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I am submitting herewith a dissertation written by Maria Vryza entitled "Control Mechanisms, Interpartner Trust, and Performance in International Joint Ventures: A Transaction Cost Approach." I have examined the final copy of this dissertation for form and content and recommend it to be accepted in partial fulfillment of the requirement s for the degree of Doctor of Philosophy, with a major in Business Administration.

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ABSTRACT

This study examined the moderating effects of cognitive and affective dimensions of trust in the relationship between control and performance in the context of international joint ventures (IJVs). Data were collected from 140 general managers of U.S.-foreign IJVs operating in the United States. Results were cross-validated with responses from U.S. and foreign IJV parent representatives.

The study's conceptual model was developed based on extant research in the IJV control-performance relationship and the insights provided by the revised transaction cost theory (TC) that acknowledges the importance of interpartner trust in interorganizational relationships. The study's results clearly demonstrate the importance of incorporating trust when studying the IJV control-performance relationship. This, in itself, provides a tentative explanation for the empirical inconsistencies and contradictions of extant research in this area of investigation.

In this vein, this study provided strong empirical evidence that the correct match of control mechanisms to the IJV transaction does *not* necessarily translate into superior performance. No significant direct effects between formal and informal control mechanisms and IJV performance were found. On the other hand, this research found that informal control

mechanisms strongly interact with affective and cognitive dimensions of trust to explain the financial performance of IJVs. In fact, it was found that while there was a positive association between informal control and performance for IJVs characterized by high levels of either cognitive or affective trust, these constructs were negatively related for IJVs with low levels of either cognitive or affective trust. Moreover, the research findings provided empirical support for a unique joint effect due to the combination of cognitive and affective trust interacting with informal control in affecting IJV performance. Finally, this study supported a priori expectations that neither cognitive nor affective trust moderate the relationship between formal control and IJV performance.

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CHAPTER 1

INTRODUCTION

Background

The global patterns of foreign direct investment (FDI) have changed significantly in recent years. The most obvious evidence of this change is the reversal in the status of the United States from a net outward direct investor to a net host country for FDI. The United Nations Centre on Transnational Corporations (1988) estimated that the U.S. share of the worldwide FDI inflow increased from 12% in 1981 to 39% in 1988. A number of researchers have indicated that an important factor contributing to this reverse trend is the increase in international joint ventures established in the U.S. (Harrigan, 1988; Hennart, 1991; Hergert & Morris, 1988).

By definition, an international joint venture (IJV) is an independent legal entity formed by two or more parent organizations of which at least one of the parents is headquartered outside the joint venture's country of operation (Geringer, 1988; Geringer & Hebert, 1989). In terms of both commitment and control, IJVs represent an intermediate type of strategic alliances between full equity ownership agreements and "arm's length" market transactions such as licensing and franchise agreements. Intense domestic and foreign competition have made it difficult for both U.S. and

foreign companies to adjust single-handedly to constantly changing economic, technological, and social conditions (Devin & Bleackley, 1988; Gugler, 1992; Tupin, 1993). Given the battle for survival and success on the international level, multinational corporations have realized that it is better to team up with other companies instead of trying to face this growing ambiguity all alone (Lewis, 1992; Ohmae, 1989). Today, companies are establishing IJVs to gain competitive advantage, diversify risk, or gain access to markets and technologies (Ghoshal, 1987; Goldenberg, 1988; Harrigan, 1988a).

The establishment of IJVs is a strategic option for multinational corporations, especially those pursuing global strategies (Geringer & Woodcock, 1989; Hergert & Morris, 1988). According to Harrigan (1987), IJVs are critical to the maintenance of competitive advantage because they are increasingly employed to exploit an organization's core markets and technologies. Moreover, IJVs are pivotal to maintaining economic performance and stimulating growth.

The literature indicates that the size of the American market, advanced technology, enhanced marketing capabilities, and the potential of gaining competitive advantage and management know-how are the most important factors that attract foreign companies to establish IJVs in the United States (Ajami & Ricks, 1981; The U.S. Department of Commerce, 1971). However, research has also found that foreign firms invest in the U.S.

in order to feed U.S. technological information back to their home countries (Franko, 1976) or acquire critical marketing knowledge and management know-how (Kogut, 1988). By doing so, foreign firms are in a better position to eventually acquire the U.S. company with which they initially formed a venture, or terminate the IJV agreement and pursue the U.S. operation alone. In each one of these scenarios, U.S. companies end up losing their competitive stance (Cullen & Johnson, 1995) and the economy, at large, ends up suffering from higher unemployment rates.

It is evident from the above discussion that IJVs can be two-edged swords. On one hand, if these hybrid organizational forms are not managed appropriately, American companies can be robbed from their current competitive posture by giving access to potential competitors to home technologies, processes, or markets (Lewis, 1992). On the other hand, if important safeguards are built into the agreement, IJVs can be the most effective and efficient organizational forms (Perlmutter & Heenan, 1986). According to Jarillo (1988), IJVs can lead to a win-win situation for both parent sponsors because their hybrid structure enables parents to retain internally the activities they are mostly skilled to perform and transact those that do not compromise their core competencies. One popular case study of enduring IJV success is the Fuji-Xerox joint venture which has been meeting the expectations of both of its parents for over 30 years.

Despite their potential, IJVs have earned a notorious reputation of being the Trojan horses of business transactions in that they provide an opportunity for internal attack and parental disputes (Beamish, 1985; Janger, 1980; Killing, 1983; Lewis, 1992; Urban & Vendemini, 1992). In fact, it has been estimated that up to 70% of all IJVs fail within two years of their formation (Geringer & Herbert, 1991; Parkhe, 1993). Clearly, this discouraging statistic indicates that IJVs are good ideas that all too often go awry because IJV partners face serious implementation problems.

Implementation Issues Not Addressed

Issues pertaining to the implementation and management of IJVs are largely left unexplored in the management literature. Research in this area has been compounded with fragmented empirical studies that do not build on one another and are, for the most part, exploratory in nature (Parkhe, 1993a; Schopler, 1987; Thomas & Trevine, 1993). In a recent review of the IJV literature, Parkhe (1993a) pointed out that, at the expense of other areas, a disproportionate amount of research attention has been given to the identification of motives that influence IJV formation and the examination of partner selection characteristics. Consequently, even though the literature has provided rules of thumb to guide formation considerations, little is known about the critical implementation factors that determine IJV success

(Borys & Jemison, 1989). In fact, even on the part of practicing managers, the eagerness to form IJVs has not been met by an advancement on the understanding of how to manage them (Harrigan, 1985). Because IJVs create value only after they are formed and in a way that is not possible by either parent acting alone, the implementation problems that parent companies face are crucial to the management and success of IJVs (Borys & Jemison, 1989; Doz, 1988; Niederkofler, 1991).

Importance of IJV Control

The literature indicates that one of the most difficult and unwelcome implementation challenges that parent companies encounter when they form IJVs is the extent to which they have to relinquish control over the venture's activities (Aderson & Gatignon, 1986; Geringer & Hebert, 1991). On one hand, parents need to exercise adequate control over the venture's activities to ensure that their strategies are effectively implemented and their resources are efficiently utilized (Lorange, Morton, & Ghoshal, 1986). Insufficient control may lead to the unintentional "leakage" of knowledge and capabilities (Geringer & Hebert, 1989) or a loss of competitive advantage to the other parent (Hamel, 1991) or some other competitor (Reich & Mankin, 1986). On the other hand, parents need to relinquish more control over the venture's activities than they are accustomed to in managing their wholly-

owned subsidiaries (Anderson & Gatington, 1986; Geringer & Hebert, 1991), since IJVs require autonomy to grow and prosper. All too often, though, parents tend to overmeddle in the venture's day to day affairs (Lyles, 1991) especially, when they see the relationship as being risky.

While these observations might suggest that the difficulty in managing IJVs involves finding the right "balance" of autonomy and control, in reality this task is probably much more difficult and enigmatic than merely achieving a compromise. Instead, the obstacle in IJV success likely involves obtaining a workable *synthesis* of this dialectic (i.e., achieving both autonomy and control). Such a synthesis of control and autonomy must be worked out between the parents and effectively implemented over time to assure satisfactory IJV performance (Harrigan, 1985).

Even though the control-performance relationship is conceptually interesting, research has yet to produce conclusive empirical evidence about this important link. Contradictory findings should be of little surprise, however. A closer examination of this stream of research indicates that, both individually and collectively, these studies suffer from important theoretical and methodological shortcomings.

Critique of Extant Research

A serious problem with mainstream research on the IJV control-performance relationship pertains to the studies' narrow conceptualization and operationalization of two focal variables: IJV control and performance (Geringer & Hebert, 1989). In this vein, previous studies have placed excessive emphasis on ownership control, assuming that the dominant partner (the one with the largest ownership share) is also the one that exercises the highest level of control over the IJV activities (Blodgett, 1991; Fagre & Wells, 1982; Tomlinson, 1970). Nonetheless, there is plenty of evidence indicating that mere ownership control does not necessarily translate into complete managerial control. Compounded to this problem, a lack of consensus about the appropriate definition and measurement of IJV performance has resulted in disparate and often incompatible performance operationalizations. The above discussion clearly supports Geringer and Hebert's (1991) assertions that several methodological and theoretical shortcomings that have constrained research progress on the control-performance relationship.

Furthermore, extant research has been overly preoccupied with establishing a direct link between formal control (e.g. mechanisms associated with hierarchical governance) and IJV performance. Schaan (1983), for example, asserted that formal control is used to prevent venture activities

that are not aligned with the parents' interests and is primarily exercised through majority ownership, veto power, formal plans, budgets, reports, agreements, and approval of the venture's board composition and strategic decisions. Recently, however, this rationale has been questioned (Gray & Yan, 1992). Cumulating empirical evidence suggests that formal control mechanisms by themselves explain only a small percentage of the IJV performance variance (Ding, 1993; Friedman & Kalmanoff, 1961; Harrigan, 1985; Ohmae, 1989). Therefore, the examination of other control mechanisms, besides equity ownership, and their effect on joint venture performance warrants further investigation.

Another serious limitation of the extant research on the IJV control-performance relationship is the absence of a sound theoretical base. This stream of research can benefit from the integrative theoretical framework provided by the transaction cost (TC) approach. According to Geringer and Hebert (1989), the incorporation of the TC perspective in this area of investigation is one of the most promising research avenues that can help clarify and resolve empirical inconsistencies. The TC theory, postulated by Williamson (1975), marries organization theory with industrial economics and contract law by linking transactions and governance structures in a discriminating manner that minimizes transaction costs and maximizes efficiency. This theory recognizes that the effects of bounded rationality,

information constraints, and increased environmental uncertainties lead to long term transactions that lower the transaction costs associated with opportunistic behavior. In this vein, long term transactions, such as IJVs, create interdependencies between companies and build trust (Parke, 1993).

Even though the TC perspective is one of the most widely used explanations for the formation of IJVs, (Beamish & Banks, 1987; Harrigan, 1988; Hennart, 1988; Kogut, 1988), it has not been applied to the IJV control-performance relationship. In general, the TC framework suggests that formal controls and safeguards would be ill-suited to address the behavioral condition of opportunistic behavior that characterizes exchange relations (Hennart, 1991; Williamson, 1975; 1985). This is particularly true in the case of IJVs where the adoption of formal safeguards and controls goes against the very essence of choosing IJVs over other forms of governance and sacrifices their transaction efficiency (Kogut, 1988). Furthermore, recent modifications and additions to the TC theory have greatly enriched the framework's conceptual domain and predictive power, especially in the context of relational exchanges. More importantly, though, one lately elevated construct of the TC theory --trust-- seems to be critical to interfirm cooperation (Parke, 1993b) and central to the understanding of the control-IJV performance relationship.

How the Study Addresses Previous Research Limitations

This study addresses the shortcomings of extant research on the IJV control-performance relationship in the following manner. First, previous studies have not utilized an integrative theoretical framework to explain this relationship. This research attempted to break this cycle by using a theoretically grounded model based on the revised TC theory. Second, previous studies have produced inconsistent findings about the IJV control-performance relationship and no serious effort has been made to reconcile and explain contradictory findings. Guided by the modified TC theory, an effort was made to break the current conceptual boxes surrounding the IJV control-performance relationship by introducing the concept of interpartner trust as a moderating variable in this relationship. Finally, extant research has treated the concepts of interpartner trust, IJV control, and performance unidimensionally. To address this limitation, the present investigation employs multidimensional conceptualizations and operationalizations of these variables.

Purpose of the Study

This research develops and tests a theoretically-grounded model for the IJV control-performance relationship. The model is based on insights drawn from the TC perspective and extant literature on IJVs. Specifically,

the purpose of this research study is to address the following question: What is the relationship between IJV control and performance and how is this relationship influenced by interpartner trust? The critical issues explored in this study include (1) the conceptualization and operationalization of IJV control; (2) the conceptualization and operationalization of IJV performance; (3) the linkage between IJV control and performance; and (4) the multidimensional conceptualization and operationalization of interpartner trust and its effects on the IJV control-performance relationship.

Important Definitions

International Joint Venture

An international joint venture (IJV) is an independent legal entity formed by two or more parent organizations of which at least one of the parents is headquartered outside the venture's country of operation (Geringer, 1988; Geringer & Hebert, 1989). The IJV entity is subject to joint ownership and control of the parent companies (Shenkar & Zeira, 1987).

Governance

The term "governance" refers to the categorical differences in the structure regulating economic transactions (Wilkens & Ouchi, 1982; Williamson, 1975; 1985). That is, whether a transaction or related set of

transactions are best regulated by markets, hierarchies (formal structural elements in organizations), hybrids (combination of bureaucratic and market elements) or "clans" (informal influences grounded in social regulation).

IJV Control

The exercise of IJV control entails the use of power, authority, and a variety of control mechanisms (Geringer & Hebert, 1989) that parent companies use to ensure that the way the IJV is managed conforms to their own interests (Schaan, 1983).

Informal IJV Control

Informal control is exercised through socialization, communication, interaction, reward systems, or parental participation in IJV decision making areas (Kumar, 1993; Schaan, 1983). Informal control is primarily used to encourage and promote venture activities that are aligned with the parents' goals and objectives.

Formal IJV Control

Formal control is used to prevent IJV activities that are not aligned with the parents' goals and objectives. It is primarily exercised through majority ownership, veto power, formal plans, budgets, reports, agreements,

and approval of venture's board composition and strategic decisions (Schaan, 1983).

Interpartner Trust

Trust refers to "the reliance by one person, group, or firm upon a voluntary accepted duty on the part of another person, group, or firm to recognize and protect the rights and interests of all others engaged in a joint endeavor or economic exchange." (Hosmer, 1995, p. 393).

Cognitive Trust

Cognitive trust is based on available knowledge and "good reasons" that serve as evidence for trustworthiness (Lewis & Wiegert, 1985). Some of these "good reasons" include the partner's competence, professionalism, reliability, past history, and reputation.

Affective Trust

Affective trust reflects the emotional bonds, ties, and commitments that develop among interacting individuals, groups, and organizations (Lewis & Wiegert, 1985). Affective trust is manifested through genuine care, personal interest, and concern for the partner's welfare. In this respect,

while cognitive trust is based on sound reasoning and leaps of faith, affective trust addresses partners' integrity and moral foundations.

Opportunism

According and consistent with Williamson's (1975) view, opportunism is self-interest seeking with guile. This condition often involves some form of deceit.

IJV Performance

IJV performance is defined as the extent to which an IJV has fulfilled its parents' performance goals and objectives (Beamish, 1984; Blumenthal, 1990; Ding, 1993; Harrigan, 1986; 1988; Lecraw, 1984; Schaan, 1983; Yan, 1993).

Theoretical and Managerial Significance

Theoretically, the study of IJVs is important because it poses scholars with several dilemmas. IJVs are not independent entities from the parent organizations that form them. As a result, extant theories that address the successful management of unitary organizations do not necessarily apply to the management of partial equity ownership agreements because hybrid organizational forms are established in order to avoid the shortcomings of

unitary organizations (e.g., operational inefficiencies, scarcity or resources or high levels of risk). Therefore, trying to apply theories that derive from the strategic management of unitary companies to the IJV context may be misleading and/or inaccurate. The significance of this study lies in its examination of the IJV control-performance relationship under the TC lens. Since this theoretical base applies to a wide range of transactual agreements, and not only to unitary organizations, it is believed to be an appropriate theoretical framework in the context of IJVs.

Moreover, this study departs significantly from the current approaches to the IJV control-performance relationship. By introducing the concept of interpartner trust into this relationship, an attempt is made to create a new logic that can help clarify inconclusive research findings. Finally, a significant attribute of this study pertains to the conceptual delineation and operational clarification of interpartner trust, a task that has perplexed scholars for several years.

Managerially, the study of IJVs is important for several reasons. First, IJVs enable multinational corporations to pursue global strategies and gain and preserve competitive advantage by reducing risks, gaining efficiency, learning new technologies or processes, or gaining access into markets. In this respect, cooperative ventures expand organizational capabilities and provide firms with a competitive posture for the future.

Second, even though the number of IJVs continues to grow, recent statistics indicate that they have been largely unsuccessful. The high failure rates of IJVs provide a clear indication that venture parents face serious implementation problems. By focusing on the control structure of IJVs and the behavioral context of economic exchanges, this study seeks to uncover cost efficient and effective control strategies that lead to superior IJV performance.

CHAPTER 2

REVIEW OF LITERATURE

This chapter reviews extant research in the area of IJVs with a particular emphasis on studies investigating key variables and relationships pertaining to the objectives of the present research. The chapter is divided into the following sections: 1) conceptualization of control; 2) IJV performance; 3) IJV control-performance relationship; 4) importance of interpartner trust; and 5) conceptualization of trust.

Conceptualization of Control

Control is a fundamental element of organizational life. It has been stipulated that the very essence of organizing implies control (Child, 1973). Control is the process of evaluating, monitoring and rewarding the behavior and outcomes of organizational members and subunits (Ouchi, 1977). As organizations grow in size and demands for structural complexity and differentiation increase, so does the need to monitor, coordinate, and integrate diverse organizational activities (Lawrence & Lorch, 1977). In this context, a company's system of strategic control is important because it determines the degree to which an organization is able to achieve its goals and objectives (Daft & Macintosh, 1984; Goold & Quinn, 1990).

Given its strategic importance, it is not surprising that the concept of control attracted the attention of early writers in organization theory (e.g. Child, 1972; Edstrom & Galbraith, 1977; Etzioni, 1966; Lorange & Scott, 1974; Ouchi, 1977; Ouchi & Maguire, 1975; Tannebaum, 1968). Even in recent years, a considerable amount or research effort has been devoted to the conceptual and operational delineation of organizational control (Daft & Macintosh, 1984; Green & Welsh, 1988; Goold & Quinn, 1990; Govindarajan & Fisher, 1990; Gupta & Govindarajan, 1991; Merchant, 1982; Miner, 1982; Schreyogg & Steinmann, 1987). Interestingly enough, the great majority of extant research examines the control system of unitary organizations or wholly-owned subsidiaries of multinational companies (e.g. Anderson & Gatington, 1987; Cray, 1984; Doz & Prahalad, 1981, 1984; Egelhoff, 1984).

In the context of IJVs, the concept of control has attracted some scholarly attention (Parkhe, 1993a), but research in this areas has been far from integrative. Our cumulative understanding of control in hybrid organizational forms is still very limited and quite fragmented because research in IJVs is still in an embryonic stage of development. A review of the literature indicates that there is lack of consensus on the definition and conceptualization of IJV control (Geringer & Hebert, 1989). Table 2.1 lists previous studies' attempts to define and conceptualize control in the context of IJVs.

Table 2.1
Studies on IJV Control and Performance

Author	No. of JVs	JV Country	Definition of Control	JV Control	JV Performance
Friedman & Kalmanoff (1961)	Not specified	12 developing countries	Not explicit	Ownership, contract agreements, staffing, resource dependence	Based on few case studies (profitability, fees, attitudes towards JV)
Tomlinson (1970)	71 JVs (58 India & 13 Pakistan)	India & Pakistan	Successful acts of influence to ensure completion of the desired cycle of behavior.	Ownership, effective control, focus & extent of control	Profitability, interest, fees, meeting JV objectives, satisfaction with JV.
Franko (1971)	159 JVs held by Fortune 500	6 developed & developing countries	Not explicit	Parent standardization centralization & strategy.	JV survival & ownership instability.
Friedman & Beguin (1971)	Not specified	Many developing countries	Not explicit	Ownership, board, staffing, manager training	Social performance (employment, issue of shares)
Stopford & Wells (1972)	Not specified	Not specified	Not explicit	Ownership	JV survival
Behrman (1977)	Not specified	Canada, Europe & Australia	Not explicit	Ownership, board, MNC involvement in JV decisions, staffing.	Not examined
Dang (1977)	23 subsid. (15 JVs & 8 wholly owned)	Philippines & Taiwan	Locus of decision making (degree of subsidiary's autonomy)	Staffing, parent centralization, extent of control	Profitability
Raffi (1978)	35 JVs	Iran	% of JV's life that the JV CEO was a parent representative	Staffing, contractual agreements	Not examined
Killing (1983)	37 JVs	Developed countries	Locus of decision making (level of parents' influence on JV decisions)	Board, staffing, reward systems	JV survival, parent satisfaction with JV.

Table 2.1 (continued)

Author	No. of JVs	JV Country	Definition of Control	JV Control	JV Performance
Schaan (1983)	10 JVs	Mexico	Assuring that a JV's management conforms to the parents' interests	Board, staffing, service, contracts, socialization, decision involvement	Perceived parent satisfaction with JV.
Beamish (1984)	66 JVs	Less developed countries	Locus of decision making, parent influence & involvement in JV decisions.	Ownership, board, staffing, reward structure.	Perceived parent satisfaction with JV.
Lecraw (1984)	153 JVs	ASEAN countries	Parent influence in JV decisions.	Ownership, extent & focus of control, overall & effective control.	Profitability, parent satisfaction, standardized perceived satisfaction.
Hyder (1988)	3 JVs	India & Bangladesh	Not explicit	Resource contributions, board, staffing, communication	Not examined
Tillman (1989)	51 JVs	Thailand	Locus of decision making (parents' level of influence on JV decisions	Staffing	Perceived parent satisfaction with JV.
Ding (1993)	34 JVs	China	Process & techniques used by parents to influence JVs to achieve parent objectives.	Mechanisms, extent & scope of control	Meeting parents' financial & non-financial expectations.
Kumar (1993)	64 JVs	U.S., Europe, Canada & Japan	Degree of autonomy the parent allows the subsidiary in determining mgt. policies.	Integration complexity board, communication, staffing, rewards, socialization	Not examined
Yan (1993)	90 JVs	China	Parent influence on JV behavior & outcomes through the use of power, authority & control mechanisms.	Board, staffing, JV structural similarity with parents, informal & overall control	Patterns of performance & overall performance (meeting specific & overall parent objectives)

Dang (1977) defined control as "the degree of autonomy the parent allows the subsidiary in determining management policies." (p. xv). Schaan (1983) indicated that IJV control is "the process through which a parent company ensures that the way a joint venture is managed conforms to its own interest" (p. 57). Killing (1983) interpreted the concept of control as the degree of parent involvement in making important decisions for the joint venture. According to Geringer and Hebert (1989), the exercise of control entails the use of power, authority, and a variety of control mechanisms. Gray and Yan (1992), on the other hand, defined control as the structural organizational form and the management patterns that dictate the venture-parent relationship. It is evident that all these definitions stress either parent involvement or managerial influence over the IJV activities.

Not only the definition, but also the conceptualization of IJV control varies substantially from study to study. For example, some researchers have focused on the types of control mechanisms employed by parent organizations to monitor and evaluate the activities of IJVs, others investigated the extent or level of control exercised by parent companies, while few examined the scope or focus of the parents' control activities. Upon reviewing these three distinct streams of research, Geringer and Hebert (1989) concluded that the concept of IJV control is a multidimensional

construct. Therefore, the following literature review is organized according to this classifications scheme.

