CONTROL AND PERFORMANCE OF INTERNATIONAL JOINT VENTURES

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Abstract. Control is a critical concept for successful management and performance of international joint ventures (IJVs). This paper reviews and synthesizes prior studies addressing the conceptualization and operationalization of control within IJVs, as well as the IJV control-performance relationship. The paper also presents a new conceptualization of IJV control, as well as a conceptual framework for studying control of IJVs.

THE IMPORTANCE OF CONTROL IN INTERNATIONAL JOINT VENTURES

With continued globalization of the world's economies, joint ventures (JVs) have become an important element of many firms' international strategies. These ventures involve two or more legally distinct organizations (the parents), each of which actively participates in the decisionmaking activities of the jointly owned entity [Geringer 1988]. If at least one parent organization is headquartered outside the JV's country of operation, or if the venture has a significant level of operations in more than one country, then it is considered to be an international joint venture (IJV).

An alternative to wholly-owned subsidiaries, IJVs are commonly used by firms as a means of competing within multidomestic or global competitive arenas [Porter & Fuller 1986; Harrigan 1988]. Increasingly, they are perceived as strategic weapons, as one of the elements of an organization's business units network [Harrigan 1987]. Joint ventures also represent an

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effective way of coping with the increasing competitive and technological challenges of today's environment [Perlmutter & Heenan 1986].

However, despite their potental contributions, IJVs are not without their drawbacks. The presence of two or more parents can make IJVs difficult to manage and often characterized by poor performance [Drucker 1974; Young & Bradford 1977; Janger 1980; Killing 1983; Geringer 1986]. A critical determinant of IJV performance appears to be the control exercised by parents over a venture's activities [Rafii 1978; Killing 1983; Schaan 1983]. Yet, particularly in comparison to wholly-owned subsidiaries, the exercise of effective control over IJVs may represent a more difficult proposition for the parent organizations because they are often unable to rely solely on their ownership position to determine the IJV's behavior and management, instead requiring recourse to other modes of influence.

Furthermore, a firm that agrees to participate in an IJV inevitably complicates its life. Although each partner must, by definition, relinquish some control over an IJV's activities, such a move is often accompanied by great consternation. A firm may avoid relinquishing control over some or all of its activities for reasons intimately related to its corporate strategy and objectives. Attainment of a firm's objectives over the long term is contingent on its ability to implement a strategy which exploits its distinctive competencies along one or several critical dimensions of corporate activity. Insufficient or ineffective control over an IJV can limit the parent firm's ability to coordinate its activities, to efficiently utilize its resources and to effectively implement its strategy [Stopford & Wells 1972; Lorange, et al. 1986; Anderson & Gatignon 1986]. In turn, exercising control over some or all of the activities of an IJV helps protect the firm from premature exposure of its strategy, technological core or other proprietary components to outside groups. Even if its products or processes are protected by patents or copyrights, a firm may nonetheless fear damaging "leakage" of unprotected innovations or know-how if shared with partners. Such disclosures, between the partners or to organizations outside the venture, may have serious effects on the competitive position of a parent or the IJV, possibly creating new competitors or otherwise limiting the IJV's or parent's overall efficiency [Parry 1985; Rugman 1985; Reich & Mankin 1986].

It is from this perspective that we will present a review and synthesis of the principal research addressing the issue of the control of IJVs. The discussion's emphasis will be on the similarities and differences in prior conceptualizations and operationalizations of IJV control, and in the approaches used to examine the control-performance relationship for IJVs. The paper will conclude with the presentation of a new conceptualization of IJV control and a conceptual framework for studying control of IJVs.

CONCEPTUALIZATION AND OPERATIONALIZATION OF JOINT VENTURE CONTROL

Control refers to the process by which one entity influences, to varying degrees, the behavior and output of another entity [Ouchi 1977] through the use of power, authority [Etzioni 1965] and a wide range of bureaucratic, cultural and informal mechanisms [Baliga & Jaeger 1984]. Control plays an important role in the capacity of a firm to achieve its goals. Typically, as organizations expand in size, there are concurrent increases in the complexity and differentiation of their structures [Lawrence & Lorsch 1967], as well as in the risks of conflicts, opportunistic behavior and competing goals between units. As a result, top management are confronted by the increasingly crucial need to monitor, coordinate and integrate the activities of the organization's business units, including IJVs [Child 1977; Mintzberg 1979].

