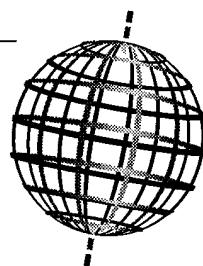


Does Control Matter? A Path Model of the Control-Performance Relationship in International Joint Ventures

LOUIS HÉBERT
Concordia University



ABSTRACT

This paper investigates the relationship linking the division of control and the performance of international joint ventures (IJVs). In addition to comparing shared- and dominant-control IJVs, it presents and tests a path model studying the impact of the division of control between parent firms on the performance of IJVs and parent firms' satisfaction. This model borrows elements from transaction-costs analysis and social-exchange theory. It takes into account the impact of control sharing on trust and conflict and the impact of these constructs on IJV performance and parent firms' satisfaction.

RÉSUMÉ

Cet article porte sur la relation entre partage du contrôle et performance des coentreprises internationales (CEI). En plus de comparer les CEI à contrôle partagé et dominant, l'auteur propose un modèle capable d'expliquer l'effet du partage du contrôle sur la performance des CEI et la satisfaction de leurs entreprises mères. Ce modèle, qui s'appuie sur les théories des coûts de transaction et des échanges sociaux, prend en compte l'effet du partage du contrôle sur la confiance et les conflits ainsi que les conséquences de ces paramètres sur la performance et la satisfaction des entreprises mères.

RESUMEN

Este artículo estudia la relación que existe entre la división del control y el rendimiento de empresas internacionales conjuntas. Además de comparar las empresas internacionales conjuntas donde existe una división del control y aquellas donde existe un control dominante, este artículo describe un modelo causal del impacto que tiene la división del control en el rendimiento y en la satisfacción de la sociedad matriz. El modelo propuesto se basa en la teoría de los costes de transacción y en la teoría de los intercambios sociales. Este artículo considera el impacto que tiene la división del control en la confianza y en los conflictos así como los efectos de este tipo de contratos en el rendimiento y en la satisfacción de la empresa matriz.

Joint ventures (JVs) are shared-equity and decision-making arrangements involving two or more firms (the parents). A JV is considered international (IJV) when at least one of the parents is headquartered outside the venture's country of operation. Despite their competitive benefits, increasing frequency and strategic importance, IJVs often encounter performance problems (Harrigan, 1988). By their inherent nature, the presence of two or more parents represents a potentially significant source of complexity, often making IJVs difficult and laborious to manage (Killing, 1983). To cope with this complexity, the control exercised by parents over IJVs' activities, in particular the division of control between the parent firms, has been found to be a critical determinant of their performance (Killing, 1983; Schaan, 1983; Beamish, 1984). Control refers to the process by which one entity influences, to varying degrees, the behaviour and output of another entity (Geringer and Hébert, 1989).

Still, with limited empirical evidence and conflicting results, prior research provides little understanding of the relationship between the division of control and the performance of IJVs. Research has also been limited to the direct impact of the division of control, without consideration for its impact on the quality and dynamics of interpartner relationships (Parkhe, 1993; Madhok, 1994). Therefore, this paper examines the relationship between the division of control and the performance of IJVs with the objective of assessing its importance and nature. It presents and tests a path model of the relationship between division of control and IJV performance which borrows elements of transaction-cost analysis and social-exchange theory. This model accounts for the intervening role of trust and conflict between parent firms in this relationship. The use of this model allows us not only to investigate the influence of the division of control on performance but also to cast some light on the "how", that is on the process involved in this relationship.

Prior Research on Control and Performance of IJVs

Control represents a critical element of a firm's ability to coordinate its activities and to ensure that its IJV is managed in ways consistent with its strategy, interests and objectives. According to West (1959), without effective

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control efforts, firms are likely to experience great difficulty in managing IJVs. In addition, in IJVs, the exercise of effective control may prove to be difficult and complex. By definition, firms cannot rely solely on their ownership position. They also agree to relinquish some control over their activities and resources. With the increasing strategic importance and frequency of IJVs, the effective exercise of control over IJVs takes on even greater importance. For these reasons, several researchers have examined the exercise of control, specifically how different control structures affect the performance of IJVs (see Table 1).

Killing's (1983) pioneering research provides the conceptual and empirical foundations for most of the limited research on division of control. Killing argued that since the presence of more than one parent constitutes the major source of complexity in an IJV, dominant-parent IJVs (where only one of the parents plays an active role in IJV decisions) will be easier to manager and more successful than shared-management IJVs (where both parents play an active role). Consistent with his hypothesis, although no statistical tests were used, Killing found that dominant-partner IJVs tended to evidence greater success than shared-management IJVs in a convenient sample of 37 IJVs. Killing's hypothesis did not received much empirical support, however. For instance, studies by Janger (1980), Kogut (1988) and Hill (1988) did not find any significant relation-

ship between dominant control and performance in international IJVs. Beamish (1984) used Killing's control scale and performance measures for a convenience sample of 12 IJVs in less-developed countries. Unsatisfactory performance was found to be correlated with dominant control by a foreign partner. Yan and Gray's (1994) investigation of Chinese IJVs supported this conclusion. Results from Blodgett (1987) and Geringer and Woodcock (1989) also suggested that 50/50 JVs are more stable organizational forms than majority/minority JVs.

This short review suggests that empirical evidence regarding the nature and strength of the relationship between division of control and performance is still scant, and results are often conflicting. This situation can be interpreted as a consequence of the use of different constructs of control (division of control versus division of equity) and performance (objective versus subjective measures) (Geringer and Hébert, 1989). It can also be seen as the result of the fragmentation of prior research based on the object of study. In particular, prior research did not control for the IJV's country of operation (developed country versus less-developed country) and for the type of JV studied (domestic versus international) (Beamish, 1988; Hébert, 1994).

In addition, in their analysis of the control-performance relationship, researchers have limited themselves to the study

TABLE 1
Selected Studies on the Control Structure-JV Performance Relationship

	Authors	Type of JV ¹	Measure of performance	Control-performance relationship
Early studies	Tomlinson (1970) Franko (1971)	LDC IJVs LDC/DC IJVs	Profitability Instability	Negative correlation Contingent on MNC parent's strategy
Overall division of control	Janger (1980) Killing (1982) Hill (1988) Blumenthal (1988) Tillman (1990) Yan and Gray (1994)	LDC/DC IJVs DC IJVs DC DJVs/IJVs DC DJVs/IJVs LDC IJVs LDC IJVs	Not provided Survival and perceptual measure Multidimensional scale Multidimensional scale Multidimensional scale Perceptual measures	Assumed to be contingent Dominant control related to performance No relationship No relationship Foreign partner control related to conflict and to low performance Shared control related to performance
Division of equity	Lecraw (1984) Blodgett (1987) Kogut (1988) Woodcock and Geringer (1990)	LDC IJVs DC IJVs DC DJVs/IJVs DC DJVs/IJVs	Corrected success Duration, survival renegotiation of JV contract Duration Survival	Equal division related to low success Equal division related to duration and survival No relationship Equal division related to survival
Control over specific activities	Schaan (1983) Lecraw (1984) Awadzi (1987) Hill (1988)	LDC IJVs LDC IJVs DC DJVs/IJVs DC DJVs/IJVs	Perceptual measure of satisfaction See above Composite measure Multidimensional scale	Contingent on fit among success criteria, activities controlled and mechanisms Control over critical activities related to performance Dominant control over specific activities related to performance No relationship

1. LDC = Less-developed country.
DC = Developed country.
DJV = Domestic joint venture.
IJV = International joint venture.

of the direct impact of the division of control on IJV performance. Prior research did not account for the impact of the division of control on the dynamics of the relationship between parent firms, particularly its impact on the development of trust and the occurrence of conflicts. Parkhe (1993) criticized prior research for neglecting fundamental characteristics of interpartner relationships in IJVs. Madhok (1994) also argued that relationship variables are inseparable from the dynamics of interorganizational relationships.