Control Mechanisms

This stream of research addresses the means or mechanisms through which parent companies exercise control over their IJV subsidiaries. The most widely researched, and yet most controversial, control mechanism is the parents' ownership share in an IJV (Friedman & Beguin, 1971; Stopford & Wells, 1972; Tomlison, 1970). Studies in this area tend to equate ownership (asset) control with management control and assume that the dominant partner (the one with the largest ownership share) is also the one that exercises the highest level of management control over the venture's activities (Blodgett, 1991). This assumption is clearly reflected in Gullander's (1976) assertion that "management control is said to exist for a company that has the majority equity share." Of course, this does not imply that other researchers have not recognized the conceptual distinction between asset and management control. Although, few studies have acknowledged that the two constructs are conceptually distinct, they ended up blurring them by operationalizing management control solely in terms of equity control (e.g. Blodgett, 1991; Fagre & Wells, 1982; Stopford & Wells, 1972).

The narrow treatment of IJV control has been widely criticized. Gray and Yan (1992) indicated that even though ownership and management control are closely correlated, they are conceptually and operationally distinct from each other. Commenting on this limitation, Ohmae (1989) pointed out that it is erroneous and even misleading to assume that 51% equity share in an IJV translates into complete management control, while 49% equity means complete lack of control.

Although a majority equity position ensures some degree of control, there is evidence suggesting that management control is far from being a strict and automatic consequence of majority ownership (Ding, 1993; Friedman & Beguin, 1970; Harrigan, 1985; Stopford & Haberich, 1976). Research has found that majority ownership can sometimes lead to little management control (Lecraw, 1984). Similarly, companies with minority equity share can actually play the dominant role in a subsidiary's management (Killing, 1983; Osland & Cavusgil, 1996). Moreover, the literature suggests that parents that rely on equity ownership to gain managerial control often discover that attaining majority ownership is next to impossible in certain types of IJVs (Contractor, 1990; Moxon & Geringer, 1985). This rings particularly true in the case of developing countries or centrally planned economies, such as China, that restrict the ownership

holdings of foreign multinationals to minority shares (Franko, 1989; Shan, 1991; Whitcomb, 1991).

Friedman and Kalmanoff (1961) provided empirical support for the notion that ownership control in IJVs does not necessarily translate into management control. These researchers distinguished between de jure control, which is control that stems from majority ownership participation, and de facto control, which pertains to all other types of control regardless of equity position. They found that multinational corporations holding minority equity positions were able to exert substantial amounts of de facto control over IJV activities. For the most part, the basis of de facto control was tied to the possession of valuable resources including access to important technologies, markets, managerial skills, or capital. Recent studies provided further support for this finding (Ding, 1993; Provan et al., 1980; Yan, 1993).

The literature indicates that a variety of other control mechanisms besides ownership participation are available to parent companies. For example, Behrman (1977) found that a large percentage of the variance in IJV control was explained by factors such as parents' control over the composition of the venture's board of directors, the degree to which parents were able to make appointments to the venture's key managerial positions, and the extent to which the executive directors of parent companies participated in and screened the venture's projects and decisions. Other

studies corroborated the fact that parents' control over the venture's staffing decisions is a key element of effective management control (e.g. Dang, 1977; Ding, 1993; Kumar, 1993; Rafii, 1978; Tillman, 1989, Yan, 1993).

Few years later, in a landmark study, Schaan (1983) identified additional control mechanisms. In an in-depth examination of 10 Mexican-Canadian IJVs established in Mexico, Schaan distinguished between positive and negative control mechanisms and indicated that MNCs use a mix of both types of control mechanisms to manage IJVs. According to him, positive control pertains to the promotion of venture behaviors that are in alignment with the interests of parent companies, while negative control refers to the process of preventing venture decisions that do not conform with the parents' goals and objectives. Schaan found that the exercise of negative control relied primarily on formal control mechanisms such as board composition, approval of the IJV's strategic decisions, plans, and budgets or the signing of formal agreements and licenses between the parents and the joint venture. Positive control, on the other hand, was mainly exercised through informal socialization, communication and interaction, coordination procedures, reward systems, and parental participation in a variety of planning and decision making areas. Schaan's finding that informal control mechanisms are critical to effective management control was corroborated in several other studies (e.g. Ding, 1993; Kumar, 1993; Yan, 1993). Prahalad and Doz (1981)

indicated that subtle and contextual control mechanisms are particularly suited for mature IJVs that are relatively self-sufficient and less resource dependent on their parent companies. Moreover, the frequency and nature of communication between IJV and parent managers as important control mechanisms were further supported in Hyders' (1989) investigation of 3 IJVs operating in India and Bangladesh.

Extent or Level of Control

Another stream of research examines the extent to which IJV parents exercise control over the venture's activities. Within this body of research, there are two distinct approaches to conceptualizing this dimension of IJV control. One approach is based on the organizational structural perspective and assumes that the level of IJV control is a function of the parents' structural characteristics (centralization/decentralization). The second approach examines this dimension of control in terms of the involvement or influence that parent companies exert over the venture's activities.

Studies based on the structural perspective equate the extent of IJV control with the level of centralization/decentralization of the venture's parents. According to this perspective, when multinational companies establish IJVs, they continue to "do business as usual" (Blumenthal, 1990). Consequently, it is argued that parent companies tend to impose the same

governance structure on their IJV subsidiaries as the one employed internally within the parent organizations (Yan, 1993). Using this approach, Dang (1977) investigated the locus of decision making between 23 U.S. multinational corporations (MNCs) and their Taiwanese and Filipino wholly-owned and joint venture subsidiaries. Even though he defined control as the level of subsidiary autonomy, he proceeded to operationalize the construct using a 17 item decentralization index that measured the MNC's extent of decentralization. His findings indicated that the extent of MNC control over wholly-owned subsidiaries was not significantly different from that found in IJV subsidiaries. Consequently, he concluded that no significant relationship exists between equity ownership and the extent of MNC control over subsidiary operations. Similarly, Anderson (1990) indicated that several MNCs duplicate the procedures and performance evaluation criteria employed internally at the corporate headquarters.

Despite some support, the structural perspective has been recently criticized and challenged by Kilduff (1992). According to him, the structural approach is simplistic and quite unrealistic because it overestimates the ability of parent companies to duplicate their headquarters' governance structure. Subcultural differences between parents and their international subsidiaries limit the MNCs' ability to reproduce their governance structure in an international setting (Klein, Frazier, & Roth, 1990; Roth, Schweiger, &

Morrison, 1991). Inevitably, efforts to do so would be cost inefficient, difficult to achieve, and quite unnecessary.

The second approach to conceptualizing the extent of MNC control focuses on the examination of the level of participation or the degree of influence that parent companies exert over IJV decisions (Beamish, 1984; Killing, 1983; Kumar, 1993; Tomlison, 1970). This approach was first introduced by Killing (1983) in his in-depth investigation of 37 IJVs established between developed countries. By interviewing MNC executives and JV managers, Killing was able to assess the level of MNC influence along nine JV decisions including product design, pricing considerations, production scheduling, manufacturing, quality control, staffing decisions, market segmentation, capital expenditures, and cost budgeting. In a similar manner, Lecraw (1984) surveyed venture managers to assess the extent of parent control across 18 functional areas.

By acquiring information about the degree to which each interested party (JV management, local partner, foreign partner) made autonomous or participatory decisions along nine strategic areas, Killing (1983) was able to classify IJVs into three categories. These categories included: (1) dominant partner IJVs, where only one of the parents played a dominant role in the venture's decision making process, while the other had a passive role; (2) shared management IJVs, where both parents joined equally in the venture's

decision making process; and (3) independent IJVs, where the venture was relatively autonomous from its parent companies. Killing's classification scheme was an important contribution to this area of research and has been widely employed in subsequent studies (e.g. Beamish, 1984; Lecraw, 1984).

In a more recent study, Kumar (1993) investigated the extent of control exercised by venture parents. He measured the extent of parent control across various control mechanisms including the complexity of lateral integrative mechanisms, communication intensity, board composition and influence, socialization, staffing, and incentive compensation. His results indicated that the extent to which parents participated in the venture's board was the primary mechanism through which parents exercised control over their ventures.

Focus of Control

Compared to the other two dimensions of IJV control (mechanisms and extent to control), very little research has been conducted to investigate the focus of parent control over the IJV activities. This limitation of extant research has been recently criticized because it provides an incomplete, and possibly misleading, picture of control in the context of IJVs (Geringer & Hebert, 1989). Without looking at the focus dimension of IJV control, studies are implicitly assuming that parental control is an all or nothing

phenomenon. What is misleading about this assumption is that parent companies may wish to selectively exercise control over those IJV decisions that are strategically important to them, instead of trying to exercise control across the whole range of venture activities.

The notion that parent companies tend to selectively control only those IJV activities that they perceive to be critical to their goal attainment was originally supported by Schaan (1983) and later corroborated by Geringer (1986). Selective control seems to be more in tune with the idea that IJVs need some autonomy to grow and prosper and that the implementation of control is resource dependent. Furthermore, as Geringer and Hebert (1989) correctly pointed out, the notion of selective control casts serious doubts on Killing's (1983) classification scheme.

Lecraw's (1984) study of 153 IJVs, established by U.S., European, Japanese, and Third-World MNCs, operating in seven ASEAN countries was an important investigation that examined the effects of Killing's (1983) three dimensions of control on IJV performance. Moreover, the extent of parent control was measured by asking venture managers to rate on a 10-point Likert scale (1=no control; 10=complete control) the level of control that MNCs exercised across 18 functional areas such as production, finance, marketing, exports, and imports. Similarly, the focus of MNC control was assessed through a 10-point Likert scale (1= no importance; 10=critical

importance) by asking venture managers to rate how important it was for MNCs to achieve control over these 18 functional areas in accomplishing MNC goals and objectives. Using a similar design, Ding (1993) examined the mechanisms, extent, and scope of control exercised by parent companies over IJV operations. He concluded that parent companies are better off pursuing dominant control over critical IJV decisions instead of attempting to exercise total control across all venture operations.

IJV Performance

Organizational performance is a multidimensional construct whose conceptualization and operationalization, over the years, have created much controversy and heated debate in the organization and management literature (Cameron, 1986; Cameron & Whetten, 1981; Chakravarthy, 1986; Friedlander & Pickle, 1968; Pfeffer & Salancik, 1878). If performance evaluation is considered difficult within unitary organizations, in the context of IJVs, the process becomes far more complicated and problematic because multiple parties with often divergent evaluative criteria are involved in the performance evaluation of IJV activities.

The lack of clear understanding surrounding the concept of IJV performance has constrained research progress in this area of investigation. A review of the literature revealed that three types of ambiguities are of

particular concern: 1) the standards used to assess IJV performance; 2) the perspective used to measure IJV performance; and 3) the reliability and appropriateness of employing various performance measures at different times in the IJV's lifetime.

Various standards have been used to assess the domain of IJV performance. Performance indicators range form measures of IJV stability (Beamish & Lane, 1983; Franko, 1971), ownership changes (Franko, 1971; Killing, 1983; Osland & Cavusgil, 1996), venture survival and duration (Harrigan, 1988; Killing, 1983), perceived IJV success (Beamish, 1984; Beamish & Banks, 1987; Beamish & Lane, 1983; Blumenthal, 1990; Ding, 1993; Harrigan, 1988; Killing, 1983; Lecraw, 1984; Schaan, 1983; Yan, 1993), and financial performance indicators such as profitability and cost efficiency (Lecraw, 1984; Rafii, 1978; Tomlinson, 1970).

Moreover, several perspectives have been used to assess a venture's performance. Based on the argument that JVs are established to fulfill their sponsors' strategic goals and objectives (Harrigan, 1986), a number of studies measured IJV performance from the parents' standpoint. Some researchers have used the performance assessment provided by a single parent (e.g. Blumenthal, 1990; Ding, 1993; Lecraw, 1984), while others incorporated the perspectives of both parents (e.g. Beamish, 1984; Beamish & Banks, 1987; Beamish & Lane, 1983; Harrigan, 1988; Schaan, 1983; Yan, 1993). Other

studies reasoned that since JVs are free-standings organizational entities, it is more appropriate to evaluate their performance using the ventures' management perspective (Anderson, 1990; Killing, 1983).

The literature indicates that different performance measures are more appropriate at different times of the venture's life. Anderson (1990), for example, suggested that output measures such as profitability and cash flow are better suited for mature ventures. For relatively young IJVs, subjectively assessed performance indicators (e.g. perceived success, interpartner harmony, venture morale and productivity) are preferable because new ventures tend to generate negative cash flows.

Both objective and subjective measures of IJV performance have their own limitations. Since IJVs are formed with different goals in mind (e.g. gaining competitive advantage or access to new markets and technologies, diversifying risk, blocking competitors etc.), objective measures such as traditional financial indicators and stability measures are limited because they do not reflect the venture's success in meeting its objectives (Ding, 1993). Moreover, financial measures do not reflect a significant portion of the financial returns that parent companies reap from their ventures such as management and technology licensing fees, dividends, or the supply of component parts and materials. Incompatible accounting practices and complicated transfer pricing policies that underlie exchanges between

ventures and parents are deliberately tailored to minimize tax liabilities in the host or home country (Anderson, 1990). These problems further complicate the reliability and validity of accounting-based measures of IJV performance.

Measures of IJV survival and stability suffer from other limitations. Studies that measure IJV performance in terms of venture survival or stability incorrectly assume that characteristics such as venture death or instability are indicative of poor IJV performance. The literature indicates that changes in ownership share (measure of IJV instability) are often normal evolutionary developments in a venture's lifetime that represent organizational adaptations to environmental changes (Gomes-Casseres, 1987). Furthermore, the death of an IJV does not automatically imply that the venture was dissolved because of poor performance. The literature indicates that some IJVs, especially those operating in centrally planned economies, are formed with a predetermined life span in mind. When the IJV contract expires, the venture is either dissolved or a new contract is drawn extending the venture's operation.

Given the problems associated with the objective measures of IJV performance, some authors have advocated the use of subjective performance indicators (e.g. Beamish, 1984; Ding, 1993; Killing, 1983; Schaan, 1983; Yan, 1993). Although subjective measures allow researchers to assess a venture's

success in meeting its goals and satisfying its parents' expectations, these measures suffer from response biases. Schaan (1983) found that it is not uncommon to find managers that are reluctant to admit that their ventures are underperforming even when there are clear signs of poor performance. To minimize the possible effects of response bias and enhance the subjective measures' reliability and validity, it is suggested that multiple respondents are employed (Ding, 1993).

IJV Control-Performance Relationship

Given the diversity in the conceptualizations and operationalizations of IJV control and performance, it is not surprising that extant research in the IJV control-performance relationship has generated mixed results (Geringer & Hebert, 1989). This critical relationship was initially investigated by Tomlinson (1970). In a study of 71 IJVs operating in India and Pakistan, Tomlinson found that loosely controlled ventures were more successful than tightly controlled IJVs. A similar finding was reported in Franko's (1971) investigation of 169 multinational sponsor organizations of 1100 IJVs. Using the strategy-structure-performance framework, this study argued that different strategies require different control and organizational systems and the fit between strategy and structure influences the stability or instability of IJVs. Although Franko examined control only in an indirect

manner, he found that when MNCs pursued a product-diversification strategy combined with a loosely defined control system, their IJVs exhibited greater stability.

Although these early studies shed some light into the IJV control-performance relationship, several methodological problems raise serious questions about the validity of their results (Geringer & Hebert, 1989). For example, in Franko's (1971) study, the IJV control system was never directly examined. Instead, Franko investigated only the parent companies' attitudes towards control and proceeded to derive conclusions about the IJV control-performance relationship. Furthermore, this study, even though it did not control for industry effects, it used ROI to assess the performance of IJVs operating in multiple industries. In this respect, it is questionable whether performance variations in IJVs were attributed to the MNCs' attitudes toward control or were mere artifacts of industry effects. Several limitations plague Franko's (1971) research. Using the structural perspective, Franko investigated the MNCs' level of standardization and centralization and, based on these structural characteristics of the parent companies, inferences were made about the IJV control system. Furthermore, Franko measured IJV performance in terms of changes in IJV ownership. As indicated above, it is debatable whether changes in ownership indicate poor performance or

evolutionary adjustments to environmental changes (Geringer & Hebert, 1989).

Killing (1983) investigated how the three types of IJVs in his classification scheme (dominant, shared-management, and autonomous IJVs) ranked in terms of three performance indicators including IJV liquidation, strategic changes and reorganizations, and perceived venture success measured from the venture managers' standpoint. The results indicated that, on average, dominant ventures exhibited the highest level of performance, autonomous ventures were the second best, while shared-management IJVs were, by far, the worst performers. These findings imply that certain types of control systems are more appropriate than others in the context of IJVs. Specifically, Killing suggested that in order for IJVs to be successful, management control should be granted either to one parent or left to the discretion of the venture's management. Split-control ventures were found to be significantly less effective and efficient options. This finding indicates that there is a U-shaped relationship between IJV control and performance.

Despite these general conclusions, Killing (1983) indicated that dominant control IJVs are not always better performers than shared-management ventures. Instead, he postulated that the choice of IJV control is contingent to the nature of resources contributed by the venture's parents.

Specifically, it was found that when parents contribute to their ventures assets that do not require joint managerial involvement (e.g. capital, trademarks, patents, or raw materials), dominant control is the most appropriate option. On the other hand, shared-management control is preferred when complex resource transfers that require the joint participation of both parents take place between the parents and the IJV (e.g. technological know-how).

In a later study, Lecraw (1984) employed the MNC's perspective to investigate the IJV control-performance relationship. Control was operationalized in terms of ownership share, extent and focus of control, and a single item question that measured the MNC's overall management control over the venture's activities. To assess IJV performance, the study used a combination of objective financial indicators (profitability) and subjective measures (perceived venture success and a measure of perceived IJV success standardized for industry and country effects). The study's results indicated that the relationship between effective control and the standardized measure of perceived IJV success was linear, positive, and significant. This finding is consistent with Friedman and Beguin's (1971) finding that parent control and IJV performance are positively related. However, Lecraw (1984) reported a significant J-shaped relationship between overall management

control and perceived IJV success. Consistent with Killing's (1983) findings, split-control IJVs were the worst performers.

Later studies that examined the IJV control-performance relationship failed to verify Killing's (1983) or Lecraw's (1984) findings. Some studies reported a lack of any significant relationship between control and performance (e.g. Awadzi, Kedia & Chinta, 1986; Janger, 1980). Using Killing's classification system, these studies found that in both developed and developing countries, dominant control ventures did not perform significantly better than shared-management IJVs. Other studies, on the other hand, either reported mixed results or provided empirical evidence that directly contradicted Killing's and Lecraw's general findings that dominant control ventures are, on average, the best performers.

Beamish (1984), for example, found that there is a strong positive correlation between dominant control by the foreign MNC parent and unsatisfactory IJV performance for ventures operating in developing countries. For this reason, he suggested that shared-management control is a better option for IJVs established in less developed countries. Nevertheless, it is important to mention that this recommendation may be misleading because unsatisfactory performance was reported in only a small fraction of IJVs where dominant management control was granted to the local partner. On the other hand, Ding's (1993) investigation of 34 U.S.-

Chinese IJVs, operating in China indicated that U.S.-dominant and shared management IJVs tended to outperform Chinese-dominant IJVs.

Importance of Interpartner Trust

Often, it has been stipulated that the concept of trust is at the heart of voluntary interfirm cooperation that influences the dynamics and performance of IJVs (Parkhe, 1993a). Cooperative interorganizational relations such as IJVs cannot function effectively without a certain level of mutual interpartner trust because contractual specifications are usually inadequate to prevent venture partners from engaging in opportunistic behavior (Yan, 1993). Although many stories and case studies articulate the importance of interpartner trust to the success of IJVs (e.g. Block & Matsuno, 1972; Lewis, 1990; Peterson & Shimada, 1978; Tung, 1984), evidence of this relationship is primarily anecdotal. Moreover, while some studies have alluded to the role of trust and casually mentioned its importance in interorganizational relations (Bagozzi, 1978; Jackson, 1985; Houston & Gassenheimer, 1987), others deliberated on the strategic implications of trust, but withheld from testing their propositions empirically (Bonoma, 1976; Macaulay, 1963).

Overall, trust has received limited theoretical and empirical attention in the management literature because of the complexities and subtleties

involved in defining and operationalizing the concept. Given this general trend, it is not surprising that in the field of international business which is still in a nascent and preparadegmatic stage of development, the concept of interpartner trust has been largely left unexplored. Only recently, attempts have been made to define and operationalize the concept of trust and its antecedent conditions. Overall, these studies transmit a feeling of urgency and attest to the need to conduct research in this fruitful area of investigation (Madhok, 1995).

Traditionally, the importance of trust has been stressed in interpersonal relationships and social systems (e.g. Barber, 1983; Blau, 1964; Bok, 1978). In this context, it has been argued that trust is a social good that glues social actors together, enhances social stability, and enables participants to cope with uncertainty and vulnerability (Heimer, 1976). Consequently, it has been contended that when trust is destroyed in a social system, societies tend to falter and collapse (Bok, 1978).

Nevertheless, only recently, have scholars acknowledged that the implications of trust in social relations bear striking similarities with those of business transactions (Andaleeb, 1989). For example, Williamson (1979) stipulated that contracts, in themselves, cannot materialize or guarantee the completion of exchange goals, unless there is confidence in the settlement machinery of business transactions. In other words, while contracts spell out

each transacting party's responsibilities and provide crude means for avoiding future misunderstandings, they cannot ensure that the agreement will not be breached. This phenomenon is often referred to as mutual forbearance. In these type of situations, trust becomes a necessary ingredient and an important precursor of cooperation by instilling confidence that all parties involved will carry out the terms of the agreement (Andaleeb, 1989; Buckley & Casson, 1988; Hirsch, 1978; Smith, Carroll, & Ashford, 1995; Zucker, 1986).

Trust is particularly salient in cross-cultural transactions such as IJVs. Research findings support the need to build and foster trust in interorganizational relations that involve partners from very different cultural backgrounds such as those between Americans and Japanese (Peterson & Shimada, 1978; Sullivan & Peterson, 1982). The existence of trust between culturally distant transacting parties can facilitate successful exchanges by bridging differences in administrative requirements and corporate norms that can potentially lead to exchange difficulties (Andaleeb, 1989; Subieta, 1991; Yan, 1993). Moreover, research has contended that in complex organizational systems operating under uncertainty (e.g. IJVs), efficiency can be achieved only under conditions of mutual confidence and trust especially when the integration of interdependent actors requires

mutual adjustments, coordination, and control (Gabarro, 1990; Thompson, 1967).

Conceptualization of Trust

Although there is considerable agreement among scholars that trust is a critical determinant of cooperative behavior in both social and economic transactions, there is little consent about the appropriate definition and conceptualization of trust. This notion is clearly reflected in Zucker's (1986) writings that "recognition of the importance of trust has led to concern with defining the concept, but the definitions proposed unfortunately have little in common." (p. 58). In a similar spirit, Shapiro (1990) indicated that attempts to conceptualize trust have resulted "in a confusing potpourri of definitions applied to a host of units and levels of analysis." (p. 624). Despite the plethora of hazy and often incompatible definitions of trust, Hosmer (1995) undertook the difficult task of unifying disparate definitional approaches to trust by combining elements from organizational theory, normative philosophy, and sociological perspectives. According to him, trust refers to "the reliance by one person, group, or firm upon a voluntary accepted duty on the part of another person, group, or firm to recognize and protect the rights and interests of all others engaged in a joint endeavor or economic exchange." (p. 393).

Compared to previous attempts to define the concept of trust, Hosmer's (1995) definition is relatively straightforward, succinct and unambiguous. Despite its phenomenological conceptual clarity and simplicity, this definition of trust incorporates several implicit assumptions about the nature of relational exchanges that could be easily overlooked at the first glance. In an attempt to disentangle the ambiguity surrounding the concept of trust and avoid possible misinterpretations, these implicit assumptions are further examined and qualified.

