNC) has to make in conducting their subsidiary operations is the **entry mode decision**. Entry mode is the institutional arrangement that the MNC chooses to conduct its subsidiary operations. The decision is based on internal factors such as the availability of financial and managerial resources as well as external factors such as competitors and the host country business environment.

In order to gain a better understanding of how these decisions are made, we have constructed a scenario and ask you to choose from three generic modes of entry, i.e., **export, joint venture**, and a **wholly owned subsidiary**.

The MNC in question, **TECKAZ**, sells Killets for which the worldwide demand is high and **TECKAZ** is considered to be a major force in the global Killets market. Moreover, the global demand of Killets has witnessed high growth rates in the last couple of years. [HOMOGENOUS 1]. **TECKAZ** decided to enter Pamkursia, a country with high demand for Killets. [HOMOGENOUS 2]. [CONTROL]. [STABILITY].

The decision making scenario illustrates the case of a fictitious MNC (TECKAZ) entering a fictitious country (Pamkursia) with a fictitious product (Killets: Exhibit 5.1). To stress the importance of the decision I emphasized that TECKAZ is a major world player in the Killets market, the global demand for Killets is growing at high rates, and that Pamkursia has high demand for Killets. Further I manipulated the three variables of

interest, i.e., nature of worldwide needs (universal versus country specific) and presence (versus absence) of global competitor, host county demand conditions, and host country government's perspective on MNCs, to have a 2 x 2 x 2 between subjects design (see Exhibit 5.2). From this point onwards these three environmental conditions are referred to as HOMOGENOUS, STABILITY, and CONTROL respectively. The exact wording used to manipulate these variables is presented in Exhibit 5.2.

Exhibit 5.2

Manipulations [a]

Condition	HOMOGENOUS 1	HOMOGENOUS 2	CONTROL	STABILITY
High	The worldwide demand for Killets is homogeneous. As a result, selling Killets requires very little adaptation across national markets.	Pamkursia is a strategically important market for a major global competitor of TECKAZ.	The national government of Pamkursia believes in exerting a high level of control on every aspect of manufacturing and sales of Killets.	In addition, examining the past decade's demand trend for Killets in Pamkursia reveals demand for Killets varies a lot.
Low	The worldwide demand for the Killets is country specific. As a result, selling Killets requires a lot of adaptation across national markets.	Pamkursia is not a strategically important market for any major global competitor of TECKAZ.	The national government of Pamkursia believes in the forces of the market and has a reputation of being MNC friendly.	In addition, examining the past decade's demand trend for Killets in Pamkursia reveals demand for Killets is steady and highly certain.

[a] Both HOMOGENOUS 1 and HOMOGENOUS 2 were either high or low.

The decision making task required the respondents to choose between the three generic modes of entry, i.e., export, joint venture, and wholly owned subsidiary. This gave us the polychotomous dependent measure. In terms of degree resource commitment,

exports are at the lower end, joint ventures are in the middle, and wholly owned subsidiaries are on the top.

Subjects

Because I am concerned with managerial decision making for the entry mode decision, multinational managers are the most appropriate subjects. Thus, I collected survey data from German and Japanese subsidiaries in the US. The sample for German MNCs was drawn from the Directory of Subsidiaries of German Firms in the US (1996-97) and the sample for the Japanese firms was drawn from the Directory of Japanese-Affiliated Companies in the USA & Canada (1995-96). The lists consist of approximately 1800 German subsidiaries and 2000 Japanese subsidiaries.

Procedure

Initially, MNCs from the sampling frames were contacted by phone to identify the name and designation of the person heading the marketing function. Subsequently, a cover letter on University letter head along with the questionnaire, self addressed pre-paid return envelope, a questionnaire re-directing form, and an incentive of $1 were mailed to these managers. The cover letter stated that the data were being collected to investigate managerial decision making concerning entry mode decisions and promised a copy of the findings as an added incentive (along with the dollar bill enclosed) to participate in the study. In addition, the cover letter stated that if somebody else in that organization was more appropriate to fill the questionnaire then the person could fill the "Questionnaire Re-directing Form" and I would mail another copy of the questionnaire to that respondent. The cover letter and the questionnaire re-directing form had the name of the individual along with the name of their organization. In my database, I maintained the

experimental condition to which each respondent was assigned and made sure that I redirected the correct questionnaire. In the cover letter for redirected questionnaires, I also stated the name of the person to whom I had mailed the original survey.