In short, it has been suggested that interpartner relationship variables are of significant importance for the performance of IJVs and other types of interorganizational relationship. Interpartner conflict has been depicted as an inherent problem and a major cause of IJV failure (Simiar, 1982; Habib, 1987). Trust has been described as a major condition for IJV success (Beamish, 1984; Madhok, 1994). Beamish and Banks (1987) suggested that a foundation of mutual trust and commitment between IJV partners is likely to reduce the risks and costs of opportunism and conflicts that may reduce the mutual benefits of IJVs and harm their performance. In such a context, parent firms are likely to take a longer-term perspective regarding their involvement in an IJV and the continuation of the cooperative relationship, rather than merely focusing on obtaining short-term advantages at the expense of their partner and the IJV. Recent research has provided empirical evidence of these theoretical contentions. Trust has been found to be significantly correlated with the success and the high performance of different forms of IJVs and alliances (Subieta, 1991; Inkpen, 1992). Yet the impact of the division of control on these interpartner relationship variables and by extension their intervening role in the division of control-performance relationship are little known and understood. As a result, enhanced understanding of the impacts of the division of control on the dynamics and performance outcomes of IJVs appears to involve an examination of the intervening role of trust and conflict.

This paper therefore proposes to examine the division of the control-performance relationship in IJVs. As a first step, it tests Killing's (1983) proposition by comparing the performance associated with shared- and dominant-control IJVs and by investigating the relationship linking the extent of control sharing with the success and the relationship dynamics of IJVs. Finally, building from both transaction-cost analysis and social-exchange theory, this paper presents a model accounting for relationship-dynamics variables affecting IJV performance.

Control and IJV Performance: A Path Model

This study's conceptual framework draws from both transaction-cost analysis (TCA) and social-exchange theory (SET), since they appear to be complementary as regards the scope and purpose of this research. Although TCA has been used extensively to examine the dynamics of IJVs (Beamish and Banks, 1987; Hennart, 1988; Kogut, 1988), it

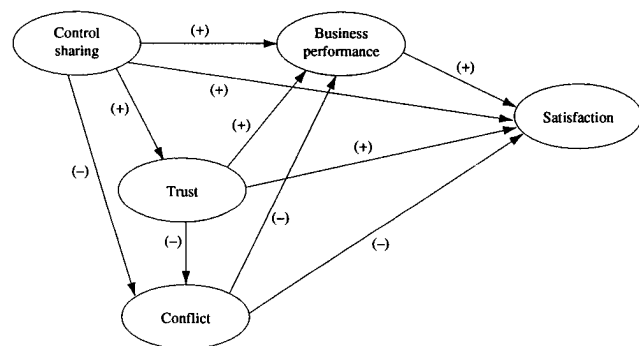
has limitations that make it unsuitable for this research. In particular, TCA views interorganizational relationships as discrete and technologically separable transactions, and neglects the social context surrounding exchanges (Johanson and Mattsson, 1987; Hill, 1990). TCA also assumes that actors are basically opportunistic and thus minimizes the role of trust and commitment in exchange relationships (Granoveter, 1985). In contrast, SET includes both economic and social aspects in the analysis of relationships (Dwyer, Schurr and Oh, 1987). It views relationships as dynamic and iterative processes shaped by the actions of the partners (Cook, 1977; Van de Ven and Walker, 1984). Moreover, social-exchange researchers have given considerable attention to the impact of power on the dynamics of relationships. As result, SET can provide an appropriate theoretical base for an analysis of the impact of control on the stability of relationships in IJVs. In fact, power and control are closely related concepts. Power can be defined as the ability to influence the behaviour and output of an entity (Dahl, 1957; Etzioni, 1965). In turn, control can be seen as the actualization of that ability (Provan and Skinner, 1989) or the reflection of a firm's power position (Blodgett, 1987). Many researchers have also used these two terms interchangeably (Thibaut and Kelley, 1959; Anderson and Narus, 1984). In conclusion, with TCA's focus on efficiency and SET's focus on relationships, it is expected that the combination of these two frameworks will provide a more integrative view of IJVs and their dynamics.

The Model

As presented in Figure 1, this study's path model is organized around five constructs: the division of control/control sharing, trust, conflict, satisfaction and business performance. These constructs are defined in the following pages.

FIGURE 1

Path Model: Hypothesized Relationships



Satisfaction. Building from Anderson and Narus (1984), we define satisfaction as the aggregation of the parent firms' positive affective state resulting from the appraisal of all aspects of the IJV. This IJV performance-outcome construct

was selected since satisfaction has been the focus of much prior research on IJVs and other interorganizational relationships (Schaan, 1983; Beamish, 1984; Anderson and Narus, 1990; Geringer and Hébert, 1991). Parents' satisfaction has been found to be an effective predictor of their future actions and a critical determinant of the long-term continuity of a relationship (Anderson and Weitz, 1989; Anderson and Narus, 1990). Indeed, if a parent is not satisfied with an IJV, it will most likely not want to remain involved in the venture.

Business Performance. This construct is a direct assessment of the success of the IJV, or the extent to which it has met the expectations that the parent firms had at the time of its creation. It is an evaluation of its performance according to its business objectives. The use of this construct in addition to satisfaction is consistent with the trend in IJV research toward the use of composite performance measures combining business performance and satisfaction variables.

Furthermore, a positive relationship between business performance and satisfaction is proposed. It is believed that a parent firm's satisfaction is directly influenced by the business performance of the IJV. A parent firm is likely to express satisfaction if the IJV meets or surpasses its performance objectives. In contrast, a poorly performing IJV, or an IJV that does not achieve its business objectives, is likely to be associated with little satisfaction. Therefore, business performance is expected to have a positive effect on satisfaction:

H1: An increase in the business performance of a IJV will result in an increase in the parent firms' satisfaction.

Conflict. Conflict is an inherent element of a relationship (Aldrich, 1977). Since organizations strive to maintain their autonomy, interdependent relationships tend to create conflicts (Gouldner, 1959). Consistent with Katz and Kahn (1978) and Brown and Day (1981), this study focuses on manifest conflict, rather than latent or affective conflict. Therefore, conflict refers to the frequency of disagreements between the parent firms since the formation of the IJV.