First, the idea of voluntary reliance on another party implies vulnerability on the part of the trusting party (trustor). The importance of vulnerability in the context of trust has been explicitly acknowledged in previous research. Deutsch (1958), for example indicated that the trustor "perceives that he will be worse off if he trusts and his trust is not fulfilled than if he does not trust" (p. 266). Moreover, Zand (1972) explicated that trust is more or less an individual's voluntary decision to increase one's vulnerability to another party's actions that are beyond one's control. In the same vein, Chiles and McMackin (1996) indicated that "without some vulnerability to the risk of opportunism, there is no need to trust." (p. 85)

Second, dependence is another critical element of trust. The notion of dependence was initially highlighted by Zand (1972) and later on by Barber (1983). These researchers indicated that trust implies not only confidence in

another party to behave ethically but also dependence on that party's actions. In other words, the consequence of increasing one's vulnerability to others automatically translates to dependence upon the actions of others (Thorelli, 1986).

Third, it is performance uncertainty that makes trust a prominent element in exchange relations. This idea dates back to Deutsch's (1958) argument that trust is an nonrational choice in situations of high uncertainty because the expected loses are greater than the expected gains. As Hosmer (1995) correctly pointed out, if the opposite were true, then trust would be nothing more than simple economic rationality. Extending the idea of uncertainty, Barber (1983) emphasized that trust is important because it reduces the complexity and uncertainty surrounding transactions by instilling cognitive, emotional, and moral expectations that the world will continue to operate without major discontinuities. In this respect, trust is a future oriented concept (Thorelli, 1986).

Finally, there is an implicit assumption in the definition of trust that there is an ultimate net goal or a behavioral dimension in every trusting relationship (Michalaos, 1990). Most of the studies have pinpointed mutual cooperation to be the ultimate goal of trust (Carnevale, Pruitt, & Carrington, 1982; Gambetta, 1988; Meeker, 1983; Smith, Caroll, & Ashford, 1995). Other researchers, drawing from the field of philosophical ethics, identified several

other goals of trust that carry similar moral connotations including responsiveness (caring for others' welfare), benevolence (duty to care for the protection of others), or goodwill. In this vein, Hosmer (1995) incorporated ideas from normative philosophy and defined trust as "the expectation by one person, group, or firm of ethically justifiable behavior-that is, morally correct decisions and actions based upon ethical principles of analysis-on the part of another person, group, or firm in a joint endeavor or economic exchange." (p. 399).

Besides the definitional problems associated with trust, scholars have encountered similar difficulties in their attempts to conceptualize and operationalize this construct. Although researchers have followed multiple, and often divergent, paths in trying to further understand the concept of trust and delineate its domain, an important consensus has been reached in the literature. Today, it is widely acknowledged that trust is a multidimentional construct (Buttler, 1991; Driscoll, 1978; Scott, 1980).

The literature indicates that there are two basic dimensions that compromise the conceptual domain of trust. These include a cognitive and an affective dimension (Lewis & Wiegert, 1985). The cognitive dimension of trust is based on good reasoning that constitutes evidence for trustworthiness. According to Simmel (1964), what constitutes good reasoning for trust falls somewhere in between total knowledge and total

ignorance. Elaborating on Simmel's argument, McAllister (1995) indicated that "given total knowledge, there is no need to trust, and given total ignorance, there is no basis upon which to rationally trust." (p. 26). In other words, the cognitive dimension of trust is not based on mere calculativeness and self interest maximization as it has been postulated by Williamson (1993), but also on reasonable leaps of faith (Luhmann, 1979; Ring and Van de Ven, 1992). Based on these notions, McAllister (1995) measured the cognitive dimension of trust in terms of a person's reliability and dependability.

The affective dimension of trust, on the other hand, reflects the emotional bonds and commitments that exist among interacting individuals, groups, and organizations (Lewis & Wiegert, 1985). Through interactions, people and organizations make emotional commitments to trusting relations, exhibit genuine concern for the others' welfare, and develop strong feelings for reciprocity. Drawing from the literature in sociology and psychology, McAllister (1995) operationalized the affective dimension of trust in terms of emotional trust and security.

CHAPTER 3

THEORETICAL FRAMEWORK

Transaction Cost Theory

The transaction cost (TC) theory dates back to Commons who emphasized the importance of transactions in the economic system (Perrow, 1986). Building on this idea, Coase (1937) postulated that the transactions between parties are appropriate units of analysis for understanding organizational behavior. According to him, organizations exist because the market is not always the most efficient mechanism for governing transactions. In subsequent years, Williamson (1975, 1979, 1981; 1985) extended the efficiency concept by marrying organization theory with economics and contract law to develop the TC perspective as we know it today.

The significance of the transaction cost theory lies in its ability to link transactions and governance structures in a discriminating manner that minimizes transaction costs and maximizes efficiency. For transactions to occur efficiently, they must be "governed" in some way. Traditional TC theorists, coming primarily from economics, have proposed three broad structural systems for transaction governance: markets, hierarchies and hybrids (Williamson, 1975; 1985; 1991). Later on, Wilkens and Ouchi (1983)

paid close attention to the social context of economic transactions and added the idea of "clans" (informal structural arrangements that are based on socio-cultural norms and regulations) as the fourth type of transaction governance.

Thus, under the TC lens, society is seen as a network of transactions (Pugh & Hickson, 1989) mediated either by markets, hierarchies, hybrids, or clans (Teece, 1981; Wilkens & Ouchi, 1982; Williamson, 1975, 1981). The choice between make and buy decisions is based on the maximization of efficiency which is accomplished through the minimization of the transaction costs. Transaction costs refer to the costs of planning, adapting, and monitoring task completion (Williamson, 1975, 1981, 1985) and are used as the basis for evaluating governance structures.

By resting on the efficiency assumption adopted from economics, the TC perspective departs radically from previous explanations of organizational existence. Traditionally, the development of formal organizations was attributed to the technological imperative. Barnard (1938), for example, indicated that individuals cannot perform all organizational tasks by themselves. Consequently, individual activities had to be combined and coordinated under the structure of formal organizations to meet the technological demands of the production methods. The TC perspective, on the other hand, provides a very different rationale. Organizations are formed and continue to grow in size when the costs of

internalization are lower than those accrued through spot market buys or hybrids.

A key premise of the TC framework is that the match of the governance categories to any particular transaction or set of transactions minimizes transaction costs (Williamson, 1975). The key dimensions which influence this fit are the frequency of the transaction, the level of uncertainty in transacting, and the extent to which one or both participants are required to make asset specific investments (i.e., investments in specialized plants, equipment, or human resources which cannot be easily redeployed to other uses should the transaction fail).

Markets, as a category of transaction governance, are most efficient for occasional or periodic transactions or those where both parties know, a priori, exactly what they are both giving and getting in an exchange. These "arm's length" exchanges tend to be subject to broad legal controls. However, due to the interaction of transaction frequency, uncertainty, and asset specificity, markets may lose their efficiency (Williamson, 1975). For example, uncertainties regarding task performance and investments in special equipment contribute to a situation in which it is more efficient to bring the activity in-house and govern it *hierarchically*. While classic make-or-buy decisions focus on obtaining an item at lowest purchase cost, TC is also concerned with additional costs, such as those related to monitoring product

quality, consequences of late delivery or strikes, investments in equipment to refine the material, and possible litigation from joint and several product liability claims. When uncertainties related to such concerns or asset specific investments are implied, these transactions are more efficiently governed within the organization (Klein, Crawford, & Alchian, 1978).

In some instances, though, production costs are too high to justify internalizing an activity (in-house production) and when this situation is coupled with increased levels of uncertainty and asset specificity, then, *hybrid* structures (ones that combine elements of both markets and hierarchies) become the most efficient forms of governance (Beamish & Banks, 1987; Jarillo, 1988). Under the traditional TC framework, IJVs are considered hybrid structures because they incorporate a blend of ownership incentives (hierarchical elements) and contractual elements (market characteristics). This unique combination curbs opportunism (Cullen & Johnson, 1995; Hennart, 1988; Kogut, 1988; Tallman & Shenkar, 1994) and bypasses market inefficiencies (Osborn & Baughn, 1990). In this context, there is a superior alignment of incentives between the transacting parties because joint ownership places the IJV parents in a mutual hostage position, where both parties can potentially win or lose by the venture's performance (Kogut, 1988; Tallman & Shenkar, 1994).

Even though efficiency is the most important driver for choosing among transaction governance, the TC theory incorporates two behavioral assumptions that depart significantly from neoclassical economics. Under this framework, humans are viewed as bounded rational instead of hyper-rational and transactions are believed to be guided by opportunism (Williamson, 1975). The behavioral assumption of bounded rationality indicates that buyers and sellers lack perfect information about the market and transacting agents are cognitively limited to examine all possible exchange alternatives. Given these assumptions, it is obvious that under the TC perspective, transacting parties are believed to economize rather than optimize in exchanges.

Bounded rationality, however, does not, by any means, imply irrationality. Rather, it indicates that human agents are "intendedly rational, but only limited so" (Simon, 1961, p. xxiv) because their capacity to discern and process information is physiologically constrained. This cognitive condition has significant implications for the way firms organize exchange relations that involve contractual agreements. Since it is almost impossible to identify in advance all possible contingencies that may arise during exchanges, transacting parties tend to resort to complex contracts and monitoring mechanisms that substantially increase the transaction costs. As Ulrich and Barney (1984) correctly pointed out, transaction costs arise when

it is difficult for exchange parties to identify the value of the goods exchanged. In this respect, bounded rationality leads to higher transaction costs.

Opportunism is the second behavioral assumption in the transaction cost analysis. According to Williamson (1975), opportunism is not self-interest alone but self-interest seeking with guile, a condition which often involves a form of deceit. This condition implies that economic agents tend to maximize their own benefits at the expense of others whenever such behavior is feasible and profitable. Nevertheless, unrestrained self-interest maximization is not wholly representative of the human affairs. As John (1984) indicated, the fact that people are not always completely honest does not necessarily mean that they are always dishonest. Furthermore, situations where the threat of opportunism is quite high give rise to hierarchies or vertically integrated exchanges (Williamson, 1975).

In Williamson's (1975) view, efficient economic exchanges fail partly due to the two human conditions of bounded rationality and opportunism. In other words, when bounded rationality of the perceiver is coupled with suspicion that the other party will engage in opportunistic behavior, exchange difficulties can arise leading to a host of problems and complexities. Even from a legal perspective, the conditions of bounded rationality and opportunism complicate considerably the process of negotiating and enforcing

contracts. Opportunistic partners, for example, may withhold information from each other that could adversely affect the outcomes of an agreement or provide empty promises to behave responsibly. Moreover, bounded rational parties may decide to follow the letter rather than the spirit of a contract which could potentially end up being at their partner's expense. These examples clearly indicate that the behavioral assumptions of the TC framework play an important role in cooperative transactions that involve formal contracts.

Due to bounded rationality and opportunism, complex contracts and specification of rules of behavior are likely to emerge to ensure that neither party in an exchange dyad will cheat the other. Contracts are important because they provide the necessary sanctions to guarantee that the party that voluntarily obeys the exchange rules is not sacrificed by the party that subscribes to opportunistic behavior (Hart, 1961). Despite their advantages, the literature indicates that all written contracts are at the very best incomplete, since the parties that draw them cannot foresee in advance all possible contingencies that can occur during the life of a cooperative agreement (Williamson, 1975). Consequently, contracts are instruments of limited reach and scope (Gottfredson & White, 1982; Williamson, 1981).

Transaction Cost and IJVs

According to Williamson (1985), markets and hierarchies represent the extreme poles of the continuum between markets and hierarchies. In fact, somewhere in between there are intermediate forms of governance including trilateral, bilateral, and hybrid governance structures. In the trilateral setting, an arbitrator is specified to oversee market transactions between two exchange parties because arbitration is more efficient in resolving disputes than battles fought in court. Under the bilateral governance mode, formal transactual contracts that contain extensive safeguards and specifications are drawn between the exchange parties in an effort to minimize opportunistic behavior during the implementation stage of exchange relations.

Rousseau and Parks (1993) indicated that formal transactual contracts are relatively static because they are characterized by a narrow scope with an economic focus and a brief time frame. According to them, these elements are best suited for "exchange relationships whose parties have limited involvement in the relationship in terms of dedicated assets, organization-specific skills as well as emotional ties and loyalties." (p. 11) For this reason, control and coordination, in these types of exchanges, are exercised through highly specified and extensively formalized rules and policies.

On the other hand, hybrid governance structures, such as IJVs, are distinct from bilateral and trilateral modes of governance because their structure incorporates a unique blend of ownership incentives and contractual elements. This combination of elements provides an effective and efficient way to curb opportunism (Kogut, 1988; Tallman & Shenkar, 1994) and bypass market inefficiencies (Osborn & Baughn, 1990).

What distinguishes JVs from formal transactual contracts is the fact that their hybrid governance structure provides an additional incentive for venture partners to forebear and shy away from opportunistic behavior (Cullen & Johnson, 1995). As Buckley and Casson (1988) indicated, joint ventures are true mechanisms for enforcing mutual forbearance. In a JV, transacting parties contribute both financial and non-financial resources to the venture and in return, they jointly own and control the venture's resources, costs, and profits (Kogut & Singh, 1988). Through joint ownership, parent companies' performance becomes interwoven with the venture's performance (Kogut, 1988; Tallman & Shenkar, 1995). In this respect, IJVs reduce the transaction costs associated with opportunistic behavior by achieving a superior alignment of incentives between the transacting parties (Hennart, 1988; Osborn & Baughn, 1990). For this reason, when transactions are characterized by high asset specificity, uncertainty, and frequency, and when production costs are too high to justify

internalization, JVs are the most efficient forms of governance (Beamish & Banks, 1987; Jarillo, 1988). In a similar vein, Teece (1985) has indicated that joint ventures are superior to other governance structures in appropriating rents from a sale of a rent-yielding asset in foreign markets.

Trust: A Recent Addition to the TC Theory

Nevertheless, the traditional TC framework provides an incomplete picture of hybrid governance (e.g. IJVs) because it disregards the socio-cultural context of relational exchanges. The social elements of economic transactions, under the classic TC model, are usually grouped into the error terms or to 'noise' (Ring & Van de Ven, 1992). However, IJV stability and efficiency is created not only by combining market-mediated contracts and hierarchy grounded authority, rules, and procedures but also through shared norms and values (Borys & Jemison, 1989).

Relational exchanges include relationship-specific assets that are engendered in the social components of exchanges and most importantly in interpartner trust (Lynch, 1993; Zaheer & Venkatraman, 1995). When the social context of relational exchanges is taken into account, and under conditions of high uncertainty and asset specificity, *"clans"* (norms and understandings grounded in social regulation) become the most efficient transaction governance (Wilkens & Ouchi, 1983). The addition of clans to

the TC theory has greatly enriched the theory's conceptual domain because it relaxes the framework's grounding on opportunism (Ghoshal & Moran, 1996; Moran & Ghoshal, 1996) and allows room for contextual elements (e.g. interpartner trust) to act as the efficiency drivers in relational exchanges. As Zaheer and Venkatraman (1995) correctly pointed out, relational governance embodies both structural and process dimensions. In the context of IJVs, there are elements of both quasi-integration (the structural dimension) and interpartner cooperation that is grounded on trust, shared norms, and understandings (the process dimension).

Despite the importance of trust, it is not surprising, that early writings in the transaction cost theory, coming primarily from economics, gave only passing recognition to the social context of economic transactions. Although the social elements of exchange relations, and particularly interpartner trust, were acknowledged in the TC theory (Williamson, 1975), it was not until recently that scholars began to examine them more closely. Mainstream economists such as Arrow (1973) indicated that "there is an element of trust in every transaction." (p. 24) Moreover, Williamson (1975; 1985; 1993) contended that trust is the necessary social glue that ties exchange agents together because transactions and their associated costs are embedded in a broader social context.

Despite its importance, trust was not officially incorporated into the original TC framework (Chiles & McMackin, 1996) due to the conceptual ambiguity and operationalizational difficulties that surround this concept (Williamson, 1985). Commenting on this important oversight, Williamson (1985) indicated the task of 'unpacking' the conceptual domain of trust falls heavier into the domain of organizational theory than economics. For this reason, he called for a better understanding of the behavioral and contextual elements of transaction cost analysis.

Responding to this call, recent studies have tried to understand how trust fits into the TC framework. Alternatively, the following question has been raised in the literature: "can trust ameliorate some of the problematic conditions purported by the transaction cost theory?" The latest theoretical developments indicate that the concept of trust can be easily incorporated in the mainstream model and that the social and economic perspectives can be blended to compliment each other (Zaheer & Venkatraman, 1995). In fact, recent work in the social context of economic transactions has substantially broadened and enriched the conceptual domain of the TC framework and its predictive power (Chiles & McMackin, 1996).

Several authors have criticized the widely held assumption that economic transactions are infused with opportunism (Ghoshal & Moran, 1996; Granovetter, 1985; Heide & John, 1992; Larson, 1992; Maitland,

Bryson, & Van de Ven, 1985). These authors have indicated that the great majority of economic exchanges are transcended by trust rather than opportunistic motivations or fraudulent behavior. In fact, it has been stipulated that when trust is present in exchange relations, the threat of opportunism is greatly reduced (Beamish & Banks, 1987; Chiles & McMackin, 1996). Even in the long run, opportunistic behavior does not pay off because the quasi-rents associated with opportunism dissipate over time (Hill, 1990).

Moreover, Chiles and McMackin (1996) indicated that interpartner trust does not only reduce opportunism but also the transaction costs associated with opportunistic behavior. Specifically, organizational reputation for trustworthy behavior reduces the information and administrative costs associated with the search of appropriate exchange partners. In addition, trust minimizes the negotiation costs prior to signing an agreement, as well as the costs associated with extensive safeguards and elaborate contract specifications. In this respect, the existence of interpartner trust economizes on the transaction costs involved with monitoring the partners' performance during exchange relations (Ring & Van de Ven, 1994).

It is evident that the negative relationship between trust and opportunism alters the rules that dictate the choice of governance structure

and changes the comparative transaction costs associated with the various modes of governance (Chiles & McMackin, 1996). Several authors have indicated that trust increases the efficiency of economic transactions (Bromiley & Cummings, 1992; Buckley & Casson, 1988). For example, while the traditional TC model would indicate that internalization is an appropriate governance structure for high levels of asset specificity, the revised model would predict that hybrid modes are more efficient when there are high levels of interpartner trust (Beamish & Banks, 1987). In a similar vein, Granovetter (1985) indicated that hybrid governance structures are superior to hierarchies in generating trust and suppressing opportunistic behavior when exchanges involve recurrent and socially embedded economic transactions.

Moreover, the introduction of interpartner trust into the mainstream TC model economizes on the costs of bounded rationality. However, the effects of trust on bounded rationality are indirect because the existence of trust does not directly enhance the cognitive abilities of the transacting parties. Instead, trust decreases the complexity surrounding contractual agreements (Lincoln, 1990; Powell, 1990) and by doing so, it economizes on the costs of bounded rationality. This point is reflected in Williamson's (1975) argument that bounded rationality is cumbersome "only to the extent that the limits of rationality are reached-which is to say, under conditions of

uncertainty and/or complexity" (p. 22). In other words, if human agents were perfectly rational and transactions were relatively simple and certain, then, exchange relations would involve perfect contracts. In reality, though, bounded rationality and transactual complexity and uncertainty are present in all exchange relations. Consequently, the contracts that support economic exchanges are far from perfect.

The question that arises from the above discussion is "how does trust decrease the uncertainty and complexity of transactual agreements and how does this, in turn, economize on bounded rationality?" This question has been recently addressed by Chiles and McMackin (1996). According to them, the existence of trust in exchange relations economizes on the information and monitoring costs associated with transactions. Specifically, when economic relations are meshed with trust, information exchanges between the transacting parties tend to be more timely, comprehensive, and accurate (Beamish & Banks, 1987). In addition, trust increases the parties' receptivity to one another and decreases the need for extensive monitoring and formal controls. By doing so, a reduction in behavior uncertainty and complexity surrounding the actions of exchange partners is achieved. When performance complexity and uncertainty are reduced, then the effects of bounded rationality are less salient and threatening in economic transactions.

According to Williamson (1975; 1985), the choice of governance structure needs to economize on bounded rationality by avoiding to place excessive and unrealistic demands against the cognitive limits of human agents. The mediated effect of exchange uncertainty on the relationship between trust and bounded rationality, shifts the comparative transaction costs associated with the different modes of governance (Chiles & McMackin, 1996). In other words, given certain conditions and the absence of trust, the traditional TC model would predict that internalization is more efficient than other modes of governance. The revised TC model, on the other hand, indicates that when trust is present and under the same conditions, hybrid modes of governance are more efficient than hierarchies.

Summary

Under the economic model, markets are the ideal mode of transactions and therefore, spot contracts are more efficient than hierarchies when: 1. there is little uncertainty about the costs, prices, suppliers, and buyers found in the market and 2. when there is perfect competition among a large number of buyers and suppliers that bargain and bring prices down. However, the effects of bounded rationality, opportunism, and increased environmental uncertainty create a market failure. These conditions make hierarchies more efficient than markets. Nevertheless, the high production

and administrative costs associated with hierarchies often preclude firms from internalizing transactions. Instead, companies pursue long term transactions characterized by small number bargaining and high asset specificity. Intermediate forms of governance, such as JVs, are not only viable but also efficient because they economize on the transaction costs associated with opportunistic behavior and bounded rationality.

Theoretical Model

Based on the transaction cost theory and the review of literature presented in Chapter 2, this study's conceptual model was developed. This theoretical framework is presented on Figure 3.1. An outline of the key arguments driving this model and definitions of important constructs are provided below. Several key considerations permeate the rationale for the proposed model.

(1) Informal control is the most effective and efficient way to control IJVs. By definition, informal control is exercised through socialization, communication, interaction, reward systems, or parental participation in IJV decision making areas (Kumar, 1993; Schaan, 1983) and is used to encourage and promote venture activities that are aligned with the parents' goals and objectives. It is expected that the extent of informal control employed by the IJV parents is positively related to IJV performance. This relationship is in

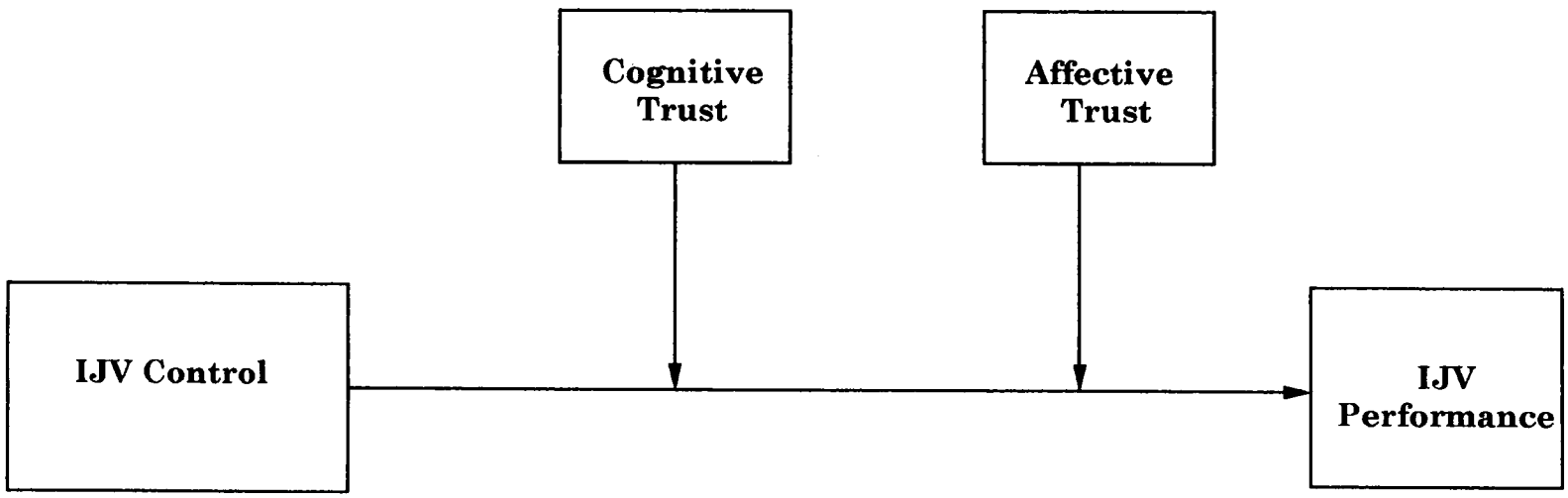


Figure 3.1

The Conceptual Model of Interpartner Trust, IJV Informal Control, and Performance.

tune with the TC theory which indicates that under conditions of high asset specificity, frequency, and increased environmental uncertainty, IJVs are the most efficient modes of governance if they are managed informally. Extensive formal specifications and control safeguards lead to higher transaction costs that sacrifice the venture's efficiency and ultimately, defy the very purpose of choosing IJVs over other modes of governance. For this reason, it is expected that extensive emphasis on formal controls would lead to lower IJV performance.