Pretest

The objective of the pretest was to make sure that the manipulations were working. I mailed 400 surveys to a random sample of 200 respondents from each of the two mailing lists. Two weeks after mailing the original surveys I mailed post card reminders to each respondent. Overall, 91 responses and 16 questionnaire re-directing forms were received, on re-mailing these I received 6 additional responses. In all 97 responses were received out of which 86 were complete and usable.

To make sure that the manipulations were working as designed, I measured respondents' perceptions of the scenarios with 9 items (3 for each construct) seven-point Likert scale (1 = disagree, 7 = agree). The three items for each construct were averaged to create composite indicators. For each of the three dichotomous independent variables, the sample was split into two, i.e., high and low, and T-test statistic was used to verify the manipulations. The manipulations were significant and in the right directions for the three variables (HOMOGENOUS: $b = 1.30$, $t = 4.54$, $p < 0.01$; STABILITY: $b = 2.14$, $t = 7.97$, $p < 0.01$; CONTROL: $b = 1.84$, $t = 8.46$, $p < 0.01$).

Final Study

An additional 1000 questionnaires, 500 from each list were mailed for the final study. The same procedure as in the pretest was followed. Overall, 201 responses and 50 Questionnaire Re-directing Forms were received. On re-mailing these forms I received another 20 responses. In all 221 responses were received of which 201 were usable.

Again, the manipulations worked in the right direction and were significant (HOMOGENOUS: b = 1.25, t = 6.81, p < 0.01; STABILITY: b = 1.85, t = 10.58, p < 0.01; CONTROL: b = 1.71, t = 12.36, p < 0.01). As the manipulations worked for both the pretest and the final study, I combined the data for subsequently analysis. This gave us 318 responses of which 288 were complete and usable. Of these 288 responses, the distribution across the three independent measures was quite equitable (low versus high: HOMOGENOUS 145 versus 143; STABILITY 142 versus 146; CONTROL 125 versus 163). Further, as I hypothesized interactions between HOMOGENOUS and STABILITY, the cell sizes in this 2 x 2 classification varied from a low of 65 to a high of 78.

Non-Response Bias

To access non-response bias, I slightly modified the procedure of Armstrong and Overton (1977) and compared the manipulation checks for the pretest and the final study (kind of a test re-test validity). Specifically, for subjects in high universal needs condition, I compared pretest manipulation check means for HOMOGENOUS with final study manipulation check means for the same variable. This procedure was repeated for subjects in low universal needs condition, the two stability conditions, and the two control conditions. Non-response bias did not exist as all the six means were statistically equal (HOMOGENOUS = high, b = -0.140, t = -0.65, p = 0.52; HOMOGENOUS = low, b = -0.100, t = -0.40, p = 0.69; STABILITY = high, b = 0.010, t = 0.44, p = 0.66; STABILITY = low, b = -0.19, t = 0.78, p = 0.43; CONTROL = high, b = -0.005, t = -0.29, p = 0.78; CONTROL = low, b = -0.007, t = -0.37, p = 0.71).

Estimation Procedure

For the first decision frame I considered the entry mode options to be ordered in terms of equity participation (with exports at the lowest end, joint ventures in the middle, and wholly owned subsidiaries on the top). For this decision frame I estimate the ordered probit model (M1), which treats the data as comprising of discrete ordered alternatives (for details see Maddala 1983). For the second decision frame I estimated the multinomial logit model (M2), which treats the dependent measure as discrete unordered alternatives (Greene 1993).

For both the ordered probit (M1) and multinomial logit (M2), I used the Judgment Uncertainty and Magnitude Parameter (JUMP) paradigm, proposed by Chandrashekaran and Marinova (1998), to obtain the JUMP version of these models, M3 and M4 respectively. The JUMP model statistically separates out, simultaneously, the drivers of judgment magnitude from those of judgment uncertainty. Note that in our case judgment magnitude refers to the entry mode decision and judgment uncertainty refers to decision uncertainty. Now I briefly review the JUMP model estimation framework. For an individual *i*, a JM model is written as:

(1a) $$Y_i = \mu_i + \varepsilon_i$$

(1b) $$\mu_i = \beta_0 + \mathbf{X}_i\beta$$

(1c) $$\varepsilon_i \sim N(0, \sigma_\varepsilon^2)$$

where Y_i denotes the judgment (dependent measure), $\mathbf{X}_i = [x_{1i}, x_{2i}, \ldots, x_{ji}]$ denotes a row vector of j-variables hypothesized to impact the judgment, β_0 denotes the intercept term,

and $\beta_i = [\beta_{1i}, \beta_{2i}, \ldots, \beta_{ji}]$ denotes the column of corresponding impacts, and ε_i is the error term.