The importance of the issue of control explains why, for many years, scholars have devoted attention to this concept's role in the management of organizations [Etzioni 1961; Tannebaum 1968; Child 1972a, 1972b; Lorange & Scott Morton 1974; Ouchi & Maguire 1975; Edstrom & Galbraith 1977; Ouchi 1978; Vancil 1979]. Nevertheless, many researchers have felt that the essence of the concept had not yet been adequately captured [Giglioni & Bedeian 1974; Miner 1982], resulting in numerous recent attempts to provide more thorough and explicit frameworks, definitions and conceptualizations of control [Green & Welsh 1988; Schreyogg & Steinmann 1987; Merchant 1982]. Several authors have shown particular concern for the exercise of control within large organizations, particularly multinational corporations [Skinner 1968; Franko 1971; Stopford & Wells 1972; Brooke & Remmers 1978]. In particular, they have examined the different degrees of control multinationals exercise over their subsidiaries [Cray 1984; Anderson & Gatignon 1987], as well as the mechanisms, systems and procedures used and the variables influencing the recourse to them [Doz & Prahalad 1981, 1984; Baliga & Jaeger 1984; Egelhoff 1984].

In contrast, the issue of control of IJVs has received relatively scant attention. The topic of IJV control was first raised by West [1959], who recognized the potential inter-partner conflicts which could result from this form of organization. According to West, without effective control efforts, firms were likely to experience great difficulty in managing JVs. Yet, despite this early observation regarding its importance, the issue of control has received only fragmented and unsystematic attention in the JV literature. More than ten years passed between West's initial observations and the re-emergence of the issue of control within the JV literature. Moreover, as discussed below, these subsequent research efforts have largely examined very different dimensions of IJV control, and no explicit attempts have been made to provide an integrative approach to the issue.

The first dimension of IJV control which researchers have examined is the *mechanisms* by which control may be exercised. Initial studies showed that firms frequently relied on majority ownership or on voting control (in turn, largely determined by majority equity shareholdings) to achieve effective management control of an IJV's activities [Tomlinson 1970; Friedman & Beguin 1971; Stopford & Wells 1972]. Although these studies showed that a majority position in equity or votes could ensure some degree of control over the venture, the same argument might not be valid for IJVs where the equity was equally divided between parents or in which a firm had only a minority participation role. This latter situation especially concerned firms that, over time, were unable to demand full or dominant ownership positions in many international investments. With continued diffusion of technology, increased scale and risk accompanying new projects, increased globalization of many industries and host government policies promoting local equity participation in order to obtain resources or market access, the option of implementing wholly-owned or dominant ownership ventures has often been constrained [Moxon & Geringer 1985; Porter & Fuller 1986].

In addressing such concerns, Behrman [1970] as well as Friedman and Beguin [1971] suggested that control was not a strict and automatic consequence of ownership. According to these studies, a variety of mechanisms were available to firms for exercising effective IJV control: right of veto, representation in management bodies and special agreements related to either technology (e.g., licensing) or management (e.g., management services). Companies might also be able to rely on their technical superiority and managerial skills as a means of guaranteeing participation in the management of day-to-day operations. The nomination of one of a firm's managers as the IJV general manager [Rafii 1978], as well as employment of different ownership structure arrangements [Gullander 1976], could represent further means of exercising managerial control.

In extending this stream of research, Schann [1983] demonstrated the breadth of mechanisms available to parent firms for exercising control over their IJVs (Table 1). Among these control options, the JV board of directors, formal agreements, the appointment of key personnel, the JV planning process, the reporting relationships and a variety of informal mechanisms appeared to be particularly important for Schaan's sample. He also made a significant contribution to knowledge of IJV control by categorizing control mechanisms into two main types. Schaan distinguished positive control mechanisms, which parent firms employed in order to promote certain behaviors, from negative control mechanisms, which were used by a parent to stop or to prevent the IJV from implementing certain activities or decisions. Positive control was most often exercised through informal mechanisms, staffing, participation in the planning process and reporting relationships. In contrast, negative control relied principally on formal agreements, approval by parents and the use of the JV board of directors. These latter, negative forms of control exemplified what Child [1973] described as bureaucratic mechanisms.