Conflict is expected to have a negative impact on a relationship, especially on performance and satisfaction. Frequent disagreements tend to cause frustration and unpleasantness in a relationship, and thus result in dissatisfaction (Anderson and Narus, 1984, 1990). In addition, conflict may hinder accomplishment of the relationship's task. In the case of an IJV, frequent disagreements may result in complex, time-consuming decision making, or in obstructive behaviours that simply block any decision making. Such situations may limit an IJV's ability to cope with and to respond to changes in its environment and thus to be successful in its business. Therefore, the following negative relationship between the frequency of conflict and IJV performance outcomes can be suggested:

H3: An increase in the level of conflict in an IJV will result in:

- a) a decrease in parent firms' satisfaction.
- b) a decrease in the business performance of the IJV.

Trust. The concept of trust is important to an understanding of relationships (Zucker, 1986). Golembiewski and McConkie (1975; p.131) suggest that there is "no other single variable which so thoroughly influences interpersonal and intergroup behavior". Scanzoni (1983; p.79) views trust as "a kind of catalyst or critical juncture" in a relationship. In other words, unless trust is established, a relationship cannot expand and result in greater interdependence and exchange. Building from Blau (1964), Scanzoni (1983) and Anderson and Narus (1990), we can define trust as the parent firm's belief that its partner is ready to perform actions that will result in positive outcomes for the firm and the IJV, and will avoid actions that would result in negative outcomes.

The presence of trust is expected to have positive impacts on performance and satisfaction outcomes in IJVs. In an atmosphere of mutual trust, exchanges are easier and less costly to complete (Williamson, 1975). Trust decreases the transaction costs resulting from bargaining, auditing, and from conflicts and opportunism. These transaction-cost reductions can be translated into economic benefits. Trust also permits better communication and cooperation, and reinforces exchange relationships (Dwyer et al., 1987). Furthermore, Beamish and Banks (1987) argue that, in the presence of mutual trust, parent firms will be more likely to work together, to avoid opportunistic behaviours and to commit the resources required to achieve the IJV's objectives. Subieta (1991) and Inkpen (1992) also support the positive relationship linking the presence of trust with satisfaction and performance in IJVs.

Furthermore, a relationship between trust and conflict is proposed, even though the direction of this relationship is difficult to define. Does conflict decrease trust, or does trust reduce conflict? Evidence regarding this relationship is scant. On the basis of prior research, the relationship can be argued both ways. For instance, Young and Wilkinson (1988) were not able to reach any clear conclusion on its directionality. Anderson and Narus' (1990) results suggested that the presence of trust reduced the incidence of conflict in vertical relationships. In contrast, the absence of conflict was also described as necessary for the development of trust in a relationship (Scanzoni, 1983). Although recognizing the interactive nature of the relationship between trust and conflict, the perspective taken in this study builds on Anderson and Narus' (1990) study of working partnerships, as well as on Dwyer, Schurr, and Oh's (1987) framework of working relationships. According to Anderson and Narus (1990), in a relationship characterized by strong trust, conflict is more likely to be functional, and partner firms are more likely to maintain cordial relations and to give each other "the benefit of the doubt" (Hardy and Magrath,

1988). The presence of trust also supports the effective resolution of disagreements between partners. As a result, relationships in which partners have succeeded in developing trust are expected to exhibit fewer risks of appearance of conflict and lower overall frequency of conflict. This perspective is consistent with the position that trust increases tolerance for the short-term inequities inevitable in relationships, and thereby reduces the potential for frequent conflict (Beamish and Banks, 1987; Dwyer, Schurr, and Oh, 1987; Madhok, 1994). Therefore, the following hypotheses can be formulated:

- H2: An increase in the level of trust in an IJV will result in:
- a) an increase in the parent firms' mutual satisfaction;
 - b) an increase in the business performance of the IJV;
 - c) a decrease in conflict.

Control Sharing. Control sharing is defined as the extent to which the control exercised by parent firms over an IJV is shared. In this model, consistent with Killing (1983) and Beamish (1984), control is conceptualized as dependent on the locus of decision making. Thus control sharing refers to the extent to which decision-making responsibilities regarding the IJV are shared by the parents. Control must be distinguished from autonomy, or the division of decision-making responsibilities between the parents and the IJV's management. Furthermore, control sharing is conceptualized as a continuous variable. Within this perspective, division of control is a continuum of control sharing. At one end of this continuum, there is limited control sharing between the parents, and one of the parents assumes responsibility for the joint venture. This situation is similar to Killing's dominant-control IJV (where one of the parents plays an active role in IJV decisions). At the other end of the spectrum, there is extensive control sharing; this situation equates to Killing's shared-management IJV (where both parents play an active role).

In trying to develop hypotheses on the impact of control sharing on performance and relationship outcomes in IJVs, one may pay particular attention to the concept of power, especially the balance of power in relationships. This perspective is consistent with the notion that the division of control in an IJV is the result of negotiations, and the reflection of the parent firms' bargaining power (Blodgett, 1987; Gray and Yan, 1992). Power is also one of the central concepts of social-exchange theory (SET; Blau, 1964; Hallén, Johanson and Seyed-Mohamed, 1991). In a relationship, power, or the capacity of one party to influence the outcomes of another party, results from the possession of resources that the other party needs, and from control over the sources of the resources (Emerson, 1962).

In particular, the presence of asymmetry in the distribution of power has been suggested as having a destabilizing effect on a relationship (Burgess and Huston, 1983). In a

situation of power imbalance, the high-power party tends to exploit its power advantage (Bannister, 1969). Its power position encourages it to use its power to its advantage, thus at the expense of the other party in the relationship, so as to gain a greater share of the rewards from the exchange (Frazier and Rody, 1991). In contrast, balanced relationships are expected to be more stable since no party enjoys a power differential. As a result, a power imbalance is associated with dissatisfaction on the part of the low-power party (Anderson and Narus, 1984) as well as with the poor performance of the relationship (Lusch, 1976). After attempts by the high-power party to exploit its power position, opportunistic behaviours, decisions without mutual consent, and what may be perceived as abuses of power and inequity, the low-power partner is likely to express dissatisfaction. These efforts to exploit the dependence of the low-power partner and to alter the exchange to its advantage serve to reduce the benefits the low-power partner receives. Complying with the powerful party's decisions or dictates involve costs, such as taking resisting actions or relinquishing some of the benefits of the relationship. For similar reasons, the low-power partner is likely to be apprehensive about the stronger party's intentions and behaviour (Anderson and Weitz, 1989). These apprehensions may weaken the attachment of the low-power partner to the relationship as well as its interest in investing resources in a relationship with limited benefits. They will impede the development of mutual trust and mutual commitment in the relationship (Pruitt, 1981; Zucker, 1986; Dwyer, Schurr and Oh, 1987). They may also limit cooperation between partners and thereby their capacity to achieve the objectives pursued through the relationship (Anderson and Narus, 1984, 1990).