Chandrashekaran and Marinova (1998) proposed:

(2a) $$\mu_i = JM_i + JU_i^{1/2}\xi_i$$

(2b) $$\xi_i \sim N(0,1)$$

(2c) $$\text{cov}(\varepsilon_i, \xi_i) = 0$$

where JM and JU denote the judgment magnitude and judgment uncertainty respectively.

Thus, I have:

(3) $$Var(Y_i) = \sigma_{\mu i}^2 + \sigma_\varepsilon^2 = JU_i + \sigma_\varepsilon^2$$

As variances cannot be negative, one could use the exponential form to constraint variances to be positive:

(4) $$Var(Y_i) = \sigma_\varepsilon^2 \exp(Z_i\delta)$$

where $JU_i = \delta_0 + Z_i\delta$, $Z_i = [z_{1i}, z_{2i}, \ldots, z_{ki}]$ denotes a row vector of k-variables hypothesized to impact the judgment uncertainty, δ_0 denotes the intercept term, and $\delta_i = [\delta_{1i}, \delta_{2i}, \ldots, \delta_{ji}]$ denotes the column of corresponding impacts.

The above form is analytically convenient and approximates the additive form, with 90% accuracy, if $Z_i\delta^* < 0.5$, where $\delta^* = \delta/\sigma_\varepsilon$ (Chandrashekaran and Marinova 1998). I use this exponential form to model uncertainty and verify whether the average of $Z_i\delta^* < 0.5$. I use maximum likelihood to obtain the parameter estimates for all models.

To test the hypotheses, I estimate the following JUMP model equation:

$$JM = \beta_0 + \beta_1 HOMOGENOUS + \beta_2 STABALITY + \beta_3 CONTROL + \beta_4 HOMOGENOUS * STABILITY \quad ...(5)$$

$$JU = \delta_1 HOMOGENOUS + \delta_2 STABALITY + \delta_3 CONTROL + \delta_4 HOMOGENOUS * STABILITY \quad ...(6)$$

Note that in terms of judgment uncertainty parameters, I expect $\delta_1 < 0$, $\delta_2 < 0$, $\delta_3 < 0$, and $\delta_4 < 0$.

Results

Four different models were estimated. The first two models dealt only with the entry mode decision. The first model (M1) viewed the dependent measure as discrete ordered alternative (i.e., I estimated ordered probit), while the second model (M2) viewed the dependent measure as discrete unordered alternatives (i.e., multinomial logit). The last two models were the JUMP versions of the first two models respectively, i.e., they simultaneously considered both the decision and the decision uncertainty (M3 and M4 respectively). I use likelihood ratio (LR) tests to assess the overall fit of the four models. In addition, LR tests are also used to examine the incremental variance explained by incorporating decision uncertainty in M3 and M4 (Chandrashekaran and Marinova 1998). The results from the LR tests show:

1. All four models, M1 ($\chi^2 = 27.12$, d. f. = 4, $p < 0.01$), M2 ($\chi^2 = 35.88$, d. f. = 8, $p < 0.01$), M3[21] ($\chi^2 = 38.08$, d. f. = 8, $p < 0.01$), and M4[22] ($\chi^2 = 43.76$, d. f. = 16, $p < 0.01$) fit significantly better than the null model with no independent measures.
2. The JUMP ordered probit (M3) does significantly better than the M1, which considers judgment magnitude only ($\chi^2 = 10.90$, d. f. = 4, $p < 0.05$). But the JUMP multinomial logit model (M4) does not outperform the judgment magnitude multinomial logit (M2) model ($\chi^2 = 7.88$, d. f. = 10, $p < 0.36$).

To sum, all four models provide a significantly better fit than their respective null models, but M4 does not provide a significantly better fit than the parsimonious M2, though M3 performs significantly better than the parsimonious M1. Thus, I retained M1, M2, and M3 for subsequent investigation. I retained M2 as it outperforms M1, M3 as it is as good as the JUMP M4, and M1 to compare it with M2 in order to gauge the explanatory power of the two decision frames.