In addition to the *mechanisms* by which control may be exercised, a second dimension examined by scholars was the *extent* of control exercised over an IJV. Borrowing from organizational behavior research, most studies examining this latter dimension have conceptualized control as being dependent upon the centralization or the locus of the decisionmaking process. One such study was Dang's [1977] research on the autonomy of U.S. multinationals' subsidiaries in the Philippines and Taiwan. Undoubtedly influenced

TABLE 1
Positive and Negative Control Mechanisms

Positive	Negative
Ability to make specific decisions	Board
Ability to design:	Executive committee
1) Planning process	Approval required for:
2) Appropriation requests	1) Specific decisions
Policies and procedures	2) Plans, budgets
Ability to set objectives for JVGM	3) Appropriation requests
Contracts:	4) Nomination of JVGM
management	Screening/No objection of parent before ideas or projects are discussed with other parent
technology transfer	
marketing	
supplier	
Participation in planning or budgeting process	
Parent organization structure	
Reporting structure	
Staffing	
Training programs	
Staff services	
Bonus of JVGM tied to parent results	
Ability to decide on future promotion of JVGM (and other JV managers)	
Feedback; strategy/plan budgets, appropriation requests	
JVGM participation in parent's worldwide meetings	
Relations with JVGM; phone calls, meetings, visits	
Staffing parent with someone with experience with JV	
MNC level in Mexico	
Informal meetings with other parent	

Source: J. L. Schaan, *Parent control and joint venture success: The case of Mexico*, 249. Unpublished doctoral dissertation, University of Western Ontario, 1983.

by the Aston Group studies and the stream of research on centralization/decentralization/autonomy in large organizations and multinationals, Dang defined control as the autonomy of a subsidiary and measured the construct with a decentralization index based on seventeen key decisions. Executives from parent companies and their subsidiaries were asked to evaluate the subsidiaries' degree of autonomy for these decisions along a three-point scale. Non-parametric tests failed to reveal any differences in control based on ownership, or between complete or joint ownership. As a result, Dang concluded that the tendency and degree of multinationals' control over their subsidiaries could not be explained by equity ownership and, thus, that wholly-owned subsidiaries were not more tightly controlled than JVs. Nevertheless, he observed a more frequent presence of multinationals' expatriate managers in JVs and, therefore, suggested that the control exercised over the JVs might be more important than indicated by his control index.

Using a similar perspective, Killing [1983] studied control in thirty-seven JVs from developed countries. Building in part on the work of Tomlinson [1970], Killing employed interviews of parent company executives and JV general managers to examine parent firms' influence on nine types of decisions: pricing policy, product design, production scheduling, manufacturing process, quality control, replacement of managers, sales targets, cost budgeting and capital expenditures. More specifically, he inquired whether each decision was made (1) by the JV general manager alone, (2) by the local parent alone, (3) by the foreign parent alone, (4) by the JV general manager with input from the local parent or (5) from the foreign parent or (6) from both parents. Using this scale, Killing classified each sample venture as either a dominant partner JV (where only one of the parents played a dominant role in decisionmaking), a shared management JV (where each parent played an active role in decisions), or an independent JV (where the JV general manager enjoyed extensive decisionmaking autonomy). Beamish [1984] subsequently employed this same scale in an examination of JVs in less developed countries.

A significant contribution of the locus of decisionmaking perspective to the JV literature was conceptualizing control as a continuous variable, rather than merely an absolute, dichotomous variable representing parents' exercise of either total control or no control over the IJV. However, despite this contribution, several scholars have criticized the locus of decisionmaking perspective for presenting a very limited and incomplete view of IJV control [Skinner 1968; Brooke & Remmers 1978]. For example, several studies discussed above demonstrated the existence of means other than decisionmaking for exercising effective control over IJVs. Another criticism of this perspective is its implicit suggestion that parent firms seek to control the overall IJV, rather than targeting specific activities or processes perceived as crucial for achievement of the IJV's or the parent's strategic objectives. Concern with this implicit conceptualization of control constituted one of the bases for Schann's [1983] examination of ten IJVs in Mexico. Explicitly defining control as "the process through which a parent company ensures that the way a JV is managed conforms to its own interest" (p. 57), Schaan demonstrated that firms tended to seek control over specific "strategically important activities" rather than over the whole IJV.

Schaan's finding that control also had a *focus* dimension, i.e., that parents may choose to exercise control over a relatively wider or narrower scope of the IJV's activities, was supported by Geringer's [1986] study of ninety developed country JVs. These findings support the notion of parent firms' parsimonious and contingent usage of resources for controlling IJVs. This suggests that the exercise of effective control should emphasize selective control over those dimensions a parent perceives as critical, rather than attempting to control the entire range of the IJV's activities. This notion of selective control efforts raises the prospect of a split control IJV, one in which a parent firm may exercise dominant control over only a few dimensions of the venture. A split control IJV might be distinct from either of Killing's [1983] categories of an overall dominant control JV or a shared control JV, if all or most of the IJV's activities were dominated by a single parent firm but if no individual parent controlled a clear majority of the venture's activities.