Just as a power imbalance negatively affects satisfaction, business performance and trust, it is expected to result in greater conflict (Pruitt, 1981; Anderson and Narus, 1984). Snyder and Diesing (1977) argue that cooperation supplants competition in relationships when a balance of power is achieved. The position of the high-power party and the resulting constraint it poses on the low-power party's autonomy are often perceived as aversive and thereby constitute a source of conflict. This finding is consistent with Brehm's (1966) theory of psychological reactance, which states that when an individual's freedom is restrained, he or she will resist and attempt to restore his or her autonomy. In doing so, the low-power individual is likely to rationalize actions that may well take the form of opportunistic behaviours (Provan and Skinner, 1989). These actions are likely to result in conflict in the relationship.

This line of reasoning, based on principles of social-exchange theory, can be applied to the situation of IJVs, and to the effect of the division of control on relationship and performance outcomes. Building from the notion that the division of control is the reflection of the parent firms' bargaining powers, the preceding social-exchange rationale suggests that IJVs where one parent firm dominates and little control is shared would be characterized by lower trust,

satisfaction and business performance. These ventures would also exhibit greater conflict. In turn, in IJVs where control is distributed more symmetrically or where control sharing is extensive, it is expected that both parents will experience lower conflict and greater trust, satisfaction and business performance. Therefore, the following hypothesis can be formulated:

H4: An increase in control sharing in an IJV will result in:

- a) an increase in the parents' satisfaction;
- b) an increase in the business performance of the IJV;
- c) an increase in trust;
- d) a decrease in conflict.

Research Method

Sample. This research studied two-parent manufacturing JVs based in Canada. Only IJVs where one of the parents holds no more than 75% of the IJV's equity were selected. The research also focused on domestic and international JVs in operation by January 1988 and those formed since then. From Statistics Canada's CALURA data base, the population of qualifying IJVs was estimated at 93. Data required for hypothesis testing were collected from key informants, namely parent-firm managers responsible for the IJV and general managers of the ventures (JVGMs). Consistent with Campbell's (1955) criteria for key informant selection and with prior studies of JVs, the selected individuals were deemed the best placed to describe the management and dynamics of the JVs. Data were collected during 1991 and 1992 with a mailed questionnaire survey complemented by in-person and phone interviews. Data were obtained from 127 informants ($n = 127$) regarding a total of 70 IJVs.

Data Collection. The study's data-collection approach attempted to reduce risks of implicit theories, causal attributions and ex-post rationalizations that would have threatened the reliability and validity of our data and results. In particular, there was substantial support in prior research for the use of key informants. Research indicated that self-reporting produced reliable data and represented a reliable and valid method for business policy research (Pearce, Robbins and Robinson, 1987). John and Reve's (1982) results provided empirical evidence suggesting that single key informants were a source of reliable and valid data regarding interorganizational relationships. Prior research on IJVs (Geringer, 1986) and pretest interviews with multiple respondents from three firms revealed that one to three key senior executives in each firm typically had intimate involvement throughout the JV formation and management process and had access to the requisite data. Comments from key informants also suggested a high level of consensus among a firm's key senior executives regarding perceptions

of an IJV's situation and dynamics. To further minimize risks of biases and threats to validity, the questionnaire and interviews were organized and the questions formulated in ways that reduced causal attributions and the impact of implicit theories. In the questionnaire, for instance, questions related to independent and dependent variables were placed on different pages. In addition, key informants were encouraged to use any additional information sources they needed to refresh their memories or to verify their responses about aspects of the IJV, its formation, and its operations.

Measures. The division of control, or rather the extent of control sharing, was measured with a scale similar to the one used in Geringer (1986), which is an adapted and expanded version of Killing's (1983) multi-item scale. Respondents were asked, "How was control over each of the following decisions allocated between your firm and your partner?" for 17 categories of decisions and/or activities of the IJV. The response scale was a Likert-type, five-point scale where 1 is associated with "Your firm controls", 3 with "Shared control between your firm and your partner", and 5 with "Your partner controls". JVGMs were asked whether one of the parent controls (1 or 5), or if both parents share control (3). For hypothesis testing, this scale was recoded in a three-point scale (where 1 is associated with one of the parents controls and 3 with parents share control). An IJV was considered to be a shared-control one if the average for all 17 items was equal to or greater than 2.25.

Trust was measured with a two-item scale derived from Anderson and Weitz (1989) and Anderson and Narus (1990). Respondents were asked to indicate their agreement on a Likert-type, five-point scale (-2 = Strongly disagree, 0 = Neither agree nor disagree, +2 = Strongly agree) with four statements (for example, "My firm has a high degree of trust in this partner" and "Our partner is a firm that stands by its word"). In turn, conflict was measured with a five-item scale adapted from Habib (1987). Informants were asked to assess the frequency of conflict with the partner firm on a Likert five-point scale (5 = Constantly, 1 = Never) regarding such aspects of the IJV as marketing, parent control, capital expenditures, R&D and IJV's objectives. Parent firms' satisfaction was assessed with a three-item scale derived from Anderson and Narus (1984 and 1990). Respondents were asked to indicate their agreement on a Likert-type, five-point scale (-2 = Strongly disagree, 0 = Neither agree nor disagree, +2 = Strongly agree) with three statements (for example, "My firm and our partner are very content with all aspects of the JV") focusing on satisfaction with the JV, its performance and the relationship between the partners. Business performance was measured with a multi-item scale assessing performance versus expectations in 10 areas, such as sales, profitability, overall performance, marketing, etc. The response scale was a Likert-type, five-point scale (-2 = Below expectations, 0 = Equal to expectations, +2 = Above expectations).

Data Analysis. SPSS-X was used for data analysis. Reliability and factor analyses were first performed. These analyses supported the convergent and discriminant validity as well as the unidimensionality of the trust, conflict, business performance and satisfaction constructs. In turn, factor analyses identified three control factors with eigen values above 1. The first factor (operational control) involved control over nine operational decisions, such as hiring and firing, distribution, pricing, marketing, day-to-day management of the JV, manufacturing, etc. The second factor (technological control) involved control over four decisions related to technology (product and process technology, patents and R&D). Finally, the third factor (strategic control) was related to control over four strategic areas (financing, capital expenditures, location of the JV and appointment of the JVGM). All constructs had Cronbach's α between 0.8 and 0.95. Factor scores were computed for use in OLS regression analysis. For hierarchical regression, mediating effect and path analyses, procedures outlined in Baron and Kenny (1986) and Cohen and Cohen (1983) were followed. In addition, steps were taken to identify possible data biases and control variables related, among others, to industry and parent size. These variables were not found to have significant effects and thus were not included in the data analysis. The research sample was found to include IJVs that were created at different periods and had been in operation for

more than 20 years. This characteristic may have introduced biases or intervening variables related to selection, history or maturity effects (e.g. Cook and Campbell, 1979). To control for potential biases associated with this characteristic and to rule out related alternative explanations, the IJVs formation date was included in regression analyses as a control variable. Still, analyses conducted without this control variable yielded similar results. Table 2 presents descriptive statistics for all constructs.