While the LR tests provide descriptive validity for the four models, it is useful to establish predictive validity (cf., Greene 1993; Maddala 1983). I do recognize that prediction is never a motive of entry mode research, but predicting out-of-sample does convey information with respect to empirical generalizability of findings. To assess the predictive validity of the four models, I split the sample into two: estimation sample and validation sample. One in every four respondents was randomly allocated to validation sample and three in every four to estimation sample. I re-estimated the models with the

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[21] The $Z_i\delta^*$ for the ordered probit and the tobit model is -0.24 and, as recommended, is below the 0.5 cut-off (Chandrashekaran and Marinova 1998).

respondents in the estimation sample, and based on these estimates, predicted the choice of subjects in the validation sample. The percentage correct classification for the four models were compared to the criterion specified by Morrison (1969).[23] The out-of-sample prediction results (i.e., validation sample) indicate the following:

3. The percentage correct classified for M1 (51.32%), M2 (42.11%), and M3 (43.42%) were greater than Morrison's (1969) maximum chance criterion (36.84%) and proportional chance criterion (33.55%), but M4 (34.20%) performed worse than the naive maximum chance criterion. Note that in terms of predictive validity M1 outperforms the other three models.

Conventional LR tests cannot be used to compare M1 and M2 because no one model is nested in the other. I therefore employed a non-nested test for model selection based on the likelihood dominance criterion (LDC) proposed by Pollak and Wales (1991).[24] Note that M2 and M3 have the same degrees of freedom, therefore only way to compare these is to examine their log likelihood values. The model with higher log likelihood value explains more variance in the dependent measure, but there is no way to

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[22] The $Z_i\delta^*$ for the multinomial logit model are -0.46, and 0.89. We did estimate a model with additive terms for uncertainty, but this resulted in negative variances.

[23] We extended Morrison's (1969) proportional chance criteria and maximum chance criteria from two category discriminant problem to three category problem. If α, β, and γ are the proportion of respondents in each of the three categories, then the maximum chance criterion would be the maximum of these three proportions and the proportional chance criteria would be: $\alpha^2 + \beta^2 + \gamma^2$.

[24] For two non-nested hypotheses involving the same dependent variable, the likelihood dominance criterion (LDC) involves calculating the $L_2 - L_1$, where L_2 is the log likelihood for the model with greater number of estimated parameters (say n_2) and L_1 is the likelihood for model with lower number of estimated parameters (say n_1). The LDC prefers H_1 to H_2 if $L_2 - L_1 < [\chi^2(n_2 + 1) - \chi^2(n_1 + 1)]/2$, H_2 to H_1 if $L_2 - L_1 > [\chi^2(n_2 - n_1 + 1) - \chi^2(1)]/2$, and is indecisive if both of these criteria are not satisfied (Pollak and Wales 1991).

know whether the two log likelihood values are statistically different. The results from the LDC test and the comparison of likelihood values of M3 and M4 show:

4. For the comparison of ordered probit (M1) with the multinomial logit model (M2), LDC gives us $L_2 - L_1 = 4.38$, which is greater than the 1% critical value of 4.23. Thus, M2 outperforms M1.
5. The log likelihood for the JUMP ordered probit (M3) is slightly higher than the log likelihood for M2, the judgment magnitude only multinomial logit model (-295.57 versus -296.64). Thus, M3 outperforms M1.

In summary, both M2 and M3 have a significantly better fit than M1, though M1 outperforms M2 and M3 in terms of predictive validity. In addition, comparison of log likelihood values of M2 and M3 reveals that M3 provides a better fit than M2, but there is no way to know if this difference is statistically significant. Therefore, I retained M2 and M3 to test the hypotheses.[25]

Hypotheses Testing

The results from judgment magnitude only multinomial logit model (M2) are presented in Table 5.1. This model tests hypotheses H_1 through H_4. The results support H_1, as under high pressures of global integration wholly owned subsidiaries are preferred over both exports ($b = 0.955$, $p < 0.05$) and joint ventures ($b = -0.637$, $p < 0.10$). For the two alternate hypotheses H_{2a} and H_{2b}, I find support for H_{2a}. Thus, in stable markets, in comparison to volatile environments, wholly owned subsidiaries are preferred over both exports ($b = 1.299$, $p < 0.01$) and joint ventures ($b = -0.746$, $p < 0.05$).