As demonstrated by the preceding review, IJV control is a complex and multidimensional concept. Control is a much more subtle phenomenon than a proxy like centralization of decisionmaking is liable to capture, and it can be quite distinct from mere consideration of relative equity ownership or relative overall control of an IJV. In fact, as suggested by the above discussion, it is possible to distinguish three dimensions or parameters which comprise IJV control: (1) the *focus* of control, i.e., the scope of activities over which parents exercise control; (2) the *extent* or degree of control achieved by the parents; and (3) the *mechanisms* the parents use to exercise control. Contrary to initial appearances, these three parameters are not incompatible, but rather complementary and interdependent. They each examine a different aspect of IJV control.

The main problem remains that most studies on IJV control have had a limited perspective of the control concept or have only looked at one of its dimensions. Only a few studies, in particular ones by Schaan [1983] and Geringer [1986], have considered more than one parameter. However, it appears necessary to consider all three dimensions of control in order to obtain a thorough understanding of the control phenomenon for IJVs, although this integration has yet to be accomplished.

In addition to simultaneously addressing control's three dimensions, another important step toward improved understanding of parent control of IJVs lies in the identification of the different types of control mechanisms, similar to Schaan [1983]. Researchers need to broaden the range of control mechanisms which managers may employ, as well as refining the operationalization of these various mechanisms. In pursuing this task, it may be valuable to acknowledge the differences in the orientation of control mechanisms. Borrowing Bartlett's [1986] terminology, the "mechanism" dimension may be broken down into three components. First, control mechanisms may be *context-oriented*. These mechanisms encompass a wide variety of informal and culture-based mechanisms and their essential purpose is to establish an organizational context appropriate for the achievement of parent company objectives. For example, firms frequently emphasize the IJV's development of a teamwork culture, rather than an "us-them" culture. This might be promoted by designating all personnel as employees of the IJV, rather than individual parent firms, and by promoting a set of policies that evidences consistency between individuals' motivations and the IJV's well-being. Such a culture may represent a very effective substitute to more formal or *content-oriented* mechanisms. In the case of this second dimension of control mechanisms, rather than relying on the organizational setting, parents rely on more direct interventions, either by top managers or by the IJV's board of directors. These mechanisms are typically bureaucratic in nature, or what Schaan [1983] termed "negative" control mechanisms. They include specification in the IJV agreement of veto rights or the assignment of selected responsibilities to each parent. The final dimension may be termed *process-oriented* mechanisms, in which parent firms exercise control through reporting relationships or influence on IJV planning and decisionmaking processes. For instance, parent firms may require the participation of their corporate staff in the IJV's strategic planning process.

Future research should also emphasize greater depth of probing regarding the critical considerations and implications associated with each control mechanism, as well as the interrelationships between control mechanisms and both the extent and the focus of IJV control. For instance, staffing may represent a crucial strategic control mechanism for an IJV parent [Frayne & Geringer 1987; Pucik 1988]. A parent may be able to influence the relative allocation of control over a venture by influencing staffing of the IJV's top management positions. The IJV general manager's position, in particular, can affect an IJV's operations [Schaan & Beamish 1988] since the general manager is responsible for maintaining relationships with each of the parents, as well as running the venture. The means of selecting, training, evaluating and rewarding the performance of IJV general managers can significantly affect not only the venture itself, but also its relationship with each parent. The relative power of the IJV general manager's position is influenced by the governance structure established by the parents, and can range from autocratic (individual dominant control) to democratic (sharing of control among many managers). Given the importance of this and other control mechanisms, more extensive examination of these variables is necessary to enhance understanding of IJV control.

THE JOINT VENTURE CONTROL-PERFORMANCE RELATIONSHIP

To the extent that scholars have devoted attention to control in IJVs, the ultimate objective should not be limited to the study of the control concept itself. Rather, the underlying rationale should be improved understanding of the relationship of control to IJV performance. Thus, this section will review the approaches that have been employed in examining this critical relationship, as well as the studies' findings.

Tomlinson [1970], often considered the first scholar to empirically study the control-performance relationship for IJVs, did not directly examine parent control, but rather the "attitude of parents toward control." From a sample of seventy-one IJVs in India and Pakistan, Tomlinson found that IJVs evidenced higher levels of profitability when their U.K. parents assumed a more relaxed attitude toward control. However, the validity of these results may be questionable, since Tomlinson used return on investment as the measure of profitability. Utilization of this measure for a multi-industry sample does not appear adequate and may have produced bias in the results. Variations in the financial performance of IJVs could be caused, for example, by industry differences rather than differences in the attitude toward control.