Furthermore, although this study relied on perceptual data collected from a single instrument, problems of common method variance were thought to be limited. First, the absence of an *a priori* positive link between the extent of control sharing and performance, as well as the phrasing of questions and response scales, was expected to diminish the risks of causal attribution and implicit theories. Second, the study collected perceptual data from key informants. It was believed that it was these informants' perceptions that guided and influenced their behaviours and attitudes regarding the JVs. Thus it appeared necessary to rely primarily on perceptual self-report data for hypothesis testing, rather than on objective measures. Nevertheless, correlations were computed between perceptual and objective measures, when possible. These analyses showed significant correlations between control sharing and the division of equity, and

TABLE 2
Descriptive Statistics

	Mean	S.D.	1	2	3	4	5	6	7	8
1. OPCTL	1.85	0.71	–							
2. TECTL	1.68	0.62	–	–						
3. STCTL	2.45	0.64	–	–	–					
4. TR	4.00	1.03	0.22*	-0.05	0.16*					
5. CON	2.11	0.79	-0.27**	0.15#	-0.07	-0.58***				
6. BPERF	3.21	0.76	0.36***	-0.15#	0.08	0.45***	-0.46***			
7. SAT	3.26	1.21	0.20*	-0.07	0.09	0.56***	-0.61***	0.65***		
8. FORM	79.77	7.64	0.17*	0.10	0.18*	0.10	0.12	-0.09	-0.22*	
9. OVCTL	1.99	0.54	0.53***	0.48***	0.64***	0.28*	-0.13	0.18*	0.14	0.29**

$p < 0.10$ * $p < 0.05$ ** $p < 0.01$ *** $p < 0.001$

OPCTL: Operational control; TECTL: Technological control; STCTL: Strategic control; TR: Trust; CON: Conflict; BPERF: Business performance; SAT: Satisfaction; FORM: Date of formation; OVCTL: Overall control.

between satisfaction, business performance and objective measures of performance such as IJV duration (in months) and survival (Yes or No). Significant correlations were also observed between objective measures of control (division of equity) and objective measures of performance (survival and duration). These results further reduced the risks that the results might be explained by common method variance.

Results and Discussion

Initial analyses compared shared- and dominant-control IJVs (see Table 3). Results suggested that shared-control IJVs significantly outperformed dominant ones in terms of business performance ($p < 0.05$), trust ($p < 0.01$) and conflict

($p < 0.05$). Shared operational control appeared to be particularly important for IJV performance: indeed, shared operational control involved higher business performance ($p < 0.001$), higher trust ($p < 0.01$) and less frequent conflict ($p < 0.05$) than did dominant operational control. Results for satisfaction were mixed ($p < 0.10$). In addition, no significant differences at the 0.05 level were observed between shared and dominant technological and strategic control for each of the four variables.

Regression analyses yielded similar results (see Table 4). The sharing of operational control correlated significantly with business performance ($\beta = 0.35$; $p < 0.001$), trust ($\beta = 0.19$; $p < 0.01$) and correlated negatively with conflict ($\beta = 0.25$; $p < 0.001$), as hypothesized. In sum, these results

TABLE 3
Comparison of Shared-control and Dominant-control IJVs

	Overall control		t	Operational control		t	Technological control		t	Strategic control		t
	Dominant n=80	Shared n=47		Dominant n=87	Shared n=40		Dominant n=76	Shared n=51		Dominant n=25	Shared n=102	
Satisfaction	3.46	3.79	1.52	3.12	3.56	1.93#	3.29	3.20	0.42	2.97	3.32	1.23
Business performance	3.09	3.44	2.61*	3.06	3.55	3.44***	3.28	3.11	1.33	3.02	3.26	1.81#
Trust	3.83	4.37	2.80**	3.82	4.54	3.87**	3.83	4.21	1.93#	3.75	4.05	1.14
Conflict	2.21	1.91	2.05*	2.20	1.88	2.30*	2.08	2.14	0.37	2.22	2.07	0.90

$p < 0.10$ * $p < 0.05$ ** $p < 0.01$ *** $p < 0.001$

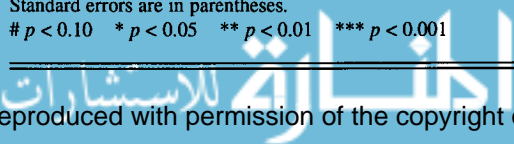
TABLE 4
Results of Regression Analysis

	Satisfaction		Business performance		Trust		Conflict	
Overall control	0.19** (0.07)		0.20** (0.07)		0.21** (0.07)		-0.16* (0.07)	
Operational control		0.22** (0.07)		0.35*** (0.07)		0.19** (0.07)		-0.25*** (0.07)
Technological control		-0.00 (0.07)		-0.06 (0.07)		0.08 (0.07)		0.08 (0.07)
Strategic control		0.11 (0.07)		0.08 (0.07)		0.10 (0.07)		-0.08 (0.07)
Formation	-0.20** (0.07)	-0.21** (0.07)	-0.11 (0.07)	-0.11# (0.07)	0.02 (0.07)	0.02 (0.07)	0.12# (0.07)	0.12# (0.07)
Adjusted R^2	0.05	0.07	0.04	0.14	0.04	0.04	0.02	0.08
F	6.28**	4.96***	4.67*	9.35***	5.14**	2.86*	3.32*	5.64***

N = 125

Standard errors are in parentheses.

$p < 0.10$ * $p < 0.05$ ** $p < 0.01$ *** $p < 0.001$



provided empirical evidence contradicting Killing's (1983) hypothesis. Since they show that the sharing of control, particularly the sharing of operational control, was associated with higher performance and better relationship dynamics, they also support the SET-based rationale underlying our fourth hypothesis.

Results from the path analysis are presented in Figure 2 and include the path coefficient matrix, related significance levels, and adjusted R^2 . The path model includes only standardized regression coefficients (β) significant at the 0.05 level. Results showed that operational control sharing had a significant and positive relationship with trust ($\beta = 0.20$; $p < 0.01$) and business performance ($\beta = 0.25$; $p < 0.01$), and a negative relationship with conflict ($\beta = -0.17$; $p < 0.01$). Surprisingly, technological control sharing was related positively with conflict ($\beta = 0.12$; $p < 0.05$). Other results generally supported the hypothesized relationships. For instance, conflict related negatively with business performance ($\beta = -0.29$; $p < 0.001$) and satisfaction ($\beta = -0.36$; $p < 0.001$). Trust was associated positively with business performance ($\beta = 0.17$; $p < 0.05$), satisfaction ($\beta = 0.17$; $p < 0.01$), and negatively with conflict ($\beta = -0.44$; $p < 0.001$). Business performance was found to be correlated with satisfaction ($\beta = 0.36$; $p < 0.001$).

In sum, these results empirically support hypotheses 1, 2 and 3. Business performance was found to be a significant factor of satisfaction. Relationship-dynamics variables such as trust and conflict represented important correlates of IJV performance outcomes. As hypothesized, the presence of trust and limited conflict in IJVs was associated with higher satisfaction and business performance. In short, our results provide support for the existing literature and reinforce the importance of the quality and dynamics of interpartner relationship dynamics to an explanation of IJV performance.