[25] The estimated judgment magnitude coefficients for M1 and M3 are very similarly. In fact, in terms of statistical significance (i.e., coefficients that are statistically significant and non-significant) the results from these two models are identical.

Table 5.1

Results from the Multinomial Logit Model [a]

Independent Variables	Joint Venture with Exports as Base	Wholly Owned Subsidiaries with Exports as Base	Wholly Owned Subsidiaries with Joint Ventures as Base (Wald Tests) [b]
Constant	-0.421 (0.399)	-0.212 (0.420)	-0.209 (0.420)
HOMOGENOUS	0.318 (0.427)	0.955 ** (0.462)	-0.637 * (0.460)
STABILITY	0.553 (0.439)	1.299 *** (0.467)	-0.746 ** (0.451)
CONTROL	0.364 (0.344)	-0.781 *** (0.330)	1.145 *** (0.314)
HOMOGENOUS * STABILITY	-0.120 (0.628)	-0.952 * (0.636)	0.832 * (0.601)
Log Likelihood Model	-296.6448		
Log Likelihood Restricted	-314.5847		
LR Test (χ^2, d. f.)	$\chi^2 = 35.88$ ***, 8.		
Predictive Validity			
	Full Sample	**Estimation Sample**	**Validation Sample**
Proportional Chance Criterion (C_{PRO})	33.75%	33.84%	33.55%
Maximum Chance Criterion (C_{MAX})	37.50%	37.74%	36.84%
Correct Classified (Model)	46.18%	48.11%	42.11%

* $p < 0.10$ ** $p < 0.05$ *** $p < 0.01$

[a] Standard errors in parenthesis.

[b] Wald tests were carried out to obtain these estimates and those for interpreting interaction effects in this model and the other models (ordered probit, ordered logit, tobit, dirichlet, and JUMP). Wald test for a linear combination of two variables (X_1 and X_2) is as follows: $b = \alpha X_1 + \beta X_2$, and the variance is given as:

$$\alpha^2 Var(X_1) + \beta^2 Var(X_2) + 2\alpha\beta Cov(X_1 X_2).$$

For the two alternative hypotheses (H_{3a} and H_{3b}) concerning the institutional environment, the results partially support H_{3b}. Specifically, under conditions of high governmental controls in the host country, joint ventures are preferred over wholly owned subsidiaries (b = 1.145, $p < 0.01$), which are also less preferred than exports (b = 1.299, $p < 0.01$). But joint ventures are not preferred over exports (b = 0.553, p = 0.104), though the coefficient is in the correct direction and nearly significant (p = 0.104). Finally, H_4 is

partially supported as exports are preferred over wholly owned subsidiaries (b = -0.952, p < 0.10), joint ventures are preferred over wholly owned subsidiaries (b = 0.932, p < 0.10), but the conjecture concerning exports being preferred over joint ventures only receives directional support (b = -0.120, p = 0.42).

Table 5.2

JUMP Results: Ordered Probit [a]

Independent Variables	Ordered Probit: Judgment Magnitude	Ordered Probit: Judgment Uncertainty
Constant	0.494 *** (0.183)	---
HOMOGENOUS	0.296 ** (0.160)	0.196 (0.255)
STABILITY	0.393 *** (0.169)	0.139 (0.255)
CONTROL	-0.415 *** (0.152)	-0.556 *** (0.205)
HOMOGENOUS * STABILITY	-0.307 * (0.223)	-0.328 (0.354)
μ / σ [b]	0.719 *** (0.1811)	
Log Likelihood Model	-295.5706	
Log Likelihood Restricted	-314.5847	
LR Test (χ^2, d. f.)	38.03 ***, 8	
Predictive Validity		
Full Sample		
Proportional Chance Criterion (C_{PRO})	33.75%	
Maximum Chance Criterion (C_{MAX})	37.50%	
Correct Classified (Model)	47.22%	
Estimation Sample		
Proportional Chance Criterion (C_{PRO})	33.84%	
Maximum Chance Criterion (C_{MAX})	37.74%	
Correct Classified (Model)	48.11%	
Validation Sample		
Proportional Chance Criterion (C_{PRO})	33.55%	
Maximum Chance Criterion (C_{MAX})	36.84%	
Correct Classified (Model)	43.42%	

* $p < 0.10$ ** $p < 0.05$ *** $p < 0.01$

[a] Standard errors in parenthesis.