(2) Interpartner trust moderates the relationship between IJV informal control and performance. Trust refers to "a type of expectation that alleviates the fear that one's exchange partner will act opportunistically" (Bradach & Eccles, 1989, p. 104). Although trust has strong efficiency implications in the context of IJVs, when it is coupled with formal IJV control, it leads to more inefficient transactions (Gulati, 1995). From the TC economizing perspective, bureaucratic controls increase the transaction costs of economic exchanges, sacrifice interorganizational performance, signal a lack of trust, increase interpartner conflict, and eventually lead to the erosion of trust (Andaleeb, 1987; Gencturk & Aulakh, 1995; Van de Ven & Walker, 1984; Williamson, 1975). Given the dangers of formal control in the presence of trust, it is anticipated that for higher levels of interpartner trust, the relationship between informal control and IJV performance will be stronger.

The same moderating relationship is expected for the two types of trust: cognitive and affective. Cognitive trust is based on the available knowledge and "good reasons" that serve as evidence for trustworthiness (Lewis & Wiegert, 1985). Some of these 'good reasons' include competence, professionalism, reliability, past history and reputation. Affective trust, on the other hand, is based on emotional bonds and ties that develop through interactions and are manifested through genuine care and personal interest and concern for the welfare of partners.

In other words, it is proposed that the positive relationship between informal control and IJV performance will be stronger for higher levels of either cognitive or affective trust than for lower levels of trust. The reason for this is as follows. While cognitive trust leads to improved IJV performance by decreasing the costs of bounded rationality and minimizing the need for formal controls (Chiles & McMackin, 1996; Parkhe, 1993), affective trust empowers informal controls to effectively and efficiently deal with the behavioral condition of opportunism.

(3) The literature indicates that complete reliance on one type of trust (affective or cognitive) is not only inefficient and risky but also threatening to the venture's long term viability and success (Friedland, 1990; Hosmer, 1995; Lewis & Weigert, 1985). During periods of increased environmental uncertainty, these relational exchanges are usually

characterized by inequitable resource contributions between exchange partners. It is during these periods that affective trust becomes particularly critical because complete reliance on cognitive trust can lead to the premature dissolution of exchange relations since the rational reasons that could justify trustworthiness are weak. On the other hand, when trust is awarded solely on the basis of emotional ties and commitments without any rational reasons to justify trustworthiness, exchange relations are prone to even higher levels of opportunistic behavior and malfeasance. This becomes the classic example of 'naive', instead of 'prudent' interpartner trust. Consequently, both types of trust are necessary for the long term survival of IJVs, but none of them independently is sufficient in sustaining relational exchanges. Therefore, it is expected that the positive relationship between informal control and IJV performance will be stronger when both types of interpartner trust are present in relational exchanges.

(4) Finally, it is expected that neither cognitive nor affective trust moderate the relationship between formal control and IJV performance. This is because formal controls do not rely on trust to operate. In fact, the literature indicates that cooperative exchanges can either rely on trust as a form of social control or extensive formal bureaucratic control and contractual specifications (Ouchi, 1979).

Hypotheses

The literature review presented in Chapter 2 indicates that control is a critical determinant of IJV performance (Ding, 1993; Friedman & Beguin, 1971; Killing, 1983; Lecraw, 1984; Schaan, 1983). Despite this argument's prevalence, previous research has produced inconsistent and often contradictory findings (Geringer & Hebert, 1989). Whereas some studies have found a positive relationship between these constructs (e.g. Killing, 1983, Lecraw, 1984), others reported a negative association (e.g. Beamish, 1984), or failed to find any significant relationship (e.g. Awadzi, Kedia & Chinta, 1986; Janger, 1980). Two shortcomings of previous studies can explain much of the confusion and problems associated with the IJV control-performance relationship.

First, extant research has tended to conceptualize and/or operationalize control narrowly and conveniently. Studies in this area have placed excessive emphasis on ownership control, assuming that the dominant partner (the one with the largest ownership share) is also the one that exercises the highest level of management control over the venture's activities (Blodgett, 1991; Fagre & Wells, 1982; Friedman & Beguin, 1971; Stopford & Wells, 1972; Tomlinson, 1970). Recently, however, this approach has been under attack (Gray & Yan, 1992). Culminating empirical evidence indicates that management control is not a strict and automatic consequence

of majority ownership or other types of formal, bureaucratic control mechanisms (Ding, 1993; Friedman & Kalmanoff, 1961; Harrigan, 1985; Ohmae, 1989).

Second, in the absence of TC reasoning, extant research has been overly preoccupied with establishing a direct link between formal control (e.g. ownership control, veto power, formal plans, budgets, reports) and IJV performance. Recently, however, this rationale has also been questioned (Gray & Yan, 1992). Increasingly, empirical evidence indicates that formal control mechanisms, by themselves, account for only a small percentage of the IJV performance variance (Ding, 1993; Friedman & Kalmanoff, 1961; Harrigan, 1985; Ohmae, 1989). In fact, some studies have found that a sizable percentage of the variance in IJV performance is explained by informal control mechanisms such as socialization, communication, interaction, reward systems, or parental participation in the IJV decisions (Kumar, 1993; Schaan, 1983). Schaan (1983) explained that informal control leads to better IJV performance because this type of control is used to reward, encourage, and promote venture activities that reinforce parental goals and objectives.

Furthermore, it seems that inconclusive research findings can also be attributed to the fact that previous studies have not utilized an integrative theoretical framework such as the TC theory to explain the IJV control-

performance relationship. This theory indicates that when production and administrative costs are too high to justify internalization, and when transactions are characterized by high frequency, great levels of environmental uncertainty, and asset specificity, IJVs are the most efficient modes of governance (Beamish & Banks, 1987; Jarillo, 1988; Williamson, 1975). However, this reasoning, alone, would indicate that the TC perspective is only directive in the choice of governance and of little help in clarifying the IJV control-performance relationship. Nevertheless, besides the choice of the most efficient governance, the TC framework is also useful in answering the following second order question: how can existing exchanges be structured to economize on the transaction costs or how formalized should IJVs be to maintain their efficiency? (Gulati, 1995) To address this question, the formality or informality of the venture's control system needs to be further examined.

When the TC reasoning is used, it becomes evident that formal controls are ill-suited for IJVs. Even Williamson (1975) indicated that extensive safeguards and formal specifications increase the transaction costs of an agreement without providing sufficient warranty that opportunistic behavior will not occur. After all, due to bounded rationality and performance uncertainty, all formal contracts and agreements are, at the very best, incomplete because transacting parties cannot foresee in advance

all possible contingencies that can arise during exchanges (Gottfredson & White, 1982; Hennart, 1991; Williamson, 1981). Thus, the TC reasoning suggests that formal controls are not only inefficient but also inappropriate for relational exchanges such as IJVs that rely primarily on trust.

As Ouchi (1979) observed, "people must either be able to trust each other or to closely monitor each other if they are to engage in cooperative enterprises" (p. 846). McAllister (1995) provided empirical support for this assertion by demonstrating that the need for formal control is mitigated in the presence of trust (e.g. in the context of IJVs). According to him, formal control is manifested in control-based monitoring which is achieved through some combination of two approaches. One approach is through first-hand observation which, in the case of IJVs, probably takes the form of parental representation within the IJV. Usually, some reasonably high ranking individual from each parent organization is physically present in the IJV to assure that the transaction is being honored from the parents' point of view. Alternatively or complimentary, control-based monitoring can be achieved through a system of tight, formal controls such as detailed financial progress reports and plans.

While some formal controls are probably needed in IJVs (especially early in their formation when the two parents have little prior experience with each other), they cannot efficiently cope with the uncertainties

attendant in IJVs. Usually these uncertainties go well beyond that of business-as-usual since, often, IJVs are confronted with political uncertainties, cultural misunderstandings, legal complications, currency risks, and, more importantly, risks associated with the interdependency with another organization's fate. Moreover, formal controls tend to fall short of efficiently protecting asset specific investments. Given the fertile ground for opportunistic behavior, it is difficult to amass sufficient formal controls to allay all fears of opportunism in IJVs. Thus, at some fairly early point in the venture's life, the transaction costs of formal controls start exceeding their diminishing returns.

According to the TC theory, since IJVs are relational transactions based on reciprocity and trust (MacNeil, 1985; Rousseau & Parks, 1993; Tallman & Shenkar, 1994; Zaheer & Venkatraman, 1995), formal controls would defy their very purpose and sacrifice their efficiency. These observations show the relatively limited potential of formal controls in the context of IJVs. In fact, the adoption of formal control goes against the very essence of choosing IJVs over other forms of governance and sacrifices their efficiency (Kogut, 1988). It seems that the efficient governance of IJVs requires a substantial overlay of clan governance suggesting that *informal* control mechanisms better fit the IJV transaction context. These observations indicate that if any direct link exists between control

mechanisms and IJV performance, it would be between *informal* control and performance (Gulati, 1995). Consequently, in the context of IJVs, informal control is expected to lead to better IJV performance (Beamish, 1988), while formal control is expected to be negatively related to IJV performance. Thus, the following hypotheses are proposed:

Hypothesis 1: The extent of informal control used by the IJV parents will be positively related to IJV performance.

Hypothesis 2: The extent of formal control used by the IJV parents will be negatively related to IJV performance.

By themselves, though, the above hypotheses would be relatively noncontributory to this study, given the empirical inconsistencies in the extant IJV control-performance research. Indeed, while a positive relationship between informal control and IJV performance is expected, based on our earlier arguments concerning the role of trust, the strength of this direct relationship should be fairly modest. Without accounting for trust, the control-performance relationship is likely to be confusing and unproductive since informal control in the absence of trust can lead to relational abuse. Previous discussion of trust also suggests that any

relationship between informal controls and IJV performance is dependent on the presence of trust.

In fact, it is anticipated that interpartner trust must be present before informal controls can economize on the behavioral conditions of bounded rationality and opportunism (Beamish & Banks, 1987; Chiles & McMackin, 1996). This is because trust reduces the complexity of contractual agreements (Lincoln, 1990; Powell, 1990) and minimizes the transaction costs associated with elaborate safeguards and formal controls (Chiles & McMackin, 1996; Parkhe, 1993b). Moreover, trust infuses interorganizational relationships with norms and value (Madhok, 1995) and by doing so, exchanges become institutionalized (Selznick, 1957). As Parkhe (1993b) indicated, trust is "the behavioral lubricant that can improve a system's operating efficiencies" (p. 307). Consequently, interpartner trust, by combining cost reduction and value enhancing properties, embodies strong efficiency implications in the context of interorganizational relations (Hill, 1990; Ring & Van de Ven, 1994).

Despite its efficiency implications, trust, by itself, does not automatically lead to better interorganizational performance (i.e., have a direct effect of its own). For example, when trust is coupled with an inappropriate control system, it leads to *inefficient* transactions that are prone to even *higher* levels of opportunistic behavior (Gulati, 1995).

Paradoxically enough, while interpartner trust is instrumental in the reduction of opportunism, it is also in the presence of trust that IJVs become even more vulnerable to higher levels of opportunistic behavior when formal controls govern relational exchanges (Granovetter, 1985). For example, when trust is present in an exchange, the use of bureaucratic controls can erode the positive spirit engendered in a trusting relationship and allow room for partner transgressions and malfeasance. It is evident that in the context of IJVs, trust becomes the most salient factor in the informal control-performance relationship.

Nevertheless, the relationship among informal control, trust, and IJV performance needs to be further qualified to account for the different dimensions of trust. As previously mentioned, two dimensions comprise the construct of interpartner trust: cognitive and affective trust. The literature indicates that while both types of trust are important forces in interorganizational relationships (Gulati, 1995; Hosmer, 1995), they are distinct from one another and can exist independently in the context of IJVs (McAllister, 1995).

Cognitive trust refers to trust based on available knowledge and a set of 'good reasons' that constitutes the necessary evidence to justify trustworthiness (Lewis & Wiegert, 1985). Competence, reliability, dependability, and a good track record in fulfilling promises are some of the

bases of cognitive trust. The development of this type of trust requires sound reasoning and knowledge of dependable behavior on the part of exchange partners (Gulati, 1995). Conversely, the lack of 'good reasons' provides the rational basis for withholding trust (Luhmann, 1979; Shapiro, 1990). It is important to note that cognitive trust is rooted in the notion of equity or fairness within the IJV relationship which refers to equitable contributions that may not necessarily be equal (Ring & Van de Ven, 1994). The consistent, reliable, dependable, competent, and fair pooling of resources provides a rational justification for mutual forbearance, reciprocation, and continued contributions towards the relationship (Gulati, 1995; Madhok, 1995).

When cognitive trust is present between the IJV parents, informal controls become the most efficient way to govern IJVs. This is because the combination of informal controls and cognitive trust economizes on the behavioral condition of bounded rationality (Beamish & Banks, 1987; Chiles & McMackin, 1996). As Williamson (1975) indicated, bounded rationality is cumbersome "only to the extent that the limits of rationality are reached-which is to say, under conditions of uncertainty and/or complexity" (p. 22). When the IJV partners perform their duties reliably and dependably, IJV complexity and partners' performance uncertainty are reduced.

Consequently, the effects of bounded rationality become less salient and threatening.

Furthermore, when IJV relations are meshed with cognitive trust, information exchanges between the IJV parents become more timely, comprehensive, and accurate (Beamish & Banks, 1987). In addition, cognitive trust increases the parties' receptivity to one another and decreases the need for extensive monitoring and formal controls (Chiles & McMackin, 1996). In this respect, cognitive trust is powerful in imparting a mutual belief in each parents' ability to problem solve problems (i.e., cope with uncertainty) as unforeseen contingencies inevitably arise. As a result, mitigating the need for formal control (or control-based monitoring), IJV parents exhibit less counterproductive and defensive behavior (McAllister, 1995) and problem solving is enhanced through face-to-face communication. On the other hand, the absence of cognitive trust renders informal controls ineffectual. For example, in the absence of a belief in the competency of the other party and the attendant ability to make any "reasonable leap of faith" associated with the IJV, informal controls become superfluous. This reasoning leads to the following pair of hypotheses:

Hypothesis 3a: For higher levels of cognitive trust, informal control will be positively related to IJV performance.

Hypothesis 3b: For lower levels of cognitive trust, informal control will be negatively related to IJV performance.

As far as affective trust is concerned, this type of trust is based on the emotional bonds and ties that develop through frequent interaction. This type of trust fosters the value of exchange relations by enriching them with a strong socio-psychological foundation. In the IJV context, affective trust is usually manifested through genuine care, personal interest, and true concern for the welfare of the IJV partners. The combination of informal controls and affective trust economizes on the costs of opportunistic behavior. Affective trust empowers informal controls to channel partner behavior and decision making towards mutual forbearance. As McAllister (1995) observed, when affective trust is present, partners tend to pay more attention to and give heed to each others' needs in the IJV relationship.

In this respect, affective trust deals with the transaction problem of opportunism by permitting partners to stay on top of each others' evolving needs and try to accommodate them as their own. Because this process requires direct and interactive communications, informal control mechanisms become the most effective means to accomplish this end. On the other hand, the absence of affective trust implies a mutual perception on the part of the IJV parents that they care very little for each others' needs. Consequently,

IJV partners tend to exhibit relatively poor citizenship behavior and, in this context, concerns with opportunism tend to loom quite high. In sum, whereas cognitive trust leads to improved IJV performance by decreasing the costs of bounded rationality and minimizing the need for costly and restrictive formal controls, affective trust empowers informal controls to lead to flexible problem solving that accommodates the needs of both parents. This reasoning leads to the following pair of hypotheses:

Hypothesis 4a: For higher levels of affective trust, informal control will be positively related to IJV performance.

Hypothesis 4b: For lower levels of affective trust, informal control will be negatively related to IJV performance.

The multidimensionality of interpartner trust raises a question about the possible interaction of the two trust dimensions in moderating the informal control-performance relationship. To gain additional insight into this issue, several other questions need to be further addressed. For example, what are the unique contributions of cognitive and affective trust in the context of IJVs? Are both types of trust necessary in relational exchanges or are they individually sufficient in sustaining long term interorganizational

transactions? Answers to the above questions can provide additional insights into the IJV informal control-performance relationship that can help further clarify inconsistent research findings of previous studies.

The literature generally proposes that both types of trust are critical to the stability of relational exchanges (Gulati, 1995; Hosmer, 1995). For example, cognitive trust is a necessary element in the development of interpartner trust. Without any good reasons to base trustworthiness, relational exchanges become inefficient and unsustainable. Nevertheless, cognitive trust in itself is not sufficient for the continuation and long term success of trusting exchanges (Madhok, 1995). Since this type of trust is rooted in the perception of fairness within the exchange context [that is equitable contributions that may not necessarily be equal (Ring & Van de Ven, 1994)], serious problems can arise when partner contributions cannot be evenly matched due to increased levels of environmental uncertainty. When such a mismatch takes place, partners are faced with a lack of good reasons to justify continued trustworthiness.

In these situations, relational exchanges become unstable and prone to dissolution. Unless of course, there are affective elements of trust to stabilize the exchange relation. Affective trust is particularly critical in this context because "it cements the relationship and provides the tolerance through the social 'glue' to tide over temporary periods of disequilibrium." (Madhok, 1995,

p. 121) In this respect, Madhok (1995) indicated that when exchanges experience periods of high uncertainty and flux that require greater flexibility and tolerance for ambiguity, the presence of affective trust broadens the zone of tolerance for inequity and prevents the premature dissolution of IJVs. Therefore, when cognitive trust weakens, the presence of affective trust enhances the exchange's resilience and strengthens its sustainability.

It is evident from the above discussion that affective based trust is necessary for the maintenance of relational exchanges. Nevertheless, it falls short from being a sufficient factor in securing efficient long term exchanges. Complete reliance on affective trust is very risky because once formed, it is very hard for socio-psychological sentiments to be revoked, even when there is culminating evidence of partner transgressions. Under these conditions, partner transgressions are usually discounted and even ignored because there is no rationally-based mechanism to monitor partner contributions in exchanges (Madhok, 1995). Undoubtedly, these conditions create the context of 'naive' trust which has the potential to erode the venture's efficiency and eventually lead to greater malfeasance and opportunism (Van de Ven, 1994). It is evident that in order to remain effective and efficient, IJVs should be based on prudent trust because unconditional trust in exchange relations invites exploitation (Friedland, 1990). Consequently, trust should be

awarded based on a combination of affective and cognitive elements of trust (Hosmer, 1995; Lewis & Weigert, 1985).

In sum, cognitive and affective types of trust are distinct concepts that can exist independently from one another in the context of relational exchanges such as IJVs. Even when exchanges incorporate both bases of trust, there is little guarantee that both trust dimensions will continue to coexist over a long period of time. In fact, research indicates that it is not uncommon for the two types of trust to become completely de-coupled after frequent interaction (Madhok, 1995). De-coupling occurs usually when affective bases of trust mature and social bonds between partners become so strong that affection overrides cognition to the extent that partners end up relying solely on affective bases of trust. Complete reliance on one type of trust is inefficient and risky because it threatens the venture's long term viability and success (Friedland, 1990). Consequently, it is expected that IJVs would be more efficient when both cognitive and affective bases of trust transcend relational exchanges (Hosmer, 1995; Lewis & Weigert, 1985). Therefore, the above discussion seems to suggest that:

Hypothesis 5: The cognitive and affective dimensions of trust will interact to have an additional joint effect on the relationship between informal control and IJV performance.

An obvious question that arises from the above discussion is how formal control, interpartner trust and IJV performance are related. As it has been mentioned before, TC reasoning suggests that formal bureaucratic controls raise the transaction cost of the IJV relationship and lead to inefficient transaction governance. Furthermore, the review of the literature also seems to suggest that interpartner trust does not moderate the relationship between formal control and IJV performance. Lets examine more closely why this is the case.

IJVs are relational transactions based on reciprocity and trust (Macneil, 1985; Tallman & Shenkar, 1994; Zaheer & Venkatraman, 1995). Thus, excessive preoccupation with formal controls could ironically lead to less control over desired ends. This is because in the presence of trust, transacting parties are confident about their partners' intentions to behave righteously and fulfill their obligations (Gulati, 1995). In this context, formal bureaucratic controls would be costly substitutes for informal controls (Badaracco, 1991; Ring & Van de Ven, 1994) because they could increase the transaction costs of economic exchanges (Williamson, 1985), signal a lack of trust in the other party (Andaleeb, 1989), and evoke interpartner resistance and conflict (Van de Ven & Walker, 1984).

More importantly though, increasing reliance on formal controls erodes the cooperative spirit of exchanges and leads to even higher levels of

opportunistic behavior (John, 1984; Ring & Van de Ven, 1994). As Subieta (1991) indicated, long term dyadic transactions that rely primarily on formal administrative control are inefficient and vulnerable to opportunistic behavior because they destroy the positive interpartner orientation that is engendered in trusting relations. Because increased formalization decreases the level of morale and commitment invested in exchanges, transacting parties that rely on formal controls tend to follow the letter rather than the spirit of an agreement (Andaleeb, 1989). Therefore, it is expected that interpartner trust (cognitive and affective) does not moderate the relationship between IJV formal control and performance. Even though it is acknowledged that the test of null hypotheses does not provide meaningful empirical support for the stated relationships, it was decided to use null hypotheses to check if the overarching reasoning about formal control, interpartner trust and performance holds in the context of IJVs. Thus, the following null hypotheses will be tested:

Hypothesis 6a: In the presence of cognitive trust, formal control will not have a significant impact on IJV performance .

Hypothesis 6b: In the presence of affective trust, formal control will not have a significant impact on IJV performance.

CHAPTER 4

METHODOLOGY

This chapter discusses the study's methods of data collection and analysis. The chapter is divided into the following sections: research design, population and sampling, research instrument, data collection, threats to validity, measures, and analysis.

Research Design

The choice of the research design is a critical consideration for empirical studies. The option of relying on secondary sources to test the research hypotheses was rejected since preexisting IJV databases are virtually nonexistent. Similarly, the idea of using an experimental design was abandoned because experimental manipulations would ultimately involve hypothetical joint ventures and artificially created interpartner relations. After a careful examination of the study's data requirements, an ex post facto research design was chosen as the most viable alternative. This design was selected because to test the study's hypotheses, it is necessary to collect perceptual data from managers that are intimately involved with the control mechanisms, interpartner trust, and performance of IJVs.

A mail survey was chosen over interviews for several reasons. First, questionnaires represent the fastest method of gathering information from a large sample of respondents when there is only a single interviewer available. Second, surveys are cost efficient when collecting data from respondents that are scattered around a broad geographic region. Third, mail surveys are not as susceptible to interviewer biases as interviews. Finally, it may be easier for busy executives to schedule the completion of a mail questionnaire at their own time and pace than scheduling a face-to-face or telephone interview.

Of course, mail surveys suffer from a number of drawbacks. Nevertheless, three issues seem to be of particular concern. First, when data are collected through a mail survey, there is little opportunity for question clarification and missing information or partially completed surveys can become problematic. Second, low response rates or non-respondent biases can raise serious questions about the validity of the study's findings. Finally, even though every effort can be made to direct the survey to the most appropriate organizational member(s), the researcher has little control over who is actually responding to the survey instrument. To minimize these drawbacks, every effort was made to conduct a methodologically rigorous survey design.

Population and Sampling

This section addresses the following methodological issues: the study's sampling frame, timeframe, method of sampling, and choice of respondents.

Sampling Frame

The literature suggests that there is a difference between IJVs established in developed and developing countries in terms of their control structures, equity division, motivations for their establishment, and characteristics of their competitive environment (Beamish, 1984; Tomlison & Thompson, 1977). To control for these variations, this study will focus only on IJVs operating in the United States. The additional benefit of examining U.S. based IJVs is that business is conducted in English. This reduces the potential error of translating the survey instrument into multiple languages and insures construct equivalence and data comparability (Douglas & Craig, 1983).