The hypothesis proposing relationships between control sharing, relationship dynamics and performance variables (H4a, b, c and d) received mixed support. Only the sharing of operational control was found to be systematically related in a significant way with the performance and interpartner relationship dynamics of IJVs. The sharing of operational control was positively related with business performance and trust, and negatively related with frequency of conflict. Its relationship with satisfaction was mediated by business performance and trust. In turn, only in a very weak manner did the sharing of technological and strategic control appear to correlate with these variables. In fact, significant correlations were obtained only in the cases of the relationship between strategic control and satisfaction, and between technological control and conflict. In the latter case, the observed relationship was positive, thereby contradicting H4.

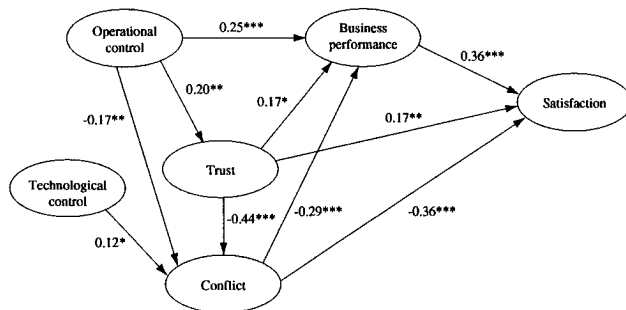
Globally, the model proved to be effective in explaining the performance and the satisfaction of parent firms in IJVs. Control and relationship-dynamics variables were found to account for 28% and 49% of the variance in these two constructs. Results also suggested that the relationship between division of control and IJV performance was mediated by relationship-dynamics variables. This finding was especially evident in the case of operational control. The relationship involving this control dimension was mediated partly by relationship-dynamics variables for business performance and fully mediated for satisfaction.

Furthermore, this paper's findings suggest that the overall importance of the division of control is significant yet limited. Despite significant relationships observed between the sharing of operational control, trust, and business performance, it remains that not all dimensions of control were found to be important or similar determinants of IJV performance. In several cases, relationships of limited and non-significant magnitude were observed. Such results may explain at least partially the contradictory and limited evidence found in the literature. They underline the importance of not limiting investigation to the overall division of control structure in IJVs and of devoting attention to its division as regards specific activities and groups of activities.

Furthermore, the limited role of strategic control and technological control may underscore that parent firms rarely rely on the division of decision-making responsibilities alone for exercising control over these activities. They also frequently use legal agreements, such as licences, patents

FIGURE 2

Results of Path Analysis



Path coefficient matrix

Endogenous variables	OPCTL	TECTL	STCTL	TR	CON	FPERF	R ²
TR	0.20** (0.07)	0.08 (0.07)	0.11 (0.07)	-	-	-	0.04*
CON	-0.17** (0.06)	0.12* (0.06)	-0.03 (0.06)	-0.44*** (0.06)	-	-	0.27***
BPERF	0.25*** (0.06)	-0.05 (0.06)	-0.04 (0.06)	0.17* (0.06)	-0.29*** (0.06)	-	0.28***
SAT	-0.02 (0.06)	0.04 (0.06)	0.05 (0.06)	0.17** (0.06)	-0.36*** (0.06)	0.36*** (0.06)	0.49***

Standard errors are in parentheses.

$p < 0.10$ * $p < 0.05$ ** $p < 0.01$ *** $p < 0.001$

OPCTL: Operational control; TECTL: Technological control;
STCTL: Strategic control; TR: Trust; CON: Conflict;
BPERF: Business performance; SAT: Satisfaction.



and trademark agreements in the case of technological matters. Similarly, strategic control issues such as capital expenditures, facilities and the JVGM are frequently the subject of shareholder agreements and veto rights. In addition, this study focused on control structures as mechanisms of control, and the focus itself may explain the mixed results. Essentially, our investigation was limited to the impact of formal, bureaucratic mechanisms of control (Child 1977; Ouchi, 1977). Informal, context- or process-oriented mechanisms (Bartlett, 1986) were neglected in our analysis, although a wide variety of these mechanisms is available for exercising control, in addition to formal mechanisms (Schaan, 1983). Yet, with its focus on control structures, this study was limited to control structures and the locus of decision making. By extension, these results suggest that future research should devote attention to mechanisms of control other than control structures and the locus of decision making-based mechanisms.

Finally, factors other than the variable of control may be more important to an explanation of parent firms' decision to terminate or to keep in operation an IJV. Such factors could be related to the competitive structure of the IJV's industry, such as industry conditions, industry life or business cycle, to the competitors' positions and reactions and to the parent firms' strategy.

Conclusions

This paper investigates the relationship linking the division of control and the performance of IJVs. Initial analyses revealed that IJVs with shared-control structures, especially shared operational control, exhibited significantly higher performance and levels of interpartner trust and less frequent conflict. Building from both social-exchange theory and transaction-cost analysis, the paper also presented a path model of the relationship between division of control and IJV performance which accounted for the intervening effect of relationship-dynamics variables. Results confirmed the importance of relationship-dynamics variables, such as trust and conflict, to the performance of IJVs. They also showed that the sharing of operation control was positively related with business performance and trust, and negatively related with conflict. Relationship-dynamics variables were also found to have a mediating effect in the relationship between division of control and performance in IJVs. Particularly, the relationship between the sharing of operational control and satisfaction was fully mediated by business performance, trust and conflict. This mediating effect suggested that the sharing of operational control not only had a direct effect on the performance of IJVs but also promoted the development of trust and reduced the occurrence of conflict. In turn, these variables had significant effects on performance and parent firms' satisfaction in IJVs. Finally, the overall model was also believed to be particularly effective in explaining business performance and parent firms' satisfaction with IJVs.

In sum, this paper shows that control does indeed matter for the performance of IJVs, to some extent at least. Still, the extent of control sharing did not exhibit the relationship with IJV performance outcomes that the literature suggested and that was expected. The sharing of operational control was the only control construct to systematically show significant relationships with performance and relationship-dynamics constructs. Despite some significant results, they also lead us to conclude that factors other than the division of control over all or over specific activities in IJVs may be more effective in explaining the performance and interpartner relationship dynamics of these organizations.

This study is believed to have implications for both the research on and the management of IJVs. It underlines the importance of not limiting investigation to the overall division-of-control structure in IJVs. In fact, it appears critical for a thorough understanding of control in IJVs to devote attention to the focus of control and to its division over specific single functions and groups of activities. Furthermore, its findings suggest that the relationship linking division of control and performance could be exposed to various mediating and moderating effects. Factors other than formal control mechanisms and control structures may also be more effective predictors of IJV performance. Therefore, further investigation of these effects and factors is required.

In turn, it appears critical that managers should avoid limiting themselves to a global and overall perspective of control. Managers may strive to achieve incontestable and unambiguous control over their IJVs. This desire to "be in control" may be motivated by the need to protect the parent's interests as well as proprietary assets. It may also represent a mechanism for reducing uncertainty, particularly with regard to effective coordination and implementation of strategy. The critical issue for a parent firm, however, is to control only those activities and decisions that will enable it to implement its strategy successfully, without incurring costs and effects that would harm the performance of the IJV and outweigh the gains from cooperation. Considerable attention should be given to the control, and by extension the sharing of control, over activities and matters of an operational nature. In fact, the sharing of operational control may represent an effective strategy for an IJV to meet its objectives and to support the development of trust and to avoid frequent conflict. Developing and maintaining a relationship characterized by trust and limited conflict is also of considerable importance.