[b] μ is the estimate of the second threshold parameter for the ordered probit and logit models, whereas σ is the estimate of standard deviation for the tobit model (Greene 1993).

The results from JUMP ordered probit model (M3) are presented in Table 5.2. This

model tests hypotheses H_1 through H_5, with the exception of H_{2b} and H_{3b}.[26] The results support H_1, as under high pressures of global integration, high resource commitment decisions are preferred over low resource commitment decisions ($b = 0.296$, $p < 0.05$). Consistent with the results of M2, stable environments are characterized by high resource commitment decisions in comparison to volatile markets (H_{2a}: $b = 0.393$, $p < 0.01$). I also find support for H_{3a} ($b = -0.415$, $p < 0.01$), which is contrary to the results of multinomial logit model (M2) in which H_{3b} was supported. Further H_4 is supported implying that under high pressures of global integration and stable demand conditions in the host country low resource commitment decisions are preferred ($b = -0.307$, $p < 0.10$). Finally moving to the four judgment uncertainty hypotheses, the results support only one hypothesis, viz. H_{5c}. Both pressures of global integration (H_{5a}: $b = 0.196$, $p = 0.78$) and stable versus volatile demand in the host country (H_{5b}: $b = 0.139$, $p = 0.71$) do not seem to influence judgment uncertainty. Even when these two factors (i.e., high pressures of global integration and stable demand conditions in the host country) are taken together (H_{5d}) judgment uncertainty is not affected ($b = -0.328$, $p = 0.18$). Finally, as hypothesized, when the host country government exerts is likely to control over MNC subsidiary (H_{5c}) judgment uncertainty is likely to be low ($b = -0.556$, $p < 0.01$).

Discussion

I investigate the implications of decision framing and decision uncertainty on theory development for the MNCs entry mode decision. Specifically, I examine the two decision frames adopted by entry mode researchers. First, the available entry mode options are viewed as discrete ordered alternatives with respect to the level of resource

[26] Note that H_{2b} and H_{3b} assume no hierarchical ordering among the three generic entry modes.

commitment (cf., Gatignon and Anderson 1988; Kim and Hwang 1992). Second, the entry mode decision is framed as the choice between discrete unordered alternatives (cf., Agarwal and Ramaswami 1992; Kogut and Singh 1988).

Based on previous research on mode of entry, I develop hypotheses for both decision frames. The hypotheses development exercise results in two sets of alternative propositions. H_{2a} and H_{3a} for the first decision frame and their alternatives H_{2b} and H_{3b} respectively, for the second decision frame. To test the hypotheses for the first decision frame, I estimated an ordered probit model (M1 and M3) and for the second decision frame a multinomial logit model (M2 and M4). Note that the multinomial logit model is a general specification and can be used to validate hypotheses for both decision frames.

Results from M2 support H_{2a} and H_{3b}, but results from M3 support H_{2a} and H_{3a}. In other words, I find support for both H_{3a} and its alternative hypothesis H_{3b}. One way to resolve this anomaly is to compare the overall fit of the two models. Likelihood dominance criterion showed that M2 outperforms M1.[27] Therefore, H_{3b} is the hypothesis which finds support. But when I incorporate judgment uncertainty, the comparison of M2 and M3 reveals that M3 outperforms M2, though there is no way to know that the difference is statistically significant (as they both have the same degrees of freedom). Note that H_1 and H_4 are predicted by both decision frames and are supported by both M2 and M3.

The results from the JUMP model reveals that incorporating decision uncertainty significantly increases the explanatory power of the ordered probit model (M1 versus

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Therefore, ordered models (M1 and M3) cannot test these hypotheses.

[27] Note that both M1 is the judgment magnitude version of the JUMP model M3. As we are talking about judgment magnitude here, comparison of M1 and M2 seemed appropriate

M3). The findings from the JUMP ordered probit show that decision makers confidence in their chosen entry mode increases as the host country government moves from being MNC friendly to exerting high levels of control over MNC subsidiary. Taken together with the chosen entry mode, i.e., exports, these results imply that host country government is likely to impose restrictions on the MNC, as a result, the MNC chooses a low risk entry mode and is confident about its decision. Further, results from the JUMP model also show that the other two facets of the global environment (HOMOGENOUS and STABILITY) do not influence decision uncertainty.