Although Franko [1971] also studied the control-performance relationship, his work, which was related to Stopford and Wells' research [1972] on multinational corporations (MNCs), has received limited attention by researchers in the "IJV control" field because it focused on the parent (the MNC) and its strategy rather than on the IJV and its control. Using a sample of 169 U.S. MNCs involved in more than 1100 JVs, Franko examined how parent control over JVs as well as the JVs' stability or instability (measured by the liquidation or significant changes in ownership of a JV) varied according to the MNC parent's strategy. Franko's main argument was that different strategies had different organizational and control requirements, thereby influencing the stability of JVs. From his sample data, Franko concluded that JVs were more stable when the MNC parent followed a product-diversification strategy (roughly equivalent to Doz' [1986] national responsiveness strategy), which usually demanded less control over subsidiaries. In contrast, JVs evidenced greater instability when the parent's strategy emphasized product concentration (roughly equivalent to Doz' [1986] global product strategy), which usually relied on centralization of decisionmaking and strong control. Moreover, Franko demonstrated that JV stability tended to vary with the evolution of the MNC parent's organizational structure and strategy.

Nevertheless, Franko's results embody serious limitations. The author never clearly defined his concept of control, nor did he propose a genuine and direct measure of this construct. To evaluate control, he relied on the importance given by MNC parent firms to standardization and to the centralization of decisionmaking, particularly for marketing policy issues. Furthermore, the author's dependent variable, changes in JV ownership structure, fails to provide a clear sense of the JV's absolute or relative success or of the achievement of the JV's objectives, and therefore of the performance of the JVs. Because ownership may also be a control mechanism, utilization of this construct may result in confusion regarding the meaning of ownership changes. It is open to conjecture whether these changes are indicative of modifications in the control of the JV, or of its poor performance. Despite these concerns, Franko made a significant contribution by examining the JV control-performance link using the "strategy-structure" conceptual framework. Within this perspective, the degree of parental control as well as the JV's performance (or its stability) is presumed to be contingent on the MNC's strategy and structure. Unfortunately, despite the potential insights from employing this framework, no researchers have yet attempted to extend Franko's work in studying the control-performance relationship for IJVs.

The studies that constitute the "mainstream" of research on control and performance of IJVs have adopted a different, but not necessarily incompatible, approach than that employed by Franko [1971]. For example, Killing [1983] asserted that, among his three JV categories, dominant partner JVs are more likely to be successful, at least compared to shared management ventures. His argument was essentially as follows: since the presence of two (or more) parents constitutes the major source of management difficulties in JVs, dominant partner JVs, in which the venture's activities are dominated by a single parent, will be easier to manage and consequently more successful. This argument is especially easy to interpret within a transaction cost analytical framework, where transaction costs are defined as the costs assumed by firms for the enforcement, monitoring and administration of a transaction [Williamson 1981]. According to Williamson, firms tend to choose structural arrangements for transactions (markets or hierarchies) that minimize these costs. Coordination of and conflicts between parents, as well as the potential unintended disclosures of proprietary know-how discussed earlier, can generate transaction costs associated principally with uncertainty, opportunistic behavior and asset-specificity [Williamson 1975; Ouchi 1977; Anderson & Gatignon 1987] that can limit the potential gains from cooperating in an IJV [Beamish & Banks 1987; Buckley & Casson 1988]. Viewed from this perspective, dominant control is a mechanism for reducing the risks associated with coordination, potential conflicts and disclosures and, consequently, for minimizing transaction costs and stabilizing the IJV.

To test this hypothesis, Killing measured performance via management's assessment of the JV's performance (ranging from poor to good), as well as evaluating the liquidation or reorganization of the JV as a sign of failure. To justify use of these variables rather than financial indicators, Killing [1983], like Rafii [1978], explained that the profitability of the JV for a parent firm is not based solely on the JV's profits, but also on transfer prices, royalties and management fees not included in traditional financial performance measures. Due to this deficiency, traditional financial measures were, consequently, judged to be inadequate for use within a JV context.

Consistent with his hypothesis, Killing found that dominant partner JVs tended to be more successful, on both measures, than were shared management ventures. Independent JVs also exhibited superior levels of performance. In this latter case, Killing suggested that the JVs' autonomy was more a result than a cause of their performance. However, the evidence presented in support of this assertion was inconclusive. It did not completely rule out that autonomy, or the absence of parental control, was the stimulus rather than the response to higher JV performance. Furthermore, no formal statistical tests were used to support the assertion.

Similar to Killing [1983], Anderson and Gatignon [1986] proposed that entry modes offering greater control, as measured via the relative level of ownership, would be more efficient for highly proprietary products or processes. However, the work of other researchers has not provided much evidence to support Killing's [1983] contention that JVs dominated by one parent exhibited superiority in performance. For instance, Janger [1980] used a classification schema similar to Killing's, yet did not find that one type of JV tended to be more successful than another. Similarly, Awadzi, et al., [1986] failed to find any relationship between extent of parent control and the performance of IJVs.