Finally, this study's findings must be interpreted in the light of some conceptual and methodological limitations. Particularly, the research model proposed linear and recursive causal relationships between constructs, although these relationships are most often iterative and interactive. The process involved in the development of mutual trust in a JV can be a good example of such a relationship. Still, the study's cross-sectional design did not allow close examination of this process and limited the possibility of drawing causal conclusions regarding the proposed relationships.

Furthermore, despite the precautions taken in the design and focus of the study, issues of common-method variance may be raised. Furthermore, although our study involved a sample size typically larger than most clinical studies, the size did not permit the use of causal-modelling techniques, such as LISREL for the testing of our hypotheses and research model. These limitations highlight the need for further research on control, particularly on relationship dynamics in IJVs ■

References

- ALDRICH, H. (1977). Visionaries and Villains: The Politics of Designing Interorganizational Relations. *Organization and Administrative Science*, 8 (1): 23-40.
- ANDERSON, James C.; NARUS, James A. (1990). A Model of Distributor Firm and Manufacturer Firm Working Partnerships. *Journal of Marketing*, 54 (January): 42-58.
- ANDERSON, James C.; NARUS, James A. (1984). A Model of the Distributor's Perspective of Distributor-Manufacturer Working Relationships. *Journal of Marketing*, 48 (Fall): 62-74.
- ANDERSON, Erin; WEITZ, Barton. (1989). Determinants of Continuity in Conventional Industrial Channel Dyads. *Marketing Science*, 8 (4): 310-323.
- AWADZI, Winston K. (1987). Determinants of Joint Venture Performance: A Study of International Joint Ventures in the United States. Ph.D. dissertation, Louisiana State University.
- BANNISTER, E. (1969). Sociodynamics: An Integrative Theory of Power, Authority, Influence and Love. *American Sociological Review*, 34: 374-393.
- BARON, Reuben M.; KENNY, David A. (1986). The Moderator-Mediator Variable Distinction in Social Psychological Research: Conceptual, Strategic and Statistical Considerations. *Journal of Personality and Social Psychology*, 51 (6): 1173-1182.
- BARTLETT, Christopher A. (1986). Building and Managing the Transnational: The New Organizational Challenge. In M.E. Porter (ed.), *Competition in Global Industries*, 367-404. Boston, MA: Harvard Business School Press.
- BEAMISH, Paul W. (1984). Joint Venture Performance in Developing Countries. Unpublished Ph.D. dissertation, University of Western Ontario.
- BEAMISH, Paul W. (1988). *Multinational Joint Ventures in Developing Countries*. London: Routledge.
- BEAMISH, Paul W.; BANKS, John C. (1987). Equity Joint Ventures and the Theory of the Multinational Enterprise. *Journal of International Business Studies*, Summer, 1-16.
- BLAU, Peter. (1964). *Exchange and Power in Social Life*. New York, NY: Wiley and Sons.
- BLODGETT, Linda L. (1987). A Resource-based Study of Bargaining Power in U.S.-Foreign Equity Joint Ventures. Ph.D. dissertation, University of Michigan.
- BLUMENTHAL, Judith F. (1988). Strategic and Organizational Conditions for Joint Venture Formation and Success. Ph.D. dissertation, University of Southern California.
- BREHM, Jack W. (1966). *A Theory of Psychological Reactance*. New York, NY: Academic Press.
- BROWN, James R.; DAY, Ralph, L. (1981). Measures of Manifest Conflict in Distribution Channels. *Journal of Marketing Research*, 18, August, 263-74.
- BURGESS, Robert L.; HUSTON, Ted L. (1983). Social Exchange in Developing Relationships: An Overview. In R. L. Burgess and T. L. Huston (eds.), *Social Exchange in Developing Relationships*. New York: Academic Press, 3-28.
- CAMPBELL, Donald T. (1955). The Informant in Quantitative Research. *American Journal of Sociology*, 60: 339-342.
- CHILD, John. (1977). *Organizations: A Guide To Problems And Practice*. New York, NY: Harper and Row.
- COHEN, Jacob; COHEN, Patricia. (1983). *Applied Multiple Regression/Correlation Analysis for the Behavioral Sciences*. 2nd ed., Hillsdale, NJ: Lawrence Erlbaum Assoc.
- COOK, Karen S. (1977). Exchange and Power in Networks of Interorganizational Relations. *The Sociological Quarterly*, 18 (Winter): 62-82.
- COOK, Thomas D.; CAMPBELL, Donald T. (1979). *Quasi-experimentation: Design and Analysis Issues for Field Settings*. Chicago, IL: Rand McNally.
- DAHL, Robert A. (1957). The Concept of Power. *Behavioral Science*, (July): 201-215.
- DWYER, F. Robert; SCHURR, Paul H.; OH, Sejo. (1987). Developing Buyer-Seller Relations. *Journal of Marketing*, 51 (April): 11-28.
- EMERSON, R.M. (1962). Power-Dependence Relations. *American Sociological Review*, 27 (February): 37-40.
- ETZIONI, Amitai. (1965). Organizational Control Structure. In J.G. March (Ed.), *Handbook of Organization*, 650-77. Chicago: Rand MacNally.
- FRANKO, Lawrence G. (1971). *Joint Venture Survival in Multinational Corporations*. New York, NY: Praeger.
- FRAZIER, Gary L.; RODY, Raymond C. (1991). The Use of Influence Strategies in Interfirm Relationships in Industrial Product Channels. *Journal of Marketing*, 55 (January): 52-69.
- GERINGER, J. Michael. (1986). Criteria for Selecting Partners for Joint Ventures in Industrialized Market Economies. Ph.D. dissertation, University of Washington, Seattle.
- GERINGER, J. Michael; HÉBERT, Louis. (1989). Control and Performance of International Joint Ventures. *Journal of International Business Studies*, 20 (2): 235-54.
- GERINGER, J. Michael; HÉBERT, Louis. (1991). Measuring Joint Venture Performance. *Journal of International Business Studies*, 22 (2): 249-263.
- GERINGER, J. Michael; HÉBERT, Louis. (1992). Division of Control and Performance of International Joint Ventures. Working paper, Western Business School.
- GERINGER, J. Michael; WOODCOCK, Patrick C. (1989). Ownership and Control of Canadian Joint Ventures. *Business Quarterly*, 54 (1): 97-101.
- GOLEMBIEWSKI, R.T.; MCCONKIE, M. (1975). The Centrality of Interpersonal Trust in Group Processes. In C.L. Cooper (ed.), *Theories of Group Process*. New York, NY: Wiley & Sons.
- GOULDNER, A. (1959). Reciprocity and Autonomy in Functional Theory. In L. Gross (ed.), *Symposium on Sociological Theory*, 241-70. New York, NY: Harper & Row.