The generation of the study's population is a major research hurdle since there is no pre-existing list of IJVs operating in the U.S. Consequently, the identification of the IJV population requires the screening and triangulation of data reported in a number of directories. After a thorough and exhaustive search of the available public domain sources, it was decided to generate the population list using a number of secondary sources.

The first step in generating the study's population was to screen the 1995 International Directory of Foreign Affiliations and the 1996 Directory of Foreign Affiliations Plus. These directories list alphabetically foreign and U.S. companies and report some general information about them including their divisions, subsidiaries, affiliates, and IJVs. Since the majority of the information reported in these sources is provided directly by the companies themselves, it is possible that these directories provide an incomplete picture of the foreign companies' IJV activity in the United States.

To mitigate possible biases and oversights in the above sources, the initial population list was cross checked and supplemented with other IJV entries reported in The Wall Street Journal Index, Predicasts' Funk & Scott Index of Corporate Change, Worldscope, Companies International, the Directory of Foreign Firms Operating in the United States, the Directory of Foreign Manufacturers in the United States , and the Yearbook on Corporate Mergers, Joint Ventures and Corporate Policy. A typical IJV announcement in these rosters identifies the venture's SIC code, the purpose of its formation, and the names of the parent sponsors. Other information that is sometimes available includes the equity share and location of the parents as well as the ventures' names and location. Because some of these rosters often report IJV announcements or information about the negotiation process

between possible partners, these lists were carefully screened to identify and select only those IJVs that had actually materialized.

If the above directories identified an IJV, but little information was given about the venture's SIC code, country of operation or the number and nationality of parent companies, an attempt was made to collect these data from company Q-Files, which include the 10-K reports, annual reports, and proxy statements. Other valuable supplementary sources that were used to collect missing information included the U.S. Department of Commerce's International Trade Administration publications entitled Foreign Direct Investment in the United States, Moody's Corporate Report, Who Owns Whom, Wards Business Directory, and Standard and Poor's Industrial Reports on domestic and international firms.

Overall, the following secondary sources were used to generate the study's sampling frame including: The Wall Street Journal Index, Predicasts' Funk & Scott Index of Corporate Change, the Yearbook on Corporate Mergers, Joint Ventures and Corporate Policy, the International Directory of Foreign Affiliations, the Directory of Foreign Affiliations Plus, Worldscope, Companies International, the Directory of Foreign Firms Operating in the United States, the Directory of Foreign Manufacturers in the United States, Who Owns Whom, Wards Business Directory, Foreign Direct Investment in the United States, Moody's Corporate Report, and Standard and Poor's

Industrial Reports on domestic and international firms. It is believed that the triangulation of the above sources generated a population list that was a close approximation of the overall population of U.S.-foreign IJVs operating in the U.S. Consequently, any selection biases are expected to be minimal.

For the purposes of this investigation, an entry was classified as an IJV and was entered in the study's population list when it met the following criteria:

1. An entry reported in the above directories was listed as a joint venture between a U.S. and a foreign company.

2. The reported IJV operated in the United States.

3. The reported IJV operated in manufacturing industries.

4. The reported IJV was 10-90% foreign owned.

Consistent with similar studies (e.g. Chowdhury, 1988; Geringer & Hebert, 1991; Osborn & Baughn, 1990; Parkhe, 1993; Sohn, 1994) and in order to control for industry variations and biases and establish a homogeneous data set, this study investigated only IJVs operating in the manufacturing industries (SIC 20-39). Previous studies indicated that manufacturing industries are quite unique from the rest of the industrial

sectors and are characterized by the most prolific IJV activity (Hergert & Morris, 1988; Hladik, 1985).

The fourth selection criterion used satisfied the operational definition of an IJV. In fact, this range of foreign ownership (10-90%) is an accepted rule of thumb for identifying IJVs. The literature indicated that, when a foreign affiliate owns a significant amount of a company's assets, then the foreign parent actively participates in the organization's management and control decisions. Consequently, this company can be considered a joint venture management operation.

Nevertheless, what is not so clear in the literature is the exact percentage of foreign ownership that distinguishes an IJV from other forms of foreign direct investment (e.g. minority investments). For example, in the Harvard Multinational Enterprise database and Hennart's research (1991), IJVs were defined as those organizations that were 5-95% foreign owned. These studies indicated that less than 5% foreign ownership represents a minority investment for the foreign MNC, while more than 95% ownership approximates a wholly owned subsidiary. Similarly, the 95% cutoff point was employed in other studies (e.g. Franko, 1971; Gatignon & Anderson, 1988; Gomes-Casseres, 1989; Stopford & Wells, 1972). On the other hand, some researchers defined IJVs as those organizations where one parent holds between 10-90% of the company's equity (e.g. Hladik, 1985; Park, 1992;

Shenkar & Zeira, 1992). The above discussion clearly indicates that despite some discrepancies in the literature, the 10-90% cutoff point that was used in this study is a conservative operational definition for IJVs.

Timeframe

This study did not incorporate any maximum or minimum life span restrictions that IJVs had to meet to be included in the sample. Even though this decision deviates, somewhat, from previous IJV studies, the decision to examine all IJVs operating in the U.S., regardless of their date of formation, was based on the following rationale. It seems that a maximum timeframe restriction (i.e. maximum number of years that IJVs had to be in operation) is more appropriate for studies that seek to investigate IJV formation considerations such as partner selection criteria or negotiation issues. These studies usually tend to limit the study's timeframe up to five years prior to the data collection to minimize biases associated with respondent memory decay (e.g. Geringer, 1991). Clearly, since this investigation focuses on the implementation issues of IJVs, it is not necessary to employ such a restriction.

Moreover, there was no minimum age restriction that IJVs had to meet to be included in the study's sample. Previous research tended to sample form IJVs that had been in operation for at least two to three years

indicating that it takes approximately this amount of time for IJVs to commence operations and allow the reliable and valid evaluation of their performance (Beamish & Banks, 1987). Instead of employing a time restriction, this consideration was addressed by using multiple respondents to validate the IJV performance measures. Furthermore, it was important to allow fairly young IJVs to be included in the study in order to gain additional insights about the reasons why up to 70% of all IJVs dissolve within two years of their formation (Geringer & Herbert, 1991; Parkhe, 1993).

Sampling

The sampling frame is the set of IJVs which have a chance to be included in the study's sample, given the sampling technique that is utilized. Since the research sample and the data obtained therefrom can only be representative of the study's population, the correspondence between the sample and the population which the study attempts to describe is an important consideration. The study's primary objective for collecting data is to obtain conclusions about the population of IJVs and not merely describe the sample's characteristics per se. To enable generalizations beyond the limited scope of the specific sample, care must be taken to employ a sampling technique that enhances sample representativeness.

According to Mangione (1995), random sampling designs are among the strongest sampling tools available for social research because they ensure that any sampling error is only random. Therefore, from the generated population list, a random sample of 603 IJVs was drawn. Moreover, in order to control for extraneous variation and enhance the study's data comparability, two sample selection criteria were employed:

1. The number of parent sponsors.

2. The nature of parent sponsor organizations.

To control for variation resulting from multi-party IJVs (Daniels, Ogram & Radebaugh, 1983; Geringer, 1991), this study investigated only two-party IJVs. Hegert and Morris (1988) found that over 81% of the alliances formed are bilateral, while Osborn and Baughn (1990) reported a much higher statistic for two-party alliances (approximately 92%). Moreover, if multi-party IJVs were included, it would have been necessary to employ different operational definitions for the two party and the multi-party IJVs, since the literature indicates that the expected equity share of a partner decreases as the number of partners increases (Shan, 1991).

Finally, following Parkhe's (1993) and Park's (1992) example, only two-party IJVs sponsored by *for-profit* organizations were included in

sample. In this respect, IJVs that included government agencies or non-profit organizations as venture parents were automatically excluded from the sample.

Choice of Respondents

The study's method of data collection employed a combination of the key informant and multiple respondent methodologies. The basic assumption of the key informant methodology is that the perceptual errors in the responses of the key informants are random and do not add a systematic bias to the study's results (Cullen & Johnson, 1995). Consequently, the determination of the best people within an IJV that could meet the study's objectives was an important consideration.

Researchers have raised serious questions whether or not organizational members at different hierarchical levels perceive the same organizational phenomena differently (Lincoln & Zeitz, 1980). To obtain reliable data and minimize key informant biases, careful attention was paid to Campbell's (1955) and Bagozzi and Phillips' (1982) recommendations for selecting key informant(s). In this study, a decision was made to target the organizational members that were most directly responsible for the joint venture's operations. This was deemed appropriate in order to get as hierarchically close as possible to the executive who was sufficiently

cognizant of the strategic goals served by the joint venture and yet, intimately familiar with the interpartner trust, the control system and the performance aspects of IJVs. Accordingly, IJV general managers were surveyed (Dant & Schul, 1992; Park, 1992; Parkhe, 1993; Shenkar & Zeira, 1992).

Moreover, to minimize possible problems associated with mono-method biases, multiple respondents were used for a sub-sample of IJVs. In the initial questionnaire, general managers were asked to identify IJV executives that served as the representatives of the parent companies. Upon collecting this information, a short version of the survey was sent to a sample of foreign and domestic parent representatives. It is believed that multiple responses to the study's key variables (e.g. interpartner trust and IJV performance) enhance confidence in the validity and reliability of the study's research findings.

Research Instrument

A questionnaire was developed based on the review of the pertinent literature, Dillman's (1978) Total Design Method, and Mangione's (1995) suggestions. The survey instrument was mainly composed of belief statements trying to uncover the subjects' assessment of interpartner trust, and the venture's control mechanisms and performance. Three types of

question structures were utilized: closed-ended with ordered answer choices, closed-ended with unordered answer choices, and a few open-ended questions. The majority of the questionnaire was comprised of Likert-type scales. Previous studies utilizing the key informant methodology in the context of IJVs indicated that ordinal scales were more readily understood and better completed by busy senior executives than potentially more precise, but more complex and time consuming interval approximating techniques, such as Thurstone-type scales (Geringer, 1991).

When designing the survey instrument, every effort was made to avoid complex wording and double barreled questions and provide answer choices that were mutually exclusive (Dillman, 1978; Sudman & Bradburn, 1991). Several of the guidelines provided by the Total Design Method were observed in creating the questionnaire booklet. For example, questions with similar content were grouped together, organizational demographic items were placed at the end of the questionnaire, and extra care was taken in formulating the first question. The instrument's formatting maintained a vertical flow for questions and answers, directions for answering groups of items were provided, and transition sentences between sections were included. The front cover of the questionnaire included the study's title, a graphical design, names and addresses of the project's sponsors, and a short description of the study's importance and objectives. In addition, on the back

cover of the instrument respondent comments were elicited and the subjects were thanked for their participation (Dillman, 1978).

Using semi-structured interviews with IJV managers of the surrounding area, the questionnaire was pretested for its readability and relevance in the context of IJVs and the time it took to complete. Prior to its actual administration, the instrument was modified according to the managers' recommendations and suggestions. As Dillman (1978) indicated, this step is particularly critical in achieving a high response rate since an easy to read and a relatively short questionnaire is more likely to be filled out and returned.

Data Collection

A prenotification card was mailed to 603 IJV general managers approximately two weeks prior to the first wave of mailings. All subsequent mailings included along with the questionnaire, a post-paid return envelope and a personal letter describing the study's purpose, who is conducting the survey, why the research is important, and how the respondent companies can benefit from their participation (see Appendix A). Moreover, the cover letter assured subject confidentiality and promised a summary of the study's results to all interested participants.

To increase the study's response rate, a total of four rounds of survey mailings were conducted (Mangione, 1995). Nevertheless, a complete survey package was mailed only during the first, third, and fourth rounds of the survey mailings. Following Mangione's (1995) suggestion, the second mailing included only a tailored notification to the study's non-respondents (see Appendix B).

Upon collecting data from the IJV general managers (IJVGMs), a shorter version of the survey was sent to a sample of parent representatives that were identified by the IJVGMs. To encourage their participation, a personal letter was included along with the survey indicating that their names were provided by their general managers who had already responded to the survey (see Appendix C).

Of the 603 surveys mailed: (1) 91 came back undelivered; (2) 108 were returned along with the information that they were no longer IJVs; and (3) 140 usable surveys were returned. Even recognizing the short life span of many IJVs, we were taken back by the number of undelivered surveys. If these undelivered surveys (1 & 2 above) are *not* counted, then the response rate is approximately 35%. Such a rate is quite favorable compared to similar studies seeking responses from executives (e.g., Hambrick, Galekanycz, & Fredrickson, 1993). It may also be of some interest that 27 were returned along with notes explaining that completing surveys was

"against policy." As it can be seen in Table 4.1, the nationalities of the foreign IJV parents were as follows. Of the 140 completed surveys: 58 (42%) involved Japanese partners; 29 had German partners (21%); 17 were Canadian (12%); 14 were U. K. (10%); 6 were French (4%); and, 16 involved assorted other nationalities.

In this case, an important issue that needs to be addressed is the extent to which data obtained from the responding IJVs can be generalized to the target population. To examine whether or not there were any systematic response biases, respondent and non -respondent IJVs were compared across the following dimensions: IJV age, size, and IJV sales/number of employees. ANOVAs were used to test for differences between responding and non-responding IJVs. As it can be seen in Table 4.2, no significant age differences were found between responding and non-responding IJVs ($F=1.411$, $p= .24$) and the mean ages were 7.3 for the former, and 6.8 years for the later IJVs.

Company size was measured in terms of the natural logarithm of the number of IJV employees. The ANOVA results presented in Table 4.3 indicate that there is no significant size difference between the study's respondents and non-respondents ($F= 1.051$, $p= .31$). Similarly, Table 4.4 indicates that no significant differences were found in the ratio of the total

Table 4.1

Description of the Sample: Foreign Parent Nationalities

Foreign Parent Nationality	Sample (N=404)		Respondents (N=140)	
	Number	Percentage (%)	Number	Percentage (%)
Japan	144	35	58	41
Germany	57	14	29	21
Canada	41	10	17	12
United Kingdom	38	9	14	10
France	22	5	6	4
Switzerland	19	5	3	2
Sweden	13	3	3	2
Netherlands	11	3	1	1
Belgium	9	2	3	2
Norway	8	2	3	2
Italy	3	1	0	0
Australia	3	1	2	2
Finland	2	1	1	1
Mexico	2	1	0	0
China	1	0	0	0
Other (unknown)	30	8	0	0

Table 4.2

ANOVA Results on IJV Age for Responding and Non-responding IJVs

Mean Age of Responding IJVs	Mean Age of Non-responding IJVs	F-value	P-value
7.290	6.796	.797	.373

Table 4.3

ANOVA Results on the Number of Employees for Responding and Non-responding IJVs

Responding IJVs' Mean Number of Employees	Non-responding IJVs' Mean Number of Employees	F-value	P-value
5.024	5.170	1.051	.306

Table 4.4

ANOVA Results on IJV Sales/Number of Employees for Responding and Non-responding IJVs

Responding IJVs' Mean Sales/Number of Employees	Non-responding IJVs' Mean Sales/Number of Employees	F-value	P-value
283.332	260.546	1.809	.179

amount of sales to the number of employees between the respondents and the non-respondents (F= 1.809, p= .179). Clearly, these findings assuage some concerns regarding the representativeness the study's sample.

Threats to Validity

The study's random sampling design does not necessarily ensure the data collected are valid. Although this sampling technique limits the threat of systematic sampling biases, it does not provide protection against nonresponse errors, which are often the single biggest drawback of mail surveys (Mangione, 1995). To minimize nonresponse biases and increase the study's external validity, the following steps were taken.

First, every effort was made to obtain a high response rate by paying particular attention to the construction and administration of the survey instrument. To accomplish this end, several of Magione's (1995) suggestions were carefully observed including the sending of prenotification cards, reminders, and follow-ups, the construction of personalized cover letters that motivated subjects to respond, the supply of return postage, the promise of response confidentiality, and the construction of a well-laid out and easy to read questionnaire printed on color paper. Second, secondary information was collected from non-responding IJVs and comparisons were made between the respondents and nonrespondents.

Nonetheless, the above processes do not account for common method variance (Campbell & Fiske, 1959) or social desirability biases (Podsakoff & Organ, 1986). A problem with self reported data collected from the same source at one time stems from the possibility that high correlations among them may be systematically contaminated by defects in the source. Nonetheless, procedural and statistical post-hoc remedies are available to deal with artifactual covariance (Hill, Hitt & Hoskisson, 1992; Podsakoff & Organ, 1986). Several of these techniques were employed in this study.

First, to minimize the possible effects of response bias and enhance the measures' reliability and validity, multiple respondents were used to measure the study's critical variables (Ding, 1993). For example, for a subset of IJVs, a total of three respondents were asked to assess interpartner trust and IJV performance, including the IJV general manager and one representative from each one of the parent companies. Moreover, prior to its actual administration, the survey instrument was pretested through semi-structured interviews with IJV managers. Repeated iterations of item editing and refinement strengthened the scale's content validity and internal consistency.

Finally, a post-hoc statistical test was used to determine whether the survey suffered from common method variance. Following Harman's (1967) suggestion, a single factor test was conducted. An unrotated factor analysis

of all variables in the survey was performed to determine whether a single or a general factor that accounted for most of the variance emerged from the data. Since no such pattern was observed, one can be quite confident that the study's findings are not mere artifacts of common method bias.

Measures

Previously used scales were employed to measure the study's constructs. Since these scales' validity and reliability were established in previous studies, scales were only screened for their readability and general appropriateness in the IJV context. Towards this end, expert judges (colleagues and professors) were used to assess the scale's face validity and readability (Cook & Campbell, 1979). In addition, following Fredrickson's (1984) suggestion, personal interviews with managers of conveniently located IJVs were conducted in order to gain insight whether or not all of the items in the scales were relevant and easy to read and understand. Based on their suggestions, questionnaire items were modified accordingly.

The control, trust, and performance variables were factor analyzed. Factor analysis, as a statistical tool, is used to identify a relatively small number of factors that can be used to represent relationships among a large number of variables. Despite some disagreement regarding the appropriateness of using ordinal data as inputs in factor analyses, several

researchers (e.g., Nunnally, 1978) indicated that ordinal data (such as those obtained from Likert-type scales in this study) were sufficiently similar to interval level data to justify the use of factor analytic techniques.

Consequently, the control, trust, and performance variables were factor analyzed using five conventional factor analysis techniques including principal components, principal axes, maximum likelihood, alpha, and image analysis. This was done in order to obtain robust factors with consistent loadings of .35 or higher across methods. Two criteria were used to determine the number of factors retained: the inspection of the scree plots and an examination of factors with eigenvalues greater than one. To save space and demonstrate the dimensionality of the study's variables, the results of principal component analysis with varimax rotation are only reported in the following sections.

Following is a detailed description of the study's measures and the items that were used to measure the study's constructs.

IJV Performance Measures

Previous studies have used various indicators to measure IJV performance including venture instability, survival and duration, perceived IJV success, and financial performance (e.g. Beamish & Banks, 1987; Ding, 1993; Franko, 1971; Killing, 1983; Lecraw, 1984;; Schaan, 1983; Tomlinson,

1970; Yan, 1993). Quite different from regular firms, a host of problems plague the use of objective measures of IJV performance [e.g., data unavailability or inaccuracy due to consolidated performance reporting, unreported fees for royalties as well as technology and management know how transfers (Geringer & Hebert, 1991)]. Moreover, the use of venture instability, survival and duration as proxies of IJV performance has been recently criticized (Geringer & Hebert, 1991). Cessation, instability, and short life may actually represent normal organizational adaptations to environmental changes (Gomes-Casseres, 1987).

In response to this debate, Geringer and Hebert (1991) assessed the reliability and comparability of the various IJV performance indicators and found that, even though there is a positive and significant association between objective and subjective measures of IJV performance, subjective indicators are superior. They suggested that subsequent research uses objective IJV measures only in the absence of subjective data. The benefits of subjective performance indicators in the context of IJVs have been advocated by other researchers as well (e.g. Ding, 1993; Killing, 1983; Schaan, 1983; Yan, 1993).

Accordingly, to avoid the limitations of secondary data, this research employed subjective measures of IJV performance to assess the parents' satisfaction with the venture's performance. Since IJVs are free-standing

organizations, it is appropriate to evaluate their performance using the venture's perspective (Anderson, 1990; Killing, 1983). Towards this end, the literature indicates that the IJV general managers can provide a reliable source for the parent's satisfaction with IJV performance (Geringer & Hebert, 1991). Nevertheless, to minimize response biases and enhance the study's validity, for a sub-sample of IJVs, IJV performance was also evaluated by two parent representatives (one form each parent company).

The literature indicates that parents form IJVs with several objectives in mind. Consequently, IJV performance was measured multidimensionally as follows:

(1) Financial Measure of IJV Performance. IJV general managers were asked to evaluate on a 5-point Likert-type scale the extent to which each one of the IJV parents was satisfied with the venture's performance along the following dimensions: 1. ROE; 2. Sales Growth; 3. Reduction of Operating Costs; and 4. Profitability. Several studies have used these items to assess IJV financial performance (e.g. Ding, 1993; Geringer & Hebert, 1991).

For each one of the IJV parents, two separate factor analyses were performed on the financial performance indicators. It is noteworthy that the IJV general mangers gave similar evaluations for the two parents and that both factor analyses resulted in single factor solutions. Scores along the four

financial performance items were summed individually for each parent company and two performance scales were constructed. The reliability coefficient α for these scales was .89 for the U.S. partner and .84 for the foreign partner respectively. These parent performance evaluations correlated at .92 and a paired t-test was performed. Since no significant differences were found between the two parents' satisfaction with the IJV performance, their scores were averaged to produce an overall measure of IJV financial performance. This score was used in all subsequent analyses.

Beyond this evidence of internal consistency, additional efforts were expended to validate the measure of IJV performance. As a check on whether the general managers had an unbiased view of each partners' evaluation of financial performance, a subsample of the general managers were asked to identify individuals in each parent company who could evaluate the IJV from the unique perspective of each parent. Using the same criteria, parent representatives were asked to evaluate the extent to which the IJV met their parents' performance goals and objectives. Consequently, 30 responses from the U.S. and 21 from the foreign parent representatives were obtained. Interestingly enough, their responses correlated well with the general managers' evaluations of the US parent ($r = .84$) and the foreign partner ($r = .77$) and paired t-tests found no significant differences.

(2) Non-financial Measures of IJV Performance. In addition, IJV performance was assessed along the following non-financial dimensions: 1. Production & Operations; 2. Marketing & Sales; 3. Technology; and 4. Customer Service. The same criteria were employed when asking parent representatives to evaluate the extent to which the IJV met their parents' non-financial goals and objectives. Unfortunately, the factor analyses of these items did not produce robust factor loadings and no consistent patterns were observed.

In an afterthought, this finding does seem to make sense. Although IJV parents can have similar financial expectations from their ventures (i.e., both parents have common interests in the venture's financial performance), they may have complimentary, instead of similar non-financial expectations (e.g. one parent could bring a unique technology while the other brings distribution networks).

Consequently, a decision was made to drop the non-financial IJV performance measure from subsequent analysis and focus on the venture's financial performance. This avoids troublesome complications associated with trying to knit the parents' disparate non-financial expectations together into a more complex and methodologically vexing construct of IJV performance. Moreover, focusing on the financial performance of IJVs is in

tune with the implied performance goal of the TC framework applied used in this study which is transaction cost minimization.

Interpartner Trust Measures

The literature indicates that interpartner trust is a multidimensional construct. Table 4.5 presents the eleven questionnaire items that were used to measure the cognitive and affective types of trust. These items were taken from McAllister's (1995) validated scales and were applied to the context of IJVs.

(1) Measures of Affective-Based Trust. The IJV general managers were asked to evaluate on a 5-point Likert-type scale the extent of their agreement or disagreement with five affective items of trust including the sense of belonging, sharing, or emotional investments that existed between the IJV parents.

(2) Cognitive-Based Measures of Interpartner Trust. Similarly, cognitive trust was measured with six questionnaire items on a five point Likert-type scale ranging from "Strongly Agree" to "Strongly Disagree". Respondents were assess to provide their evaluations of cognitive elements of trust such as the IJV partners' reputation, professionalism, track record, dependability, reliability, and competence.