Limitations and Future Research

The findings are subject to some limitations, which are also fruitful avenues for future research. First is the data collection methodology, i.e., scenarios in a factorial array. Survey data from various host countries and industries would be the obvious extension to my study. Second, I investigate the influence of the environment on the entry mode decision. Other variable categories like MNC's strategy and proprietary knowledge should provide fruitful avenues for future research.

Implications

This study makes two important contributions to the literature on mode of entry. First, I conceptually demonstrate that framing of the entry mode decision is likely to determine the hypothesis a researcher tests (e.g., H_{3a} versus H_{3b}). Though I do not conclusively establish which of the two decision frames is better, I do show that examining both decision frames provides richer insights into the entry mode decision. Second, the findings illustrate the importance of investigating both the decision and the decision uncertainty for the entry mode decision.

Chapter 6

Conclusion

The dissertation is comprised of four essays concerning important aspect of multinational subsidiary management. The first essay is theoretical in nature and develops an integrative conceptual framework for the antecedents and consequences of MNC subsidiary channel structures and processes. Relying on literatures from diverse fields like institutional theory (DiMaggio and Powell 1983), multinational strategy (Ghoshal 1987), and marketing channels (Stern and Reve 1980), I identify three key categories of variables likely to exert an outside influence on MNC subsidiary channel structures and processes. First is the strategic motives of the MNC, which capture both the nature of control mechanisms the MNC headquarters is likely to use to manage its subsidiaries and the strategic philosophy of the MNC. Second is the MNC specific variables, which includes the subsidiary's method of founding, the international experience of the MNC, the value of firm assets used in the subsidiary operations, characteristics of the product(s) marketed by the subsidiary, the cultural distance between the MNC headquarters and its subsidiary, and the relative size of the subsidiary in relation to the headquarters. Third is the environment of the MNC, which is conceptualized in terms of pressures of both global integration and local responsiveness. The interactions among these dimensions and their influence on MNC subsidiary channel structures and processes rests on three basic tenets: (a) each of the three variable categories has a direct influence on channel structure and processes, (b) MNC specific variables, which includes the international experience of the MNC and its key assets and skills, determine the strategic motives of

the MNC, and (c) the facets of the environment moderates the influence of strategic motives on MNC subsidiary channel structures and processes.

The second essay empirically validates a part of the conceptual framework developed in the first essay. Specifically, I examine the role of a MNC's strategic motives and the facets of the local environment on the use of formal control mechanisms by the MNC subsidiary to manage its channel partners. Consistent with the strategy-environment coalignment principle, I examine the influence of a multinational's worldwide strategic motives and the facets of the host country environment on the use of process and output control mechanism by the MNC subsidiary to manage its distribution partners. The results show that the distribution partner's performance is determined by the extent to which a MNC subsidiary utilizes process and output control mechanisms to manage its distribution channel along with munificence and volatility in the local task environment. The extent to which a MNC uses these two control mechanisms in turn depends on the facets of the local environment, including munificence, dependence, and multiplicity, along with the worldwide strategic motives of the MNC. The results also confirm the mediational hypotheses and demonstrate that the local environment serves as a filter for the influence of the strategic motives on a MNC's use of formal control and coordination mechanisms.

The third essay adopts the strategy-environment coalignment principle to study the influence of the MNC's worldwide strategic motives, the facets of the local environment, and MNC-specific factors on subsidiary performance. Specifically, I investigate the influence of (1) factors internal to a MNC and (2) the fit between the MNC's worldwide strategy and the facets of the host country environment on MNC

subsidiary performance. The results show that demand munificence enhances subsidiary performance, though demand volatility does not have a significant impact. The premises of institutional theorist concerning the non-significant influence of the facets of the local institutional environment on subsidiary performance are supported, though institutional environment moderates the influence of worldwide learning. In addition, as hypothesized, psychic distance between a MNC headquarter and its subsidiary proves detrimental for the performance of the subsidiary, while subsidiary performance increases with the value of firm-specific knowledge. Finally, the results support the hypotheses that the influence of a MNC's worldwide strategic motives are contingent on the local environment.