Beamish [1984] also attempted to test Killing's hypothesis. Using Killing's [1983] data, he used a chi-square test to examine the relationship between type of JV and its performance, but found no significant relationships evident at the 0.05 level. Beamish subsequently utilized Killing's control scale and performance measures for twelve JVs in less developed countries (LDCs). Unsatisfactory IJV performance was found to be correlated (significance=0.067) to dominant foreign control, while dominant local control (control by LDC partner) and shared control JVs were judged unsatisfactory in only a few cases. Further analysis also demonstrated that dominant foreign control was significantly associated with unsatisfactory performance in four decisions (production scheduling, production process, quality control and replacement of managers) involving mainly production issues.

Using the notion that parent firms seek control over specific activities as a conceptual starting point, Schaan [1983] extended that argument as well as identifying several subtleties regarding the phenomenon. In particular, Schaan concluded that venture success, or the extent to which parental expectations for the IJV were met, was a function of the fit among three variables: the parent's criteria for success, the activities or decisions it controlled and the control mechanisms which were utilized. He concluded that IJVs in which parents achieved this "fit" would evidence better performance. Schaan failed to provide details regarding the underlying rationale for his conclusions. However, one can imagine that a parent firm not adequately exercising control over activities judged as critical for the achievement of its objectives could ultimately suffer from ineffective strategy implementation and strategic inflexibility.

Thus, despite its conceptual appeal, the relationship between dominant control and IJV performance appears to be far more complex and less direct than scholars may have originally perceived. Janger [1980] suggested that the organization of a JV has only a small direct influence on its performance. According to him, it would not be "the structure alone that makes for a successful organization, but how well the structure fits the strategy and power situation in the venture" (p. 32). Despite such comments, most prior research has been limited to a direct test of the IJV control-performance relationship without taking account of or controlling for other variables such as the parents' strategy and structure, as Franko [1971] did. Subsequent inconsistencies in results may therefore be an outgrowth of this situation.

Furthermore, the tendency of prior research to evidence differences both in the object of study and in the operationalization of performance may also help explain the conflicting results found in the literature. On one hand, scholars have focused either on developed country JVs [Killing 1983; Geringer 1988], on less developed country JVs [Tomlinson 1970; Friedman & Beguin 1971; Renforth 1974; Raveed 1976; Dang 1977; Rafii 1978; Schaan 1983; Beamish 1984], or on both types of JVs [Franko 1971; Janger 1980]. As demonstrated by Beamish [1985], less developed country JVs typically have purposes and dynamics quite different from those of developed country JVs. For instance, the motives underlying their formation have often been tactical in nature, or limited to the desire either to obtain knowledge about the local environment or respond to foreign ownership legislation.

On the other hand, no consensus on the appropriate definition of IJV performance has yet emerged. A variety of objective measures for IJV performance have been used, ranging from financial indicators [Tomlinson 1970; Good 1972; Dang 1977; Renforth 1974], to the survival or liquidation of the venture [Franko 1971; Raveed 1976; Killing 1983], its duration [Harrigan 1988; Kogut 1988a], and instability of (or significant changes in) its ownership [Franko 1971; Gomes-Casseres 1987]. However, these objective measures may not adequately reflect the extent an IJV has achieved its objectives. Despite poor financial results, liquidation, or instability, an IJV may nevertheless have attained the objectives of its parents—for example, of transferring a technology—and thus be considered "successful" by one or all of the parents. Likewise, IJVs may be viewed as "unsuccessful," despite achieving good financial results or continued stability in ownership or governance structures. Because of such concerns, Killing [1983], and later Schaan [1983] and Beamish [1984] used a perceptual measure based on a single-item scale measuring the parent's satisfaction vis-a-vis the performance of an IJV. The main advantage of this type of measure is its ability to provide information regarding the extent to which the IJV has achieved its objectives. Moreover, by collecting data from *each* parent regarding their level of satisfaction, as done by Schaan [1983] and Beamish [1984], researchers can help overcome methodological limitations associated with the use of such perceptual measures. The measure's reliability may also be enhanced if data is collected from multiple time periods, or from more than one respondent per firm, although such efforts may confront a myriad of logistical and cost barriers.

In short, the above review suggests that the empirical evidence regarding the control-performance relationship in IJVs is still limited. The importance and direction of this relationship have yet to be established, tested, and clarified.