Table 4.5

Measures of Interpartner Trust.

CONSTRUCT	MEASURES	AUTHORS
Interpartner Trust Dimensions		
A) Affective Trust		
	1. IJV parents have a sharing relationship. They both freely share ideas, feelings, and hopes about the IJV.	McAllister, 1995
	2. IJV parents can freely talk to each other about difficulties they encounter with the IJV and they both know that the other party will want to listen.	McAllister, 1995
	3. IJV parents would both feel a sense of loss if the IJV were to be dissolved and they could no longer do business together.	McAllister, 1995
	4. If one parent shared his company's concerns about the IJV, the other parent would respond constructively and caringly.	McAllister, 1995
	5. I would have to say that managers from both parents have made considerable emotional investments in their working relationship.	McAllister, 1995
B) Cognitive Trust		
	1. Parent managers address IJV issues with professionalism and dedication.	McAllister, 1995
	2. Given each parent's track record, parents have no reason to doubt each other's competence to do their jobs.	McAllister, 1995
	3. Parents can rely on each other not to make their jobs more difficult by careless work.	McAllister, 1995
	4. The venture's parents are trusted and respected even by companies that are not their business partners.	McAllister, 1995
	5. Other companies that conduct business with the IJV parents consider them to be trustworthy.	McAllister, 1995
	6. If parents knew more about each other's history, they would be concerned and try to monitor each other's performance more closely.	McAllister, 1995

Similar to the control items, the eleven trust items were factor analyzed using five conventional factor analysis techniques. The results of principal component analysis with varimax rotation for the eleven trust measures are reported in Table 4.6. Consistent with McAllister's (1995) findings, the first factor incorporated the six cognitive trust items, while the second factor included the five measures of affective trust.

It is interesting that it was the cognitive dimension of trust which dominated. In fact, cognitive trust accounted for 57% of the variance prior to the extraction of the affective factor (accounting for 11%). It should be noted, though, that there was small problem with cross-loadings here. Item 8, in particular, was somewhat ambiguous in differentiating between the two constructs, when compared to the rest of the items. Nevertheless, despite this item's relatively weak loading (.67), it should be noted that item 8 loaded consistently across the five factor analyses techniques on the affective trust factor. The reliability coefficients α were .88 for the affective trust index and .89 for the cognitive trust scale, respectively.

Moreover, for a subsample of IJVs, parent representatives (30 for the U.S. and 21 for the foreign parents) were also asked to evaluate interpartner trust based on the unique perspective of their parent companies. Their evaluations were used to validate the IJV managers' responses regarding interpartner trust. The representatives' overall affective levels of trust

Table 4.6

Rotated Factor Pattern of Interpartner Trust

Item	Factor 1 Value Cognitive Trust	Factor 2 Value Affective Trust
The IJV partners....		
1. address venture issues with professionalism & dedication.	**.74**	.43
2. due to their track record, have no reason to doubt each other's competence to fulfill their responsibilities.	**.79**	.27
3. can rely on each other not to make their part of the agreement more difficult by careless work.	**.74**	.28
4. are trusted and respected by companies that do not do business with them.	**.80**	.17
5. are considered to be trustworthy by companies that conduct business with them.	**.82**	.24
6. if they actually knew more about each other's activities, they would be concerned and try to monitor the other's performance more closely. (RECODED)	**.64**	.27
7. have a sharing relationship. They both freely share ideas, feelings, and hopes about the IJV.	.36	**.78**
8. can freely talk to each other about difficulties they encounter with the venture and they both know that the other party will want to listen.	.49	**.67**
9. would feel a sense of loss if the IJV were to be dissolved & could no longer do business together.	.12	**.80**
10. would respond constructively and caringly to their partner's concerns about the venture.	.45	**.75**
11. have made considerable emotional investments in their working relationship.	.22	**.78**
Variance Explained	.57	.11
Eigenvalue	6.33	1.22

correlated with the general managers' evaluations at .79 (U.S. parent) and .83 (foreign parent) and for cognitive trust at .74 and .78, respectively. Paired t-test found no significant differences between the IJV general managers' and parent representatives' responses.

Control Measures

The literature review suggests that there is a wealth of mechanisms that IJV parents employ to exercise control over their IJVs (Ding, 1993; Gatignon & Anderson, 1988; Schaan, 1983). Table 4.7 lists the mechanisms that were used in this study to measure IJV control. Using a five-point scale ranging from "Often Used" to "Never Used", general managers were asked to rate the extent to which parents use various means of control to monitor the activities of their IJVs. Six of those items were used to measure formal control including the appointment of key venture personnel, participation in IJV board meetings, financial reports, progress reports on venture plans, exercise of veto rights at board meetings, and control based on claims of equity share. As can be seen in Table 4.8, the factor analysis of the eleven control items split formal control into two factors. On the one hand, the items pertaining to financial reporting, progress reports, participation in board meetings, and appointment of key personnel fit well with the notion of control-based monitoring and demonstrated acceptable reliability (α = .78).

Table 4.7

Measures of IJV Control.

CONSTRUCT	MEASURES	AUTHORS
IJV Control		
	Extent to which parents use the following methods to control IJV activities.	
	1. Appointing key IJV personnel.	Schaan, 1983
	2. Board meeting to monitor IJV performance.	Schaan, 1983
	3. Financial reports to monitor IJV performance.	Schaan, 1983
	4. Progress reports on IJV plans and projects.	Schaan, 1983
	5. Veto right at board meetings.	Killing, 1983
	6. Equity Share.	Killing, 1983
	7. Rotation of key personnel between the parents and the IJV.	Schaan, 1983
	8. Use of task forces and ad-hoc committees to monitor the venture's performance.	Schaan, 1983
	9. Informal socialization between IJV and parent managers.	Schaan, 1983
	10. Face-to-face communication (e.g. visits, meetings) between the IJV and the parent managers.	Schaan, 1983
	11. Participatory decision making between the IJV and the parents.	Schaan, 1983
	12. Training	Killing, 1983

Table 4.8

Rotated Factor Pattern of IJV Control Mechanisms

Item	Factor 1 Value Informal Control	Factor 2 Value Formal Control	Factor 3 Value Ownership Control
1. Rotation of parent-venture personnel	**.74**	.07	.16
2. Task forces and ad-hoc committees	**.82**	-.03	-.04
3. Informal socialization	**.78**	-.08	-.11
4. Face-to-face communication	**.82**	.04	-.09
5. Participatory decision making	**.85**	.07	.01
6. Parent training of IJV managers	**.81**	-.02	.14
7. Appointment of key IJV personnel	.10	**.74**	-.26
8. Participation in IJV board meetings	-.11	**.78**	.01
9. Financial IJV reports	-.06	**.79**	.12
10. Progress reports on IJV plans	.13	**.81**	.14
11. Using veto at IJV board meetings	-.01	.04	**.81**
12. Control based on equity share claims	.04	.01	**.79**
Variance Explained	.33	.20	.12
Eigenvalue	3.97	2.47	1.48

On the other hand, the items pertaining to veto rights and equity claims loaded on a weak second factor named ownership control that exhibited an unacceptably low reliability (α=.51). Accordingly, these items were dropped from subsequent analysis.

Finally, the six remaining control items measured IJV informal control (i.e., the rotation of parent-venture personnel; use of task forces and ad-hoc committees; informal socialization; face-to-face communication; participatory decision making; and, parent training of venture managers). These items showed a high level of internal consistency (α = .89) and respondents' across these items were summed into an informal control index.

Control Variables

To control for possible confounding effects, two control variables were used in this study. These included the venture's age and the cultural distance between the IJV parent companies. These controls were incorporated in the study because previous studies have implied that older IJVs formed between culturally similar parents tend to perform better than relatively young and culturally dissimilar IJVs.

According to Hofstede (1984), culture refers to the collective "programming of the mind that distinguishes the members of one human group from the other (p. 13). Although several attempts have been made to

operationalize this construct, Hofstede (1984) has conducted the most comprehensive study of cultural dimensions that impact organizational life. Through an extensive study, Hofstede found that four dimensions capture cultural differences in the organizational context including uncertainty avoidance, individuality, power distance, and masculinity-femininity.

As Kogut and Singh (1988) pointed out, Hofstede's study is appealing because of its large sample size, the reliability of the cultural dimension's scores over time, the dimensions' pertinence in the organizational context, and the codification of cultural traits along a numerical index. Moreover, this index is particularly interesting because it allows researchers to assess country differences along the four cultural dimensions. Using Hofstede's indices, Kogut and Singh (1988) constructed a composite index of cultural distance. For each country, this index is based on the deviation along each of the four cultural dimensions from the score of a given focal home country. The deviations are corrected for differences in the variance of each dimension and then they are arithmetically averaged. This study used Kogut and Singh's (1988) index to measure the cultural distance of IJVs formed between a U.S. and a foreign partner. Algebraically, the Kogut and Singh index for cultural distance CDj is :

$$CD_j = \sum_{i=1}^{4} \left\{ \left(I_{ij} - I_{iN} \right)^2 / V_i \right\} / 4$$

where:

Iij = index value for cultural dimension I of country j;

Vi = variance of the index for dimension I;

N = home country (U.S. in this case).

Analysis

Hypotheses 1 and 2 were tested through a multiple linear regression, while the test of the remaining hypotheses used a series of moderated hierarchical regressions. Research indicates that when testing a moderated regression model, several factors should be taken into consideration. The literature indicates that in order to eliminate problems with multicollinearity between the independent variables and the interaction terms, predictor variables should be centered prior to computing the product term (Aguinis, 1995; Jaccard, Turrisi, & Wan, 1995). This manipulation is important because when multicollinearity is present in a moderated multiple regression, the error terms rise and as a result, the model's predictive power is greatly reduced (Aguinis, 1995). Centering is a straightforward transformation where the mean for a variable is subtracted from all cases resulting in a transformed mean of zero while distributions are unaffected. However, changing the origins of the independent and moderating variables also changes the values and significance levels of the standardized regression coefficients making them essentially uninterpretable and meaningless

(Southwood, 1978). Nevertheless, the value and the significance levels of the unstandardized regression coefficients of the *interaction* terms , the model's R^2 , and F-statistic values are not affected and can be interpreted. To test the study's hypotheses, the following models were estimated:

$$Y = a_1 + b_1X_1 + b_2X_2 + e \quad (1)$$

$$Y = a_1 + b_1X_1 + b_2X_3 + b_3X_1X_3 + e \quad (2)$$

$$Y = a_1 + b_1X_1 + b_2X_4 + b_3X_1X_4 + e \quad (3)$$

$$Y = a_1 + b_1X_1 + b_2X_3 + b_3X_4 + b_4X_1X_3 + b_5X_1X_4 + b_6X_1X_3X_4 \quad (4)$$

$$Y = a_1 + b_1X_2 + b_2X_3 + b_3X_2X_3 + e \quad (5)$$

$$Y = a_1 + b_1X_2 + b_2X_4 + b_3X_2X_4 + e \quad (6)$$

where: Y = IJV performance; X_1= Informal Control; X_2= Formal Control;
X_3= Cognitive Trust; X4 = Affective Trust; e = error

Moderated relations are usually tested by examining whether or not the unstandardized regression coefficients of the interaction terms (b_3, b_4, b_5 and b_6) are significantly different from zero. When this is the case, one can conclude that interpartner trust (the moderator variable) moderates the relationship between IJV informal control and performance. However, if the unstandardized regression coefficient of the interaction term is not significant, one can conclude that the moderating variable (in this case

interpartner trust) does not have any contingency effect on the relationship between control and IJV performance.

In addition, a moderating relationship should also be tested for monotonicity or non-monotonicity (Schoonhoven, 1981; Southwood, 1978). This is accomplished by examining the partial derivatives of equations that include the interaction terms over the whole range of values of the independent variables. If the value of the partial derivative falls within the range of values that independent variables take, then the moderating relationship is monotonic. Otherwise, the relationship is non-monotonic.

CHAPTER 5

RESULTS

Descriptive Statistics

Before testing the study's hypotheses, the data were coded and various descriptive statistics (e.g. histograms, correlations, frequencies) were run to check for miscoded data and outliers. The descriptive statistics and the correlation matrix of the study's variables are presented in Tables 5.1 and 5.2 respectively. As it can be seen in Table 5.2, the majority of the intercorrelations were quite low, except for the performance and trust measures. Whereas the performance items ($r = .68$) were combined into an index, the fairly high correlations between the trust dimensions may raise some concern with the discriminant validity of the trust measures. A full discussion of the scales' discriminant validity is provided in McAllister's (1995) work. In this particular study, though, these scales correlated at .67.

Tests of Hypotheses

Hypotheses 1 & 2

Table 5.3 presents the results of the multiple linear regression (equation 1) of IJV performance on the direct effects of the study's control variables (IJV age and parent cultural distance) and informal and formal

Table 5.1

Descriptive Statistics and Reliabilities for the Study's Variables

Variables	Mean	S. D.	Alpha
Informal control	18.51	5.51	.88
Formal control	15.53	3.55	.78
Ownership control	4.58	2.21	.50
Affective trust	18.49	4.63	.88
Cognitive trust	23.69	4.47	.89
IJV age	7.29	4.34	NA
Partner cultural distance	.37	.46	NA
Partner 1 satisfaction with IJV performance	13.36	3.86	.89
Partner 2 satisfaction with IJV performance	13.27	3.70	.84
Overall parent satisfaction with IJV performance	13.31	3.70	NA

N=140

Table 5.2

Intercorrelations Among Variables

	Variables	2	3	4	5	6	7	8	9
1	Informal control	.27**	.24**	.20*	.21*	.18*	.19*	-.06	.17
2	Formal control		.28**	.22*	.12	.09	.10	-.03	.03
3	Affective Trust			.67**	.20*	.17*	.19*	.11	-.26*
4	Cognitive trust				.22*	.19*	.21*	.09	-.19*
5	Partner 1 satisfaction with IJV performance					.92**	.98**	.11	-.41**
6	Partner 2 satisfaction with IJV performance						.98**	.12	-.42**
7	Overall parent satisfaction with IJV performance							.11	-.42**
8	IJV age								-.05
9	Partner cultural distance								

(N=140); * p≤ .05, ** p≤ .01.

Table 5.3

Multiple Regression Results of IJV Performance on Informal and Formal Control

Equation	R^2	F	Variables	Beta	t
1	.14	5.65***	IJV age	.09	.28
			Parent Cultural Distance	-.30	-3.71***
			Informal control	.17	1.88
			Formal control	.06	.66

N=140; * p≤ .05; ** p≤ .01; *** p≤ .001.

control mechanisms. It is interesting to see that the strength of the model is moderate (R^2=.14). However, this effect was largely attributed to the IJV parents' cultural distance which had a strong negative effect on IJV performance ($p \leq .001$). Moreover, the relationship between informal control and performance is in the anticipated direction, but just misses the .05 significance hurdle (for a two-tailed test). Contrary to expectations, though, the relationship between formal control and IJV performance is positive and non-significant. Thus, these results are consistent with previous studies' equivocal findings regarding the relationship between control mechanisms and IJV performance.

Hypothesis 3

This set of hypotheses (3a and 3b) predicted that cognitive trust moderates the relationship between informal control and IJV performance. More specifically, though, hypothesis 1a predicted that for higher levels of cognitive trust, the relationship between informal control and IJV performance would be positive. On the other hand, hypothesis 1b suggested that for low levels of cognitive trust, the informal control-IJV performance relationship would be negative.

Table 5.4 presents the results of the three step moderated hierarchical regression (equation 2) that was used to test the above hypothesized

Table 5.4

Results of the 3-Step Hierarchical Regression of Informal Control and Cognitive Trust on IJV Performance

Equation	Step	R^2	ΔR^2	F	Variables	Constant	Unstandardized Regression Coefficients (standard errors)
2 [a]	1	.11		5.18**	IJV age	13.452	.005 (.066)
					Partner Cultural Distance		-2.283** (.709)
					Informal control		.150* (.056)
	2	.13	.02	4.30**	Cognitive trust	13.456	.092 (.073)
	3	.40	.27	16.17***	Informal Control X Cognitive trust	13.116	.071*** (.009)

N=140; * p≤ .05; ** p≤ .01; *** p≤ .001.

relationships. In the first step of the model, the two control variables (IJV age and cultural distance) and informal control were entered. Then, in the second step, the direct effects of cognitive trust were included, and finally, in the third step, the first-order interaction term of cognitive trust and informal control, after the elimination of the main effects, was introduced. The results clearly point to the fact that the interaction term greatly improved the explanatory power of the model (ΔR^2=.27, ΔF=11.87, $p < .001$). Based on these results, it is concluded that cognitive trust has a strong moderating effect on the informal control-IJV performance relationship.

However, hypotheses H3a and H3b went somewhat further than simply predicting a moderating relationship. In fact, these hypotheses anticipated that depending on the level of cognitive trust (high, low), a change in the sign of the interaction term would occur. Accordingly and consistent with the procedures discussed by Southwood (1978) and Schoonhoven (1981), partial derivatives were calculated to test for the relationship's monotonicity or lack thereof.

Thus, using data from the third step of the hierarchical multiple regression (see Table 5.5), the partial derivative (2a) of equation (2) over X_1 (informal control) was calculated as follows:

Table 5.5

Results of the Interactive Effects of Informal Control and Cognitive Trust on IJV Performance

Equation	Step	R^2	ΔR^2	F	Variables	Constant	Unstandardized Regression Coefficients (standard errors)
2 [a]	3	.40	.27	16.17***	IJV age	13.116	-.004
							(.055)
					Partner Cultural Distance		-1.177
							(.622)
					Informal control		.079
							(.049)
					Cognitive trust		.229***
							(.064)
					Informal Control X Cognitive trust		.071***
							(.009)

N=140; * p≤ .05; ** p≤ .01; *** p≤ .001.

$$Y = a_1 + b_1X_1 + b_2X_3 + b_3X_5 + b_4X_6 + b_5X_1X_3 + e \quad (2)$$

$$\partial Y / \partial X_1 = .079 + .071\ X_3 \quad (2a)$$

where: Y= IJV performance; X_1= Informal Control; X_3= Cognitive Trust; X_5= IJV Age; X_6= Cultural Distance; e= error

As it can be calculated from equation (2a), the inflection point for this relationship is -1.113, which falls into the range of possible values for cognitive trust values (from -12.69 to 6.31, since the cognitive trust values were centered). Consequently, $\partial Y / \partial X_1$ becomes negative when $-12.69 \leq$ Cognitive trust < -1.113 and positive for $-1.113 <$ Cognitive trust ≤ 6.31. Therefore, the impact of informal control on IJV performance is *nonmonotonic* with the inflection point of the slope falling on Cognitive trust = -1.113. Thus, it is concluded that for higher levels of cognitive trust (> -1.113), increasing informal controls leads to an increase in IJV performance, whereas, when cognitive trust is low (< -1.113), the relationship between informal control and IJV performance becomes negative. This provides strong support for the moderating effects predicted by H3a and H3b.

To further verify these results, additional analysis was conducted. Following the literature's suggestions (e.g. Aiken & West, 1991), the relationship between informal control and IJV performance was plotted for different levels of cognitive trust. Using values one standard deviation above

and below the variable means, a plot was created. The plot presented in Figure 5.1 provides additional support for hypotheses H3a and H3b.

Hypothesis 4

Hypotheses 4a and 4b predicted that for high levels of affective trust, the relationship between informal control and IJV performance would be positive, whereas for low levels of affective trust, this relationship would be negative. As with hypothesis 3, a three step moderated hierarchical multiple regression was used to test this contingency relationship.

Equation 3 in Table 5.6 presents the results of the three-step hierarchical regression. The first step regressed IJV performance on IJV age and cultural distance (control variables) and informal control (independent variable). The second step regressed IJV performance on affective trust, while the third step regressed IJV performance on the first-order interaction term of informal control and affective trust, after the elimination of the main effects. These results clearly indicate that the first order interaction term had a significant and substantial joint influence on IJV performance (ΔR^2=.21, ΔF=8.86, $p \leq .001$). Consequently, it is concluded that affective trust moderates the relationship between informal control and IJV performance ($p \leq .001$).

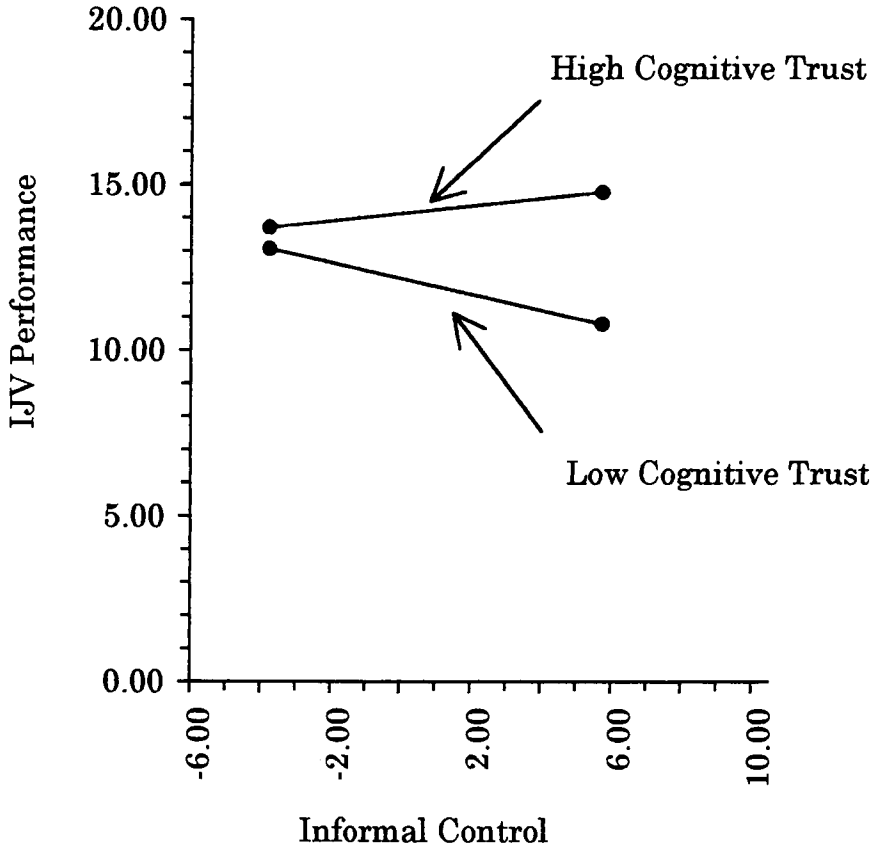


Figure 5.1

Interactive Effects of Informal Control and Cognitive Trust on IJV Performance.

Table 5.6

Results of the 3-Step Hierarchical Regression of Informal Control and Affective Trust on IJV Performance

Equation	Step	R^2	ΔR^2	F	Variables	Constant	Unstandardized Regression Coefficients (standard errors)
3 [a]	1	.11		5.18**	IJV age	13.452	.005
							(.066)
					Partner Cultural Distance		-2.283**
							(.709)
					Informal control		.150*
							(.056)
	2	.13	.02	4.03**	Affective trust	13.450	.059
							(.076)
	3	.34	.21	12.89***	Informal Control X Affective trust	13.111	.060***
							(.009)

N=140; * p≤ .05; ** p≤ .01; *** p≤ .001.

Once again, using equation (3), the partial derivative (3a) over X_1 (informal control) was calculated in order to test for the relationship's monotonicity. Thus:

$$Y = a_1 + b_1X_1 + b_2X_4 + b_3X_5 + b_4X_6 + b_5X_1X_4 + e \quad (3)$$

$$\partial Y / \partial X_1 = .091 + .06\ X_3 \quad (3a)$$

where: Y= IJV performance; X_1= Informal Control; X_4= Affective Trust; X_5= IJV Age; X_6=IJV Cultural Distance; e= error

Table 5.7 presents the detailed results of the third step of the hierarchical moderated regression used to test equation (3). Using the unstandardized regression coefficients and substituting them into formula (3a), an inflection point of -1.517 is derived. Specifically, equation (3a), is negative for $-13.49 \leq$ Affective trust < -1.517 and positive for $-1.517 <$ Affective trust ≤ 6.51 (affective trust ranges form -13.49 to 6.51). These results indicate that this relationship is *nonmonotonic*. Therefore, for higher levels of affective trust (> -1.517), the relationship between informal control and IJV performance is positive, while for lower levels of affective trust (< -1.517), this relationship becomes negative. Therefore, it is concluded that the relationship between informal control and IJV performance is negative for low values of affective trust and positive for higher values.