In the fourth and the final essay, studies the implications of decision framing and decision uncertainty on theory development for a multinational corporation's entry mode decision. Specifically, two decision frames adopted by entry mode researchers are investigated. First, the available entry mode options are viewed as discrete alternatives ordered with respect to the level of resource commitment. Second, the entry mode decision is framed as the choice between discrete unordered alternatives. Framing of the entry mode decision is important as it determines the hypotheses that a researcher will test. Though the findings do not conclusively establish which of the two decision frames is better, they do show that examining both decision frames provides richer insights into the entry mode decision. In addition to decision framing, environmental drivers of decision uncertainty are also examined by relying on the basic psychological premise that, to an extent, all decisions are fuzzy and, therefore, embody two components: the decision itself and decision uncertainty. This premise builds on previous research on entry mode

decision, which has primarily focused only on the entry mode decision. The results illustrate the importance of investigating both the entry mode decision and uncertainty associated with the entry mode decision.

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IMAGE EVALUATION
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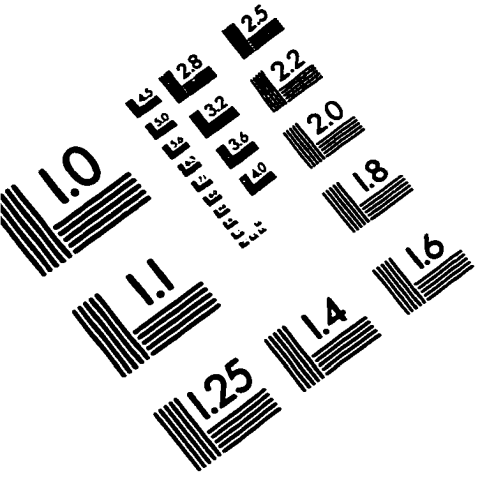

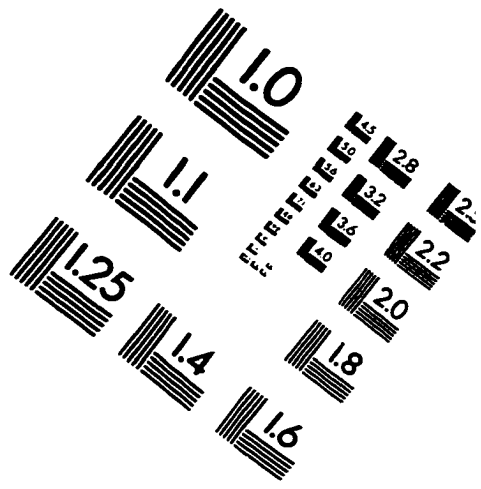

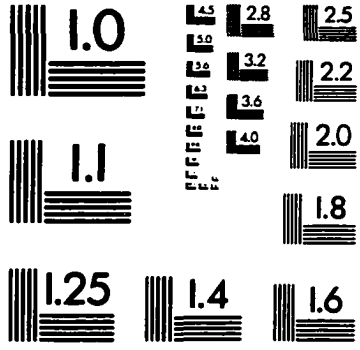

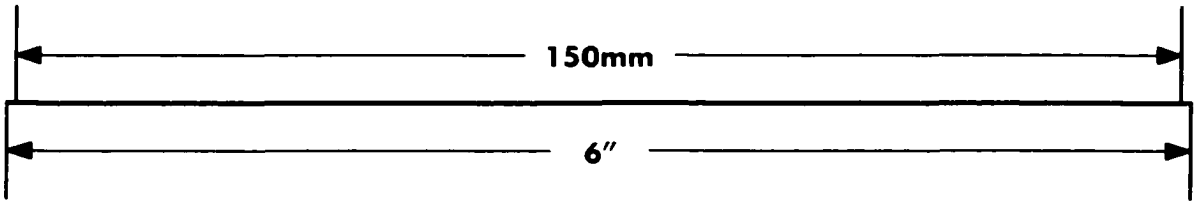

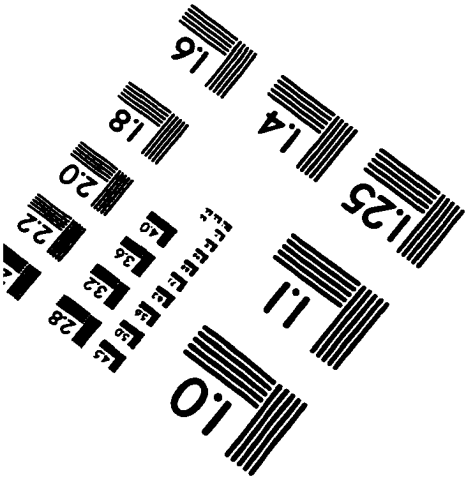

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