- GRANOVETTER, Mark. (1985). Economic Action and Social Structure: A Theory of Embeddedness. *American Journal of Sociology*, 91 (3): 481-510.
- GRAY, Barbara; YAN, Aiman. (1992). A Negotiations Model of Joint Venture Formation, Structure and Performance: Implications for Global Management. In S.B. Prasad (ed.), *Advances in International Comparative Management*, 7: 41-75. Greenwich, CT: JAI Press.
- HABIB, Ghazi M. (1987). Measures of Manifest Conflict in International Joint Ventures. *Academy of Management Journal*, 30 (4): 808-816.
- HARDY, Kenneth G.; MAGRATH, Allan J. (1988). *Marketing Channel Management: Strategic Planning and Tactics*. Glenview, IL: Scott, Foresman and Co.
- HARRIGAN, Kathryn R. (1988). Joint Ventures and Competitive Strategy. *Strategic Management Journal*, 9: 141-158.
- HÉBERT, Louis. (1994). Division of Control, Relationship Dynamics and Joint Venture Performance. Ph.D. dissertation, University of Western Ontario.
- HENNART, Jean François. (1988). A Transaction Costs Theory of Equity Joint Venture. *Strategic Management Journal*, 9 (4): 361-74.
- HILL, Charles W.L. (1990). Cooperation, Opportunism and the Invisible Hand: Implications for Transaction Cost Theory. *Academy of Management Review*, 15 (3): 500-513.
- HILL, Robert C. (1988). Joint Venture Strategy Formulation and Implementation: A Contingency Approach. Ph. D. dissertation, Texas A&M University.
- INKPEN, Andrew. (1992). Learning and Collaboration: An Examination of North American-Japanese Joint Ventures. Ph.D. dissertation, University of Western Ontario.
- JANGER, Allen R. (1980). *Organization of International Joint Venture*. New York, NY: Conference Board.
- JOHANSON, Jan; MATSSON, Lars-Gunnar. (1987). Interorganizational Relations in Industrial Systems: A Network Approach Compared with the Transaction-Cost Approach. *International Studies of Management and Organization*, 17 (1): 34-48.
- JOHN, George; REVE, Torger. (1982). The Reliability and Validity of Key Informant Data From Dyadic Relationships in Marketing Channels. *Journal of Marketing Research*, 19 (November): 517-24.
- KATZ, Daniel; KAHN, Robert L. (1978). *The Social Psychology of Organizations*. New York, NY: Wiley & Sons.
- KELLEY, Harold H.; THIBAUT, John W. (1978). *Interpersonal Relations: A Theory of Interdependence*. New York, NY: Wiley & Sons.
- KILLING, J. Peter. (1983). *Strategies for Joint Venture Success*. New York, NY: Praeger.
- KILLING, J. Peter. (1982). How To Make A Global Joint Venture Work. *Harvard Business Review*, (May-June): 120-127.
- KOGUT, Bruce. (1988). A Study of the Life Cycle of Joint Ventures. In F. Contractor and P. Lorange (eds.), *Cooperative Strategies in International Business*, 169-85. Toronto: Lexington Books.
- LECRAW, Donald J. (1984). Bargaining Power, Ownership, and Profitability of Transnational Corporations in Developing Countries. *Journal of International Business Studies*, 15 (1): 27-43.
- LUSCH, R.F. (1976). Sources of Power: Their Impact on Intrachannel Conflict. *Journal of Marketing Research*, 13 (November): 382-90.
- MADHOK, Anoop. (1994). Revisiting Multinational Firms' Tolerance for Joint Ventures: A Trust-based Approach. *Journal of International Business Studies*, 26 (1): 117-137.
- OUCHI, William G. (1977). The Relationship between Organizational Structure and Organizational Control. *Administrative Science Quarterly*, 22: 92-112.
- PARKHE, Arvind. (1993). "Messy" Research, Methodological Predispositions, and Theory Development in International Joint Ventures. *Academy of Management Review*, 18 (2): 227-268.
- PEARCE, John, II; ROBBINS, D. Keith; ROBINSON, Richard D., Jr. (1987). The Impact of Grand Strategy and Planning Formality on Financial Performance. *Strategic Management Journal*, 8 (2): 125-134.
- PROVAN, Keith G.; SKINNER, Steven J. (1989). Interorganizational Dependence and Control as Predictors of Opportunism in Dealer-Supplier Relations. *Academy of Management Journal*, 32 (1): 202-212.
- PRUITT, Dean G. (1981). *Negotiation Behavior*. New York, NY: Academy Press.
- RUBIN, Jeffrey Z.; BROWN, Bert R. (1975). *The Social Psychology of Bargaining and Negotiation*. New York, NY: Academic Press.
- SCANZONI, John. (1983). Social Exchange and Behavioral Interdependence. In R. Burgess and T. Huston (eds.), *Social Exchange in Developing Relationships*, 61-98. New York, NY: Academic Press.
- SCHAAN, Jean-Louis. (1983). Parent Control and Joint Venture Success: The Case of Mexico. Ph.D. dissertation, University of Western Ontario.
- SIMIAR, Farhad. (1982). Major Causes of Joint Venture Failure in the Middle East: The Case of Iran. *Management International Review*, 23 (1): 58-68.
- SNYDER, Glenn H.; DIESING, P. (1977). *Conflict among Nations*. Princeton, NJ: Princeton University Press.
- SUBIETA, Aldolfo T. (1991). Effective Formation of International Cooperative Arrangements: Technology Joint Ventures and Licensing Agreements. Ph.D. dissertation, Michigan State University.
- THIBAUT, John W.; KELLEY, Harold H. (1959). *The Social Psychology of Groups*. New York, NY: Wiley and Sons.
- TILLMAN, Areerat U. (1990). The Influence of Control and Conflict on Performance of Japanese-Thai Joint Ventures. D.B.A. dissertation, Nova University.
- TOMLINSON, James W.C. (1970). *The Joint Venture Process in International Business: India and Pakistan*. Cambridge, MA: MIT Press.
- VAN DE VEN, Andrew H.; WALKER, Gordon. (1984). The Dynamics of Interorganizational Coordination. *Administrative Science Quarterly*, 29: 598-621.
- WEST, Malcolm W. (1959). Thinking Ahead: The Jointly-owned Subsidiary. *Harvard Business Review*, (July-August): 31-32.
- WILLIAMSON, Oliver E. (1975). *Markets and Hierarchies: Analysis and Antitrust Implications*. New York, NY: The Free Press.

WOODCOCK, C. Patrick; GERINGER, Michael J. (1990). Parent Strategy, Ownership Structure, Cultural Congruity and Joint Venture Performance. In J.M. Geringer (ed.), *Proceedings of the ASAC Conference*. Whistler, B.C.

YAN, Aimin; GRAY, Barbara. (1994). Bargaining Power, Management Control, and Performance in United States-China Joint Ventures: A Comparative Case Study. *Academy of Management Journal*, 37 (6): 1478-1517.

YOUNG, Louise C.; WILKINSON, Ian F. (1988). The Role of Trust and Co-operation in Marketing Channels: A Preliminary Study. *European Journal of Marketing*, 23 (2): 109-122.

ZUCKER, Lynne G. (1986). Production of Trust: Institutional Sources of Economic Structure, 1840-1920. In B.M. Staw and L.L. Cummings (eds.), *Research in Organizational Behavior*, 8: 53-111. Greenwich, CT: JAI Press.