Table 5.7

Results of the Interactive Effects of Informal Control and Affective Trust on IJV Performance

Equation	Step	R^2	ΔR^2	F	Variables	Constant	Unstandardized Regression Coefficients (standard errors)
3 [a]	3	.34	.21	12.89***	IJV age	13.111	-.004
							(.057)
					Partner Cultural Distance		-1.539*
							(.663)
					Informal control		.091
							(.051)
					Affective trust		.125
							(.066)
					Informal Control X Affective trust		.060***
							(.009)

N=140; * p≤ .05; ** p≤ .01; *** p≤ .001.

To further verify these results, an additional analysis was conducted. Following the literature's suggestions (e.g. Aiken & West, 1991), the relationship between informal control and IJV performance was plotted for different levels of affective trust. Using values one standard deviation above and below the variable means, the plot presented in Figure 5.2 was created. An examination of this plot reveals that for high levels of affective trust, increasing informal control has a positive influence on IJV performance. On the other hand, when IJVs exhibit low levels of affective trust, increasing informal control tends to lower IJV performance. These results clearly support Hypotheses H4a and H4b.

Hypothesis 5

This hypothesis anticipated a three-way interaction. That is, a unique joint effect due to the combination of cognitive and affective trust interacting with informal control in affecting IJV performance. This effect was tested through a four step moderated hierarchical regression (equation 4). In the first step, informal control and the study's two control variables (IJV age and cultural distance) were entered. Then, cognitive and affective trust were entered in the second step, and the first order interactions of the two trust dimensions and informal control were introduced in the third step. Finally,

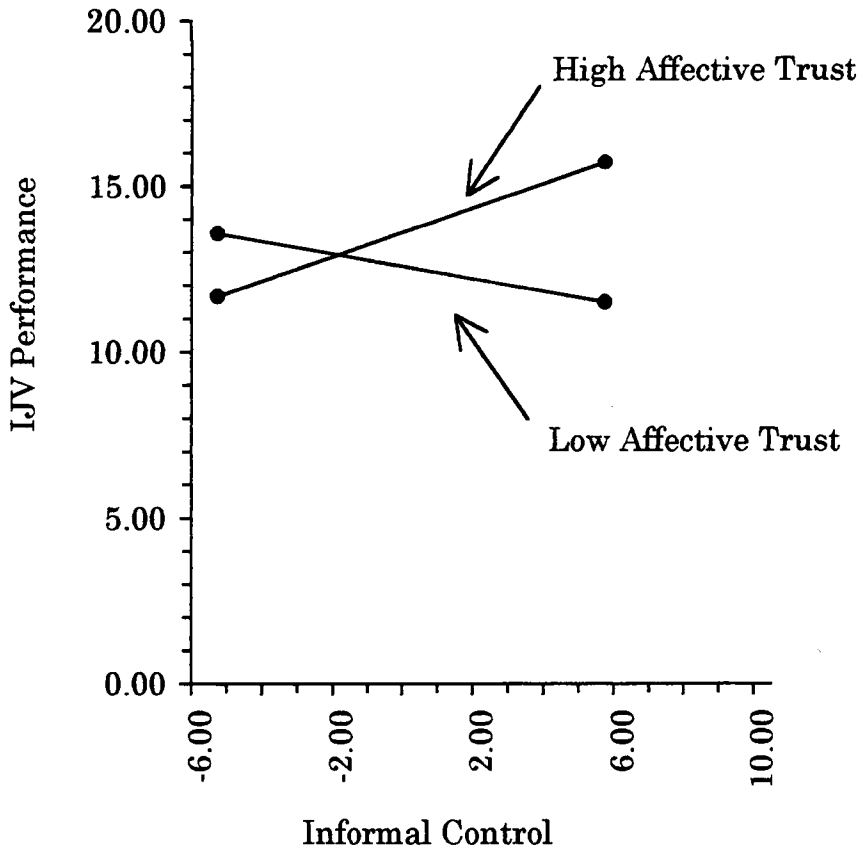


Figure 5.2

Interactive Effects of Informal Control and Affective Trust on IJV Performance

in the fourth step the multiplicative interaction term was entered into the model.

As it can be seen in Table 5.8, when the three-way interaction was introduced, the model improved significantly increasing the R^2 an additional 5%. Indeed, in this final, saturated model, the R^2 attains a high level of .46, indicating that nearly half of the variance in the perceived evaluation of IJV performance is explained. Clearly these trust variables are important in the manner in which they interact with the informal control mechanisms to impact IJV performance.

To test for monotonicity in the multiplicative model, the partial derivative of equation (4) was calculated over X_1 (informal control). In this case, however, it was also necessary to fix one of the trust dimensions. Even though mathematically, it does not make any difference which trust dimension is fixed, it is better if our choice is theoretically driven. As previously argued, both cognitive and affective dimensions of trust are necessary for the long term survival and success of IJVs. Nevertheless, it seems that cognitive trust tends to proceed the development of affective trust since the latter is developed only after frequent interpartner interactions. Furthermore, the presence of cognitive trust is particularly important in the context of IJVs because it prevents the development of "naive" trust where one partner continues to award trust despite the other partner's

Table 5.8

Results of the 4-Step Hierarchical Regression of Informal Control, Cognitive Trust and Affective Trust on IJV Performance

Equation	Step	R^2	ΔR^2	F	Variables	Constant	Unstandardized Regression Coefficients (standard errors)
4 [a]	1	.11		5.18**	IJV Age	13.452	.005
							(.066)
					Partner Cultural Distance		-2.283**
							(.709)
					Informal Control		.150*
							(.056)
	2	.13	.02	3.42**	Cognitive Trust	13.456	.094
							(.095)
					Affective trust		-1.888
							(.098)
	3	.41	.28	12.42***	Informal Control X Cognitive Trust	13.068	.048**
							(.015)
					Informal Control X Affective Trust		.028*
							(.009)
	4	.46	.05	12.83***	Informal Control X Cognitive Trust X Affective Trust	13.118	.046***
							(.002)

N=140; * $p \leq .05$; ** $p \leq .01$; *** $p \leq .001$.

transgressions. Based on this rationale, we fixed X_3 (Cognitive trust) and then examined the interaction between X_1 (Informal control) and X_4 (Affective trust). Using the unstandardized regression coefficients of Table 5.9 and when cognitive trust was fixed, the partial derivative (4a) of equation (4) with respect to X_1 was calculated as follows:

$$\partial Y / \partial X_1 = .-.046 + .062 X_2 + .035 X_3 + .005 X_2X_3 \quad (4a)$$

where: Y= IJV performance; X_1= Informal Control; X_4= Affective Trust; X_5= IJV Age; X_6=IJV Cultural Distance; e= error

In order to analyze this relationship, we selected the value of X_2 one standard deviation below the mean and entered it in equation (4a). We conducted the same for the extreme lowest value of X_2 = -12.73. It became evident that this equation becomes positive when Affective trust > -28.79 and negative for all lower values of affective trust. However, the values of affective trust range only between -13.64 and 6.36. This indicates that the equation is *always negative*, meaning that when cognitive trust is low and regardless of the level of affective trust, the relationship between informal control and IJV performance is negative. To gain additional insight on the presence of monotonicity, we examined equation (4a) for the highest value of cognitive trust (X_2 = 6.27). We find that equation (4a) is negative when

Table 5.9

Results of the Interactive Effects of Informal Control, Cognitive Trust and Affective Trust on IJV Performance

Equation	Step	R^2	ΔR^2	F	Variables	Constant	Unstandardized Regression Coefficients (standard errors)
4 [a]	4	.46	.05	12.83***	IJV Age	13.118	-.012
							(.053)
					Partner Cultural		-1.144
					Distance		(.618)
					Informal Control		.032
							(.058)
					Cognitive Trust		.163
							(.078)
					Affective Trust		.013
							(.080)
					Informal Control X		.056***
					Cognitive Trust		(.015)
					Informal Control X		.037**
					Affective Trust		(.009)
					Informal Control X		.046***
					Cognitive X Affective		(.002)

N=140; * p≤ .05; ** p≤ .01; *** p≤ .001.

$-13.64 \leq$ Affective trust < -5.19 and positive for $-5.19 <$ Affective trust ≤ 6.36 (affective trust ranges form -13.64 to 6.36). Once again, this relationship is *nonmonotonic*. Thus, we conclude that for high levels of cognitive trust and high levels of affective trust (> -5.19), increasing informal control leads to an increase in IJV performance. However, when cognitive trust is high and affective trust is low (< -5.19), then, the relationship between informal control and IJV performance is negative, meaning that increased reliance on informal control in this case is not efficient.

Hypotheses 6

Hypotheses 6a and 6b predicted that formal control would not have a significant impact on IJV performance in the presence of either cognitive or affective trust. The results of the two hierarchical moderated regressions for equations (5) and (6) are reported in Tables 5.10 and 5.11. Equation (5), in Table 5.10 indicates that the first order interaction term between formal control and cognitive trust was not significant. Neither was the interaction term between formal control and affective trust significant either (see Table 5.11). These findings clearly indicate that trust does not moderate the relationship between formal control and IJV performance.

Table 5.10

Results of the 3-Step Hierarchical Regression of Formal Control and Cognitive Trust on IJV Performance

Equation	Step	R^2	ΔR^2	F	Variables	Constant	Unstandardized Regression Coefficients (standard errors)
5 [a]	1	.08		4.01**	IJV Age	14.370	.081 (.071)
					Partner Cultural Distance		-2.129** (.668)
					Formal Control		-.052 (.105)
	2	.11	.03	4.12**	Cognitive Trust	13.450	.140* (.069)
	3	.11	.00	3.44**	Formal Control X Cognitive Trust	13.111	.019 (.022)

N=140; * $p \leq .05$; ** $p \leq .01$; *** $p \leq .001$.

Table 5.11

Results of the 3-Step Hierarchical Regression of Formal Control and Affective Trust on IJV Performance

Equation	Step	R^2	ΔR^2	F	Variables	Constant	Unstandardized Regression Coefficients (standard errors)
6 [a]	1	.08		4.01**	IJV Age	14.369	.081
							(.071)
					Partner Cultural Distance		-2.129**
							(.668)
					Formal Control		.052
							(.105)
	2	.10	.02	3.72**	Affective Trust	13.450	.114
							(.069)
	3	.11	.01	3.14*	Formal Control X Affective Trust	13.111	.023
							(.025)

N=140; * $p \leq .05$; ** $p \leq .01$; *** $p \leq .001$.

CHAPTER 6

DISCUSSION

The purpose of this study was to better understand the control - performance relationship in the context of IJVs and try to disentangle contradictory findings in this stream of research. Using a theoretically driven research framework rooted in the transaction cost theory, this research introduced the concept of interpartner trust as a moderating variable in the relationship between IJV informal control and performance. This chapter discusses the study's major empirical findings, research limitations, theoretical implications, directions for future research, and finally, the relevant managerial implications of this study.

Summary of the Study's Empirical Findings

The Direct Control-Performance Links

Initially, it was expected that informal control would be positively related to IJV performance (hypothesis 1). Even though this relationship was in the anticipated direction, it was not significant at the .05 level and the hypothesis was rejected. Furthermore, formal control was not found to be negatively related to IJV performance.

The study's findings indicate that formal controls do not have any significant direct effects on IJV performance. These results are aligned with TC reasoning suggesting that formal controls are costly substitutes for informal controls (Badaracco, 1991; Ring & Van de Ven, 1994) since the former tend to evoke interorganizational conflict (Van de Ven & Walker, 1984,) and signal a lack of interpartner trust (Andaleeb, 1989). In this respect, this study supports the notion that the efficient governance of IJVs requires a substantial overlay of clan governance which is best served through *informal* (rather than formal) control mechanisms.

In this vein, this study provided strong empirical evidence that the correct match of control mechanisms to the IJV transaction does *not* necessarily translate into superior performance. No significant direct effects between either formal or informal control mechanisms and IJV performance were found. This finding along with the array of inconsistent and often contradictory results of previous studies seem to indicate that additional research attempts, trying to support a direct link between these constructs, may be confusing, unproductive, and even misleading. After all, control mechanisms do not appear to have a universalistic direct effect on IJV performance.

Trust Moderates the IJV Informal Control-Performance Link

Undoubtedly, the study's most important empirical finding is that trust acts as a rather powerful moderator in the relationship between informal control and IJV performance. What is even more interesting is that the moderating effects of trust do not merely intensify or weaken the relationship between informal control and performance. If that were the case, then, regardless of the level of trust, the nature of the underlying informal control-performance relationship would stay the same (the relationship would simply get stronger or weaker, but its sign would remain unchanged). Neither did the moderating role of trust simply turn on or off the impact of informal control on performance by making the link between these constructs significant at one level of the moderator and non-significant at another. If this were the case, informal control would become dysfunctional (or functional) at one level of trust but have no effect on another level and one could argue that informal control should never (or should always) be used regardless of the level of trust. This discussion indicates that, even though any one of the above circumstances provides empirical support for the moderating role of trust, such moderating relationships are not very interesting.

Contrary to the above situations, the study's findings provided support for the existence of cross-over interactions between trust and informal

control. The literature indicates that these type of interactions are the strongest, most interesting, and managerially significant contingency effects (Podsakoff, MacKenzie, Ahearne, & Bommer, 1995). In the context of this study, this implies that the effects of informal control on IJV performance are reversed or negated for different levels of trust.

More specifically, this study found that informal control was positively related to IJV performance for IJVs characterized by high levels of either cognitive or affective trust. On the other hand, the relationship between informal control and IJV performance was negative for low levels of either cognitive or affective trust. Thus, depending on the level of cognitive and affective trust, informal control can sometimes be helpful or harmful to IJV performance. Given these findings, a priori expectations about trust's cross-over interactions with informal controls were strongly supported.

Finally, this research found that IJVs that exhibited simultaneously both high levels of cognitive and affective trust, the positive and significant effect of informal control on IJV performance was even stronger. Thus, this study provided empirical support for a unique joint effect due to the combination of cognitive and affective trust interacting with informal control in affecting IJV performance.

In this vein, the incorporation of trust in the IJV informal control-performance relationship can help to sort out much of the confusion that has

existed in the control-performance relationship literature. In fact, it is not surprising that previous studies produced inconsistent and contradictory findings about this important link. It is clear that this study's findings indicate that without accounting for the effects of interpartner trust, the control-performance relationship is likely to be unproductive.

Formal Control and IJV Performance

The study's results supported a priori expectations that neither cognitive (hypothesis 6a) nor affective (hypothesis 6b) trust moderate the relationship between formal control and IJV performance. These findings are consistent with previous research. Ouchi (1979), for example, asserted that cooperative enterprises require either trust or close bureaucratic monitoring to operate, while McAllister (1995) empirically supported the fact that trust mitigates the need for formal controls.

Consequently, trust does not combine with formal controls in any way to provide a joint effect, either for better or worse, on the financial performance of IJVs. Presumably, this is because formal controls do not rely on trust to operate. However, this finding may not necessarily imply that formal controls have no place in the context of IJVs. After all, the study's descriptive statistics presented in Chapter 5 indicated that the mean use of formal controls across the responding IJVs was higher than average (mean =

15.53). The obvious question that arises from the above discussion pertains to the function of formal controls in the context of IJVs.

As indicated in Chapter 3, some formal controls are necessary in IJVs, especially early in their formation. When IJV parents have little prior experience with each other, they cannot efficiently cope with the uncertainties attendant in a venture and tend to resort to formal controls. Eventually, however, formal controls fall short of efficiently protecting asset specific investments because it is increasingly difficult to amass sufficient formal controls to allay all fears of opportunistic behavior. Thus, at some fairly early point in the venture's life, the transaction costs of formal controls start exceeding their diminishing returns.

On an afterthought, the above reasoning seems to point toward the moderating role of IJV age in the relationship between formal control and IJV performance. Consequently, a post-hoc analysis of this interaction was conducted. Following the procedures described in Chapters 4 and 5, the interaction between formal control and IJV age was computed and a 3-step hierarchical moderated multiple regression was conducted.

Results of this post hoc test are reported in Table 6.1. As it can be seen in the third step of the model, the interaction between IJV age and formal control was significant ($p \leq ,001$) and the introduction of the

Table 6.1

Results of the 3-Step Hierarchical Regression of Formal Control and IJV Age on IJV Performance

Model	Step	R^2	ΔR^2	F	Variables	Constant	Unstandardized Regression Coefficients (standard errors)
1 [a]	1	.00		.09	Formal Control	13.314	-.032 (.107)
	2	.01	.01	.07	IJV Age	13.319	.162 (.074)
	3	.10	.09	5.20**	Formal Control X IJV Age	13.069	-.085*** (.022)

N=140; * p≤ .05; ** p≤ .01; *** p≤ .001.

interaction term resulted in a significant increase in the model's explanatory power (ΔR^2=.09, DF =5.13, $p \leq ,01$).

To further explore this interaction, the partial derivative of this model was computed following the detailed procedures presented in Chapter 5. This analysis indicated that for older IJVs (older than 7.229 years), formal control was negatively related to IJV performance, while for young ventures (younger than 7.229 years), the relationship between IJV formal control and performance was positive. Moreover, this interaction was plotted in Figure 6.1. Examination of this plot confirmed the previous results regarding the interaction of IJV age and formal control.

Clearly, while the study's findings show the relatively limited potential of formal controls in the presence of cognitive and affective types of trust, the previous post hoc analysis corroborates the assertion that formal controls have efficiency implications only for young IJVs. On the other hand, increased reliance on formal controls in relatively older IJVs seems to sacrifice IJV performance and ultimately, the venture's transaction efficiency. Future research should try to better understand the efficiency implications of formal controls in the context of IJVs and possibly other relational exchanges.

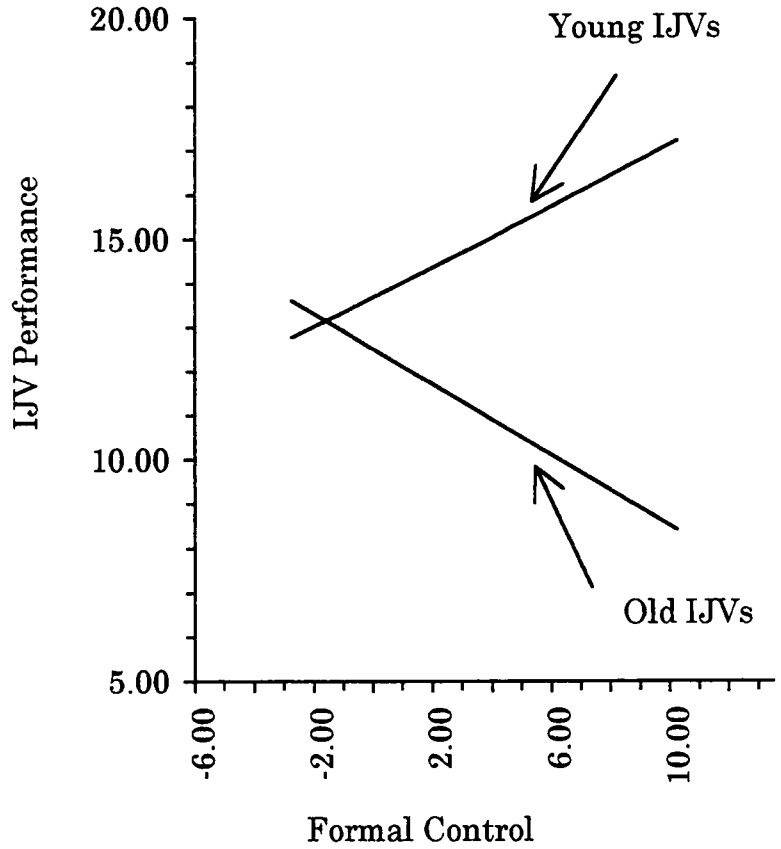


Figure 6.1

Interactive Effects of Formal Control and IJV Age on IJV Performance.

Research Limitations

Several limitations of this study warrant additional comment. First, concerns with monomethod bias should loom high in a study that collects all of its data using surveys. While this is the case here, there several precautions that were taken in this study which should serve to assuage the bulk of these concerns. It is worth mentioning, though, that direct effects are most prone to method bias, whereas interactions, the type of relationships hypothesized here, are much less vulnerable to being spuriously linked by method alone (and especially triple interactions).

Beyond this, though, considerable efforts were expended to validate the measures of interpartner trust and IJV performance. As a check on whether the general managers had an unbiased view of these two measures, a subsample of them were asked to identify individuals in each parent company who would be able to evaluate the IJV from the unique perspective of each parent. This resulted in 30 responses for the U.S. parent and 21 from the foreign parent which correlated with the general managers' evaluations of IJV performance at .84 and .77; affective trust at .79 and .83 ; and cognitive trust at .74 and 78, respectively. Such high levels of agreement should serve to mitigate concerns about the validity of these particular measures.

Also, the measures used in this research can raise some concerns with the study's statistical conclusion validity. Since the survey instrument did not include multiple measures for the variables under study, the statistical reliability of the data obtained therefrom might be suspect. Nevertheless, this potential limitation is somewhat mitigated by the use of multiple respondents. Furthermore, the reliability and validity of the trust scales were already established in previous research. In addition, whenever appropriate, several statistical tests were run (e.g., 5 types of factor analyses) to ensure the stability of the results obtained.

Another concern has to do with the sample's representativeness, (Mangione, 1995). A response rate of 35% raises the specter of selection bias in that the types of IJVs which chose to participate in the study may have not been typical. While this is a definite concern, given the nature of the study, there was no alternative to this particular methodology and every measure possible was taken to increase the study's response rate.

Certainly, a 35% response rate compares very favorably to similar surveys mailed to CEOs (e.g., Hambrick, Gelekanycz, & Fredrickson, 1993). Moreover, the results obtained from the comparative analysis between respondents and nonrespondents reported in Tables 4.2, 4.3, and 4.4 should alleviate some of these concerns. Furthermore, it is possible that the study's *actual* response rate is even higher than the reported 35%. From all the

surveys sent out, 108 surveys (approximately 18% of the initial sample) were returned indicating that those IJVs were no longer in operation. Taking this into account, it would not be surprising to find that a sizable percentage of the companies that were classified as non-respondents failed to send a notice indicating that they were no longer IJVs.

Moreover, the issue of representativeness is raised by the research sampling frame. This study looked at only IJVs based in the U.S. involving a U.S. parent. Thus, generalizing to other types of IJVs should be done with some caution. Certainly, since cultural elements may intrude on the issues of control and autonomy, these relationships may not be extended to IJVs between two Asian partners, for example. On the other hand, uncertainties associated with the political and legal context of IJVs operating strictly outside of North America and Europe are likely to be even higher. As a result, it is hard to imagine that clan governance would not be an efficient governance mode even in those cases. Assuming this to be true, then it is likely that some of the overall conclusions drawn from this study could be applied in those situations as well.

Theoretical Implications and Directions for Future Research

There are several theoretical implications as a result of this research. First, this study indicated that the relationship between IJV control and

performance is much more complicated than previously conceived in extant literature. While the direct relationships between formal and informal control mechanisms and IJV performance were not significant, the addition of interactions between informal control and trust added greatly to the model's predictive power. Similarly, post hoc tests indicated that the interaction of IJV age and formal control was negatively related to IJV performance. Undoubtedly, more research is needed in this area to identify possible other contingencies that influence the relationship between IJV control and performance.

Second, this study provided empirical support that the construct of trust is central to the understanding of relational exchanges such as IJVs. An important implication of this finding is that relational exchanges such as IJVs require the examination of contextual variables such as trust. Consequently, more efforts need to be made to account for other relationship-specific assets engendered in the social context of relational exchanges such as the notion of mutual forbearance (Lynch, 1993; Parkhe, 1993b; Zaheer & Venkatraman, 1995). Furthermore, it is critical that we begin to understand the dynamics of these contextual variables. Obviously, the development of interpartner trust and mutual forbearance are dynamic processes that require extended interaction between the IJV partners. Thus, a longitudinal

research design would be better suited to capture these concepts' richness and complexity.