CONCEPTUAL FRAMEWORK FOR STUDYING CONTROL OF INTERNATIONAL JOINT VENTURES

As previously discussed, prior research has been highly fragmented on the basis either of the conceptualization of IJV control, the object of study or the attention devoted to IJV performance (Table 2). In addition, clear understanding of the IJV control-performance relationship is constrained by apparent inconsistencies in results.

As a first step toward solving these problems, we have previously proposed a conceptualization of control that takes into account its three different dimensions. The next step involves the development of an integrative approach for studying control in IJVs. To address this latter issue, two conceptual frameworks appear to be particularly useful. The first framework is the transaction cost approach. Several works, mainly conceptual in nature, have already used their theoretical framework to explain the formation and dynamics of JVs [Beamish & Banks 1987; Harrigan 1988; Hennart 1988; Kogut 1988b]. Other studies that do not directly refer to transaction costs, including most of the recent studies of IJV control, also employ rationales that are compatible with this framework. Although the

TABLE 2
Summary of Research on JV Control

Conception of Control	Authors	Type of JVs[1]	Measure of Performance	JV Control-Performance Relationship
Mechanisms	Tomlinson (1970)	LDC	Profitability	Indirect
	Friedman & Beguin (1971)	LDC	—	—
	Stopford & Wells (1972)	both	—	—
	Gullander (1976)	LDC	—	—
	Rafii (1978)	LDC	Cost efficiency	Direct
	Schaan (1983)	LDC	Perceptual measure of satisfaction	Contingent on fit among criteria of success, activities controlled and mechanisms
Extent	Franko (1971)	both	Instability (change in ownership structure)	Contingent on MNC[2] parent's strategy
	Dang (1977)	LDC	—	—
	Janger (1980)	both	Not provided	Supposed as contingent
	Killing (1983)	DC	Survival & perceptual measure of satisfaction	Dominant control associated with performance
	Beamish (1984)	LDC	Same as Killing (1983)	No solid evidence for Killing's (1983) hypothesis
	Geringer (1986)	DC	—	—
	Awadzi et al (1986)	DC	Composite Index including financial, non-financial and industry-oriented measures	Non-significant relationship
Focus	Schaan (1983)	LDC	See above	See above
	Geringer (1986)	DC	—	—

[1]LDC refers to Less Developed Country; DC refers to Developed Country.
[2]MNC refers to multinational corporation.

transaction cost framework seems particularly valuable for providing a general theoretical base for analyzing control in IJVs, this perspective's potential usefulness may be limited by the difficulties and complexity associated with its empirical verification and operationalization. Further work aimed at operationalizing the measurement and evaluation of transaction costs is needed before the usefulness of this conceptual schema can be fully appreciated, particularly for studying IJV control.

The second conceptual framework with potential applications for studying control of IJVs is the strategy-structure approach. Although its potential usefulness was suggested by Franko's research [1971], and despite extensive use in examinations of parent-subsidiary relationships, the strategy-structure schema has not been employed subsequently for research on IJV control or the control-performance relationship. In fact, with the exception of Franko's, there have not been any studies which have explicitly considered the role of parent firm strategy in influencing the control parents subsequently exercise over their IJVs. This situation seems particularly surprising considering the importance attributed to organizational strategy-structure fit within the strategic management literature.

An especially promising avenue for future research lies in the integration of these two frameworks, which are not fundamentally incompatible but rather complementary. As shown by Jones and Hill [1988], transaction cost analysis provides the theoretical underpinnings absent in the strategy-structure paradigm. Thus, to better understand the relationship linking control and performance of IJVs, we must consider on one hand that there can be benefits from the exercise of IJV control. Without such control, parent firms may encounter difficulties in achieving the full potential of their strategies and in attaining their objectives. Control therefore can enable the firm to reduce transaction costs that could limit a strategy's benefits.