A third, and rather interesting, implication of this research is that trust appears to be the key element in creating the synthesis of autonomy and control. As stated in the beginning of this study, the heart of the problem in managing IJVs is developing a synthesis between these concepts. On one hand, trust provides the social glue that ties exchange partners together and becomes "the principal mode of social control" (Ring & Van de Ven, 1992, p. 491). On the other hand, by capitalizing on reservoirs of trust, an exchange relation becomes more resilient, flexible, adaptable, and thus, more sustainable. Consequently, trust fosters autonomy in the context of IJVs by allowing room for flexibility and adjustment, especially when exchange partners are confronted with increased levels of environmental uncertainty (Madhok, 1995). This is an area where qualitative research can greatly enhance our understanding of the process of finding the right balance.

A fourth implication related to the above discussion concerns the idea of "clans". As Wilkens and Ouchi (1983) indicated clan governance relies on social norms and understandings to provide the underlying mind-frame that guides exchanges. What is unique about this shared social knowledge in the context of IJVs is that it requires high levels of trust to promote collective IJV

goal formation and flexible adjustments to environmental uncertainties. In this respect, it is possible that clan governance is an important step in finding the balance between autonomy and control. Since little research has been conducted about clan governance and clan-type of controls, more research in this area would be beneficial.

A fifth implication pertains to the multidimensionality of trust in the context of IJVs. This study provides additional empirical support for a multidimensional view of trust, although this was not as pronounced as expected, a priori. The relatively simple structure evident in the factor analysis and the substantive distinctions when viewed through the TC framework provides some support for two trust dimensions. At the same time, though, these two measures were highly correlated (.67) and, overall, the pattern of their relationships with the control measures was roughly similar. In this study, of the two forms of trust, the cognitive dimension played a more important role in governing IJVs as it shared much more common variance with the trust items than did the affective dimension. Possibly, the dominance of cognitive trust in IJVs is of little surprise, since these exchanges are further complicated by cultural differences. Would this pattern, though, be different for domestic or multiparty foreign based IJVs? Obviously, more research in this area would be fruitful.

Moreover, it seems that some methodological refinement of the trust instrument may better discriminate between cognitive and affective types of trust. It is possible that in another context (e.g., trust in health care or NGO), the trust instruments may have performed somewhat better. But even in the context of other relational exchanges such as franchises, the examination of trust dimensions would be a potent area of future investigation.

A seventh implication deals with the issue of cultural similarity/dissimilarity between the IJV parents. This study found that the more culturally distant the IJV parents are (e.g. U.S.-Japanese IJVs), the lower the IJV performance. Nevertheless, more research is needed to further understand how culture affects the creation of trust and the use of control mechanisms. For example, Bartlett and Ghoshal (1989) have suggested that different nationalities tend to prefer different modes of control for their international subsidiaries. Does the same, though, hold true in the case of MNCs' IJVs?

For example, it is well known that Japanese companies use control through centralization, American organizations like formalization, while European firms tend to prefer control through socialization. It is also widely accepted that Japanese businessmen prefer to conduct business after a period of socialization and often make a deal on a handshake at the end of a

good evening, while other nationalities/cultures, are more prone to "structure the deal" in contractual terms and rely on legions of lawyers to write the fine print. So, what exactly happens in the context of a U.S.-Japanese IJV? Which control practice is likely to bear fruit and lead to better IJV performance when cultural similarities/dissimilarities are taken into account? Undoubtedly, there is still much to be learned about the IJV control-performance relationship. Clearly, research addressing the above questions would be fruitful.

Finally, the most important implication of this research is that the study's findings gave additional credence to the TC framework. In fact, recent criticisms (e.g., Ghoshal & Moran, 1996; Moran & Ghoshal, 1996), suggesting that the TC theory provides an unrealistic picture of human nature due to its stringent assumption regarding opportunism, do not find support in this study. Contrary to the above authors' assertions that this framework cannot be modified to become directive in the context of relational exchanges, this study clearly suggests that it is possible to blend the social and economic perspectives under the TC umbrella to greatly compliment one another and enhance the theory's predictive power in the context of IJVs (Chiles & McMackin, 1996; Zaheer & Venkatraman, 1995).

In fact, it seems that the TC theory is ripe for further empirical testing. Future research should further examine how trust acts as an

overriding control system to maintain interpartner goal congruence and exchange fairness in the IJV context. More research is needed to better understand whether trust acts as an efficiency driver in relational exchanges, the same way that price and authority drive efficiency in markets and hierarchies respectively.

Practical Implications

Practically speaking, this study has several implications for the management of IJVs. First, it is important that exchange partners recognize that the very knowledge that IJVs are risky organizational forms makes the building of trust a much more difficult task to accomplish. The irony is that the specter of failure often places IJV parents in a vicious cycle of self defeat. All too often, IJVs' notorious reputation for unsatisfactory performance and heightened risk fuels the desire to "get everything down in writing" which often leads to the development of inflexible and formal control mechanisms. Of course, extensive formal controls send the wrong signals of suspicion and hinder interpartner understanding and trust. Altogether, it is not unlikely that these factors may account for a large share of the poor reputation enjoyed by IJVs.

Second, the study's findings suggest that it would behoove the parties contemplating an IJV to place more emphasis on developing a good working

relationship *prior* to structuring an IJV deal. The development of interpartner trust is critical to the day-to-day working relationship between the venture parents. Moreover, IJV partners need to realize that even though cognitive trust appears to play a more important role in governing an IJV (as it shared much more common variance with the items than did the affective dimension), both types of trust are necessary for the long term viability and success of an IJV. Nevertheless, the dominance of cognitive trust in the IJV context should be of little surprise, especially since these exchanges are further complicated by cultural differences.

Third, in structuring an IJV, the parties must be concerned with properly reading their partners' subtle signals, instead of trying to establish intricate formal controls and detailed contract specifications in the hope that these bureaucratic elements will protect their interests in the future. Not only do formal controls fail to efficiently cope with venture uncertainties, but they also fall short of protecting asset specific investments or alleviate fears of opportunism. While it does not appear that formal controls have a direct impact IJV performance or combine with trust either for better or worse, this study indicates that with the passage of time, formal controls have diminishing returns and become detrimental to the venture's performance.

Finally, once an adequate foundation of interpartner trust is established, then, this study suggests that considerable efforts must be

placed on incorporating and maintaining effective informal control mechanisms. While the options for informal control are probably more extensive than those used to construct the study's scale, several mechanisms appear important for this purpose: first, the rotation of parent-venture personnel provides for mutual respect and understanding of the other parent's needs; second, the use of task forces and ad-hoc committees comprised of various stakeholder representatives would be contributory by providing a forum for collaborative, open sharing of problems; third, training programs and frequent informal socialization of the parties provide a framework through which to appreciate the others' actions; and finally, face-to-face communication and participatory decision making provide input and ownership of decisions. Not only do these mechanisms build trust, but they seem to maintain it as well.

IJV manages need to realize that informal controls in the absence of trust probably fail to do their job; if not create windows of opportunity for abuse. On the other hand, informal controls in the presence of both forms of trust appear to have a strong positive impact on IJV performance. In this respect, IJV partners should take measures to assure each others' integrity (affective trust) as well as competency (cognitive trust).

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APPENDICES

APPENDIX A

SURVEY LETTERS AND QUESTIONNAIRE

DATE

«Joint_Venture»
«Street»
«City_State_Zip»

Dear «Name1»

We are seeking your participation in a research project which will help us understand why some joint ventures succeed while many more fall short of their parents' expectations. As a participant in this study you may request a summary of our findings which we anticipate you will find both interesting and informative with respect to your own situation.

In case you may be wondering, we have obtained your name and address from a directory which indicated that you occupy a key position from which you can provide important insights into the management of joint ventures. Recognizing that you may have changed your position, we would appreciate it if you would pass the survey along to the current executive in that position or another manager who is knowledgeable about the joint venture operations.

Based on pre-testing, completing the survey should take about 12-15 minutes of your time and we think that you will find it interesting by itself. When you are finished, please return it in the enclosed postage-paid envelope. As you probably know, a poor response will undermine confidence in any conclusions drawn from this research. Thus, your participation is important and we would like to thank you in advance for your understanding and cooperation.

Finally, we assure you that the information provided will remain confidential. Under no conditions, will any individual or company be identified.

We would be happy to answer any questions you might have in the meantime. We can be reached in any of the following ways: Phone: 423-974-3161; Fax: 423-974-3163; or by E-mail at vryza@utkux.utcc.utk.edu or jfryxell@solar.rtd.utk.edu.

Thank you very much for your time and consideration. Your participation in this study is greatly appreciated.

Sincerely,

Maria Vryza
Project Manager

Gerald E. Fryxell, Ph.D.
Associate Professor

DATE

«Joint_Venture»
«Street»
«City_State_Zip»

Dear «Name2»:

About three weeks ago we wrote to you seeking your participation in a research project which will help us understand why some joint ventures succeed while many more fall short of their parents' expectations. As of today we have not yet received your completed questionnaire.

We are writing to you again because your response is significant to this study. As you probably know, a poor response will undermine confidence in any conclusions drawn from this research. Thus, your participation is important and we would like to thank you in advance for your understanding and cooperation. In the event that your questionnaire has been misplaced, a replacement is enclosed.

As a participant in this study you may request a summary of our findings which we anticipate you will find both interesting and informative with respect to your own situation. In case you may be wondering, we have obtained your name and address from a directory which indicated that you occupy a key position from which you can provide important insights into the management of joint ventures. Recognizing that you may have changed your position, we would appreciate it if you would pass the survey along to the current executive in that position or another manager who is knowledgeable about the joint venture operations.

Based on pre-testing, completing the survey should take about 12-15 minutes of your time. When you are finished, please return it in the enclosed postage-paid envelope. We assure you that the information provided will remain confidential. Under no conditions, will any individual or company be identified.

We would be happy to answer any questions you might have in the meantime. We can be reached in any of the following ways: Phone: 423-974-3161; Fax: 423-974-3163; or by E-mail at vryza@utkux.utcc.utk.edu or jfryxell@solar.rtd.utk.edu.

Thank you very much for your time and consideration. Your participation in this study is greatly appreciated.

Sincerely,

Maria Vryza
Project Manager

Gerald E. Fryxell, Ph.D.
Associate Professor

DATE

«Joint_Venture»
«Street»
«City_State_Zip»

Dear «Name1»:

We are writing to you regarding the study about the critical determinants of joint venture performance. As of today, we have not yet received your completed questionnaire.

The large number of completed questionnaires has been very encouraging. But, whether we will be able to describe accurately why some joint ventures succeed while many more fall short of their parents' expectations depends upon you and the other executives who have not yet responded. Your opinion about the management of joint ventures is important to us and we would like to hear from you.

This is the largest national study about the critical determinants of joint venture performance. As a participant in this study, you can request and receive a summary of our findings. We anticipate that you will find our results both interesting and informative with respect to your own situation.

In case our other correspondence did not reach you, a replacement questionnaire is enclosed. May I urge you to complete and return it as quickly as possible.

We would be happy to answer any questions you might have in the meantime. We can be reached in any of the following ways: Phone: 423-974-3161; Fax: 423-974-3163; or by E-mail at vryza@utkux.utcc.utk.edu or jfryxell@solar.rtd.utk.edu.

Your contribution to the success of this study is greatly appreciated.

Most sincerely,

Maria Vryza
Project Manager

Gerald E. Fryxell, Ph.D.
Associate Professor

DETERMINANTS OF JOINT VENTURE SUCCESS

Maria Vryza, Research Project Director, University of Tennessee-Knoxville

What is the purpose of this study? Recent statistics paint a rather discouraging picture about the future of joint ventures -- seven out of ten joint ventures formed in the United States fail without meeting their goals and objectives. In order to better understand how joint ventures can be managed more effectively, this research investigates the critical determinants of joint venture performance.

What is a joint venture? A joint venture is a cooperative agreement between two or more partners that jointly control and own the joint venture's resources.

How will confidentiality be assured? The study's results will be reported at the aggregate level. Under no circumstances, will individuals be identified nor will company specific information be made available. Only I, as the project director, will have access to the surveys.

Can I choose not to participate? While your participation in this study is entirely voluntary, a low response rate will undermine our ability to draw reliable and valid conclusions from the study's findings. Completion and return of this survey indicates your voluntary participation in this project.

When should I return the survey? If at all possible, your response within two weeks will be greatly appreciated. A postage-paid return envelope has been included with the survey. Your timely response will eliminate the need to send out follow-up reminders and subsequent survey mailings.

If you would like a copy of the study's findings, please complete the following information.

☐ Please send me a copy of the executive summary.

Is your firm a joint venture? ☐ **Yes** ☐ **No**

If you answered "No", please stop here and return the survey. If you answered "Yes", please continue on to the next section.

SECTION 1: JOINT VENTURE CONTROL SYSTEM.

1. Here, we would like to know about your **general assessment** about how the venture is actually controlled by **BOTH** partners jointly. Using the scale provided below, please indicate the **cumulative extent** to which the **venture's partners** use the following **methods to monitor and control the venture's activities and performance**.

Method of Venture Monitoring & Control	Never Used		Occasionally Used		Very Often Used
Appointment of key venture personnel	1	2	3	4	5
Participation in venture's board meetings	1	2	3	4	5
Financial reports	1	2	3	4	5
Progress reports on venture plans	1	2	3	4	5
Exercising veto rights at board meetings	1	2	3	4	5
Control based on claims of equity share	1	2	3	4	5
Rotation of parent-venture personnel	1	2	3	4	5
Use of task forces and ad-hoc committees	1	2	3	4	5
Parent-venture informal socialization	1	2	3	4	5
Parent-venture face-to-face communication	1	2	3	4	5
Parent-venture participatory decision	1	2	3	4	5
Parent training of venture managers	1	2	3	4	5

SECTION 2: NATURE OF THE RELATIONSHIP BETWEEN THE VENTURE'S PARENTS

1. Please indicate the **strength** to which you **agree or disagree** with the following statements by circling the appropriate number.

The venture partners _____	**Strongly Disagree**		**Neither Agree or Disagree**		**Strongly Agree**
a. have a sharing relationship. They both freely share ideas, feelings, and hopes about the venture.	1	2	3	4	5
b. can freely talk to each other about difficulties they encounter with the venture and they both know that the other party will want to listen.	1	2	3	4	5
c. would feel a sense of loss if the venture were to be dissolved and could no longer do business together.	1	2	3	4	5
d. would respond constructively and caringly to their partner's concerns about the venture.	1	2	3	4	5
e. have made considerable emotional investments in their working relationship.	1	2	3	4	5
f. address venture issues with professionalism and dedication.	1	2	3	4	5
g. due to their track record, have no reason to doubt each other's competence to do their jobs.	1	2	3	4	5
h. can rely on each other not to make their jobs more difficult by careless work.	1	2	3	4	5
i. are trusted & respected even by companies that do not do business with them.	1	2	3	4	5
j. are considered to be trustworthy by companies that conduct business with them.	1	2	3	4	5
k. If they knew more about each other's activities, they would be concerned and try to monitor the other's performance more closely.	1	2	3	4	5
l. sometimes alter the facts slightly in order to get what they want.	1	2	3	4	5
m. have sometimes promised to each other to do things without actually doing them later.	1	2	3	4	5
n. have always provided each other with a truthful picture of their intentions and actions.	1	2	3	4	5
o. seem to believe that complete honesty does not pay when dealing with each other.	1	2	3	4	5
p. carry out their duties even if there is no checking up on their activities.	1	2	3	4	5
q. seem to think it is OK to do anything that will help them further their own interests.	1	2	3	4	5

2. With your permission, we would like to ask two other executives working in your company to complete a similar, but shorter survey. We are asking you to identify those executives that represent, to the best of your knowledge, the interests of each partner involved in the joint venture. Please provide us with the names of **two other executives working in your company** that you consider to **best represent the standpoint of the joint venture partners**.

Name of joint venture executive that is familiar with and/or represents the interests of:

PARTNER # 1 _____

PARTNER # 2 _____

SECTION 3: JOINT VENTURE PERFORMANCE

1. Please evaluate the elements listed below on the two scales provided. First, rate the **extent of importance** that the joint venture **partners** place on the following elements and then, rate the **extent to which the partners are satisfied** with the **venture's performance** along those elements.

	Importance of Objective					Satisfaction with Venture Performance				
	PARTNER #1					**PARTNER #1**				
Venture Activity	**Not Important**		**Important**		**Most Important**	**Not at All**		**Average**		**Very High**
Return on equity	1	2	3	4	5	1	2	3	4	5
Sales growth	1	2	3	4	5	1	2	3	4	5
Operating costs	1	2	3	4	5	1	2	3	4	5
Profitability	1	2	3	4	5	1	2	3	4	5
Production &	1	2	3	4	5	1	2	3	4	5
Marketing & Sales	1	2	3	4	5	1	2	3	4	5
Technology	1	2	3	4	5	1	2	3	4	5
Customer Service	1	2	3	4	5	1	2	3	4	5
	PARTNER #2					**PARTNER #2**				
Return on equity	1	2	3	4	5	1	2	3	4	5
Sales growth	1	2	3	4	5	1	2	3	4	5
Operating costs	1	2	3	4	5	1	2	3	4	5
Profitability	1	2	3	4	5	1	2	3	4	5
Production &	1	2	3	4	5	1	2	3	4	5
Marketing & Sales	1	2	3	4	5	1	2	3	4	5
Technology	1	2	3	4	5	1	2	3	4	5
Customer Service	1	2	3	4	5	1	2	3	4	5

SECTION 4: JOINT VENTURE CONTRACT SPECIFICITY.

1. Please indicate the **extent** to which the following activities are clearly **specified in the joint venture contract**.

	Extent Of Contract Specificity				
Activities	**Not at All**		**Moderate**		**Very High**
Each parent's responsibilities concerning the venture	1	2	3	4	5
Methods of solving disagreements	1	2	3	4	5
Rules for appointing venture personnel	1	2	3	4	5
Parents' goals	1	2	3	4	5
Venture's goals	1	2	3	4	5
Venture's board composition	1	2	3	4	5
Venture decisions that require board approval	1	2	3	4	5
Percent of votes needed to approve venture decisions	1	2	3	4	5
Protections for the parent with minority ownership	1	2	3	4	5
Party that has veto power	1	2	3	4	5
Supply of component parts	1	2	3	4	5
Marketing of venture products	1	2	3	4	5
Supply of technology	1	2	3	4	5
Parent-pay-off structure (management fees, dividends)	1	2	3	4	5

SECTION 5: PARTNER PRIORITIES AND CONTROL.

1. Please evaluate the **partners' priorities** and **extent** to which they **control** the following joint venture activities.

EXTENT OF CONTROL PARENT PRIORITIES

	PARTNER #1					PARTNER #1				
Joint Venture Activity	**Not at All**		**Average**		**Very High**	**Not Important**		**Important**		**Most Important**
Sourcing of raw materials	1	2	3	4	5	1	2	3	4	5
Manufacturing	1	2	3	4	5	1	2	3	4	5
Production scheduling	1	2	3	4	5	1	2	3	4	5
Quality control	1	2	3	4	5	1	2	3	4	5
Marketing & sales	1	2	3	4	5	1	2	3	4	5
Staffing	1	2	3	4	5	1	2	3	4	5
Capital expenditures	1	2	3	4	5	1	2	3	4	5
Financing	1	2	3	4	5	1	2	3	4	5
Prices and costs	1	2	3	4	5	1	2	3	4	5
Imports and exports	1	2	3	4	5	1	2	3	4	5
	PARTNER #2					**PARTNER #2**				
Sourcing of raw materials	1	2	3	4	5	1	2	3	4	5
Manufacturing	1	2	3	4	5	1	2	3	4	5
Production scheduling	1	2	3	4	5	1	2	3	4	5
Quality control	1	2	3	4	5	1	2	3	4	5
Marketing & sales	1	2	3	4	5	1	2	3	4	5
Staffing	1	2	3	4	5	1	2	3	4	5
Capital expenditures	1	2	3	4	5	1	2	3	4	5
Financing	1	2	3	4	5	1	2	3	4	5
Prices and costs	1	2	3	4	5	1	2	3	4	5
Imports and exports	1	2	3	4	5	1	2	3	4	5

SECTION 6: JOINT VENTURE INFORMATION.

1. Which one of the following **descriptions most closely fits your company compared to other firms in your industry**? Please consider your firm as a whole and note that none of the types are inherently good or bad.

___Type 1: This firm does not appear to have a consistent product-market orientation. The firm is not as aggressive in maintaining established products and markets as some of its competitors, nor is it willing to take as many risks as other competitors. Rather, the firm responds in those areas where it is focused to by external pressures.

___Type 2: This firm attempts to locate and maintain a secure niche in a relatively stable product or service area. This firm tends to offer a more limited range of products or services than its competitors, and tries to protect its domain by offering higher quality, superior service, lower prices, and so forth. Often this firm is not at the forefront of developments in its industry -- it tends to ignore industry changes that have no direct influence on the current areas of operation and concentrates instead on doing the best job possible in a limited area.

___Type 3: This firm typically operates within a broad product-market domain that undergoes periodic redefinition. The firm values being "first in" in new products and market areas even if not all of these efforts prove to be highly profitable. The firm responds rapidly to early signals concerning areas of opportunity, and these responses often lead to a new round of competitive actions. However, it may not maintain market strength in all of the areas it enters.

___Type 4: This firm attempts to maintain a stable, limited line of products or services, while at the same time moving out quickly to follow a carefully selected set of more promising new developments in its industry. The firm is seldom "first in" with new products or services. However, by carefully monitoring the actions of major competitors in areas comparable with its stable product-market base, the firm can frequently be "second in" with a more cost-efficient product or service.

THANK YOU FOR YOUR PARTICIPATION!

APPENDIX B

SECOND WAVE NOTIFICATION

DATE

Last week a questionnaire seeking your participation in a study about the critical determinants of joint venture performance was mailed to you. If you have already completed and returned the survey to us, please accept our sincere thanks. If not, please do so today. To obtain valid and reliable results, it is extremely important that your input is included in the study. If by some chance you did not receive the survey, please feel free to call me at 423-974-3161 and I will be happy to mail you another survey.

Sincerely,

University of Tennessee

Maria Vryza
Project Director

APPENDIX C

PARENT REPRESENTATIVES' LETTER

DATE

«Joint_Venture»
«Street»
«City_State_Zip»

Dear «Rep2»:

«Informn» is participating in a study we are conducting and has authorized us to ask for your help and cooperation. Therefore, we are seeking your participation in a research project which will help us understand why some joint ventures succeed while many more fall short of their parents' expectations.

«Informn» has already completed a similar questionnaire and has indicated that you are one of the key executive who is best familiar with the joint venture operations.

Completing the survey should take about 12-15 minutes of your time and we think that you will find it interesting by itself. When you are finished, please return it in the enclosed postage-paid envelope. As you probably know, a poor response will undermine confidence in any conclusions drawn from this research. Thus, your participation is important and we would like to thank you in advance for your understanding and cooperation.

Finally, we assure you that the information provided will remain confidential. Under no conditions, will any individual or company be identified.

We would be happy to answer any questions you might have in the meantime. We can be reached in any of the following ways: Phone: 423-974-3161; Fax: 423-974-3163; or by E-mail at jfryxell@solar.rtd.utk.edu or vryza@utkux.utcc.utk.edu.

Thank you very much for your time and consideration. Your participation in this study is greatly appreciated.

Sincerely,

Maria Vryza
Project Manager

Gerald E. Fryxell, Ph.D.
Associate Professor

VITA

Maria Vryza was born in Kavala, Greece. She received her high school diploma from Anatolia College, a private American institution in Thessaloniki, Greece. Following her high school graduation, she came to the U.S. for her undergraduate education and joined The College of Wooster. Upon receiving a Bachelor of Arts in consumer behavior, she gained a Master of Arts in retailing from the University of Akron. Then she entered the doctoral program in Business Administration at the University of Tennessee, Knoxville, where she was awarded the Doctor of Philosophy degree in Business Administration in May of 1997.