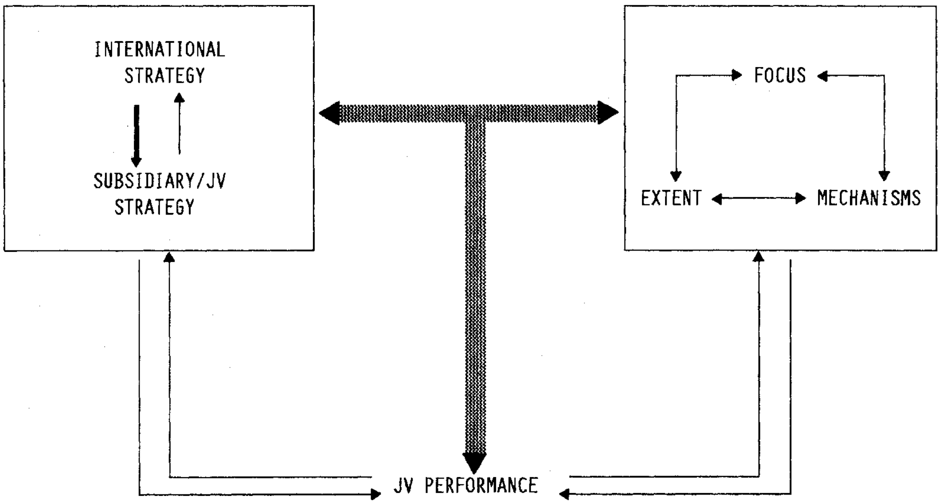
On the other hand, the exercise of IJV control is not without drawbacks; it indeed has a cost [Hulbrut & Brandt 1976; Jaeger 1982; Wilkins & Ouchi 1983; Vernon 1983]. Control often implies a commitment from a firm in terms of both responsibility and resources, and may lead to increased overhead costs [Anderson & Gatignon 1986]. It can also increase the risks to which a firm is exposed [Davidson 1982]. Consequently, the exercise of extensive control over an IJV's activities and decisions can generate important coordination and governance costs and limit the efficiency of an alliance [Contractor & Lorange 1988]. This may be especially true for control efforts oriented toward activities and decisions having little importance for performance of either the IJV or the parent firm.

Therefore, the critical issue for a parent firm is to exercise control, in terms of mechanisms, extent and focus, over an IJV in such a manner that will enable it to successfully implement its strategy without incurring a level of administrative or organizational inefficiencies which outweighs the gains from its cooperative endeavor. In other words, there is a strategy-structure "fit" when the benefits outweigh the costs of control, and this "fit" is best when the margin between benefits and costs is optimized. This rationale is readily illustrated by Franko's [1971] results. In the case of a product diversification (or national responsiveness) strategy, the foreign parent may perceive the need to exercise at least a moderate level of control over the IJV in order to protect its interests and to ensure effective strategy implementation. However, the extent of control that the foreign partner attempts to exercise may limit the autonomy and flexibility of the IJV and its local management, hindering the venture's ability to respond to local market demands and generating a level of transaction costs that may offset the strategy's potential benefits.

It is from this perspective that we propose a model for the study of IJV control (Table 3). Among its major characteristics, this model relies on an integrative concept of IJV control that takes into account its different dimensions. Furthermore, it is organized around the concept of strategy, more specifically the parents' international competitive strategies and the IJV's strategy. On one hand, Porter and Fuller [1986] have advocated the importance of looking at coalitions, such as IJVs, within the context of a firm's overall strategy for competing internationally in an industry. This approach is consistent with the stream of research on the relationship between strategy (at the corporate as well as the business level), structure and performance [Chandler 1962; Stopford & Wells 1972; Rumelt 1974; White 1986]. On the other hand, several authors have recently suggested that subsidiaries could have very different strategic roles depending on their parent's strategy, their environment and their competencies [White & Poynter 1984; Bartlett & Ghoshal 1986; Ghoshal 1987]. In addition, Gupta [1987] indicated that different strategic roles had different organizational requirements and that, consequently, subsidiaries' strategies had a relevant effect on how a parent managed its subsidiaries. Therefore, we believe that a thorough examination of the ways parents manage or control their subsidiaries, jointly or wholly-owned, must include consideration of strategy.

In the proposed model, IJV performance is mainly a function of the fit between the international strategy of the parents, the IJV strategy, and the parameters of control. It thus marks a net departure from traditional or most-used models where IJV performance is viewed as a direct outcome either of the mechanisms used or of the extent of control. In our model, strategy and control are also expected to have a direct influence, but to a much smaller extent. This raises the possibility that some combinations of strategy and control may be associated with superior performance. However, this issue has not yet been addressed in the literature, and space and focus limitations prevent us from addressing it here. Furthermore, among its advantages, our approach helps to emphasize what functions would be most critical to an organization's overall success. This type of research perspective could enhance understanding of the decisions parent firms make about which IJV activities to control, the extent of control to exercise, and the control mechanisms to employ. It can help clarify the nature of the linkages between these three basic parameters of control and IJV performance, and also permit recommendations to managers on what and how to control in order to promote achievement of IJV goals.

TABLE 3
A Strategy-Control Model of JV Performance



CONCLUSIONS

As corporations increasingly utilize alliances such as IJVs as tools for attaining strategic objectives, the issue of IJV control is experiencing a corresponding increase in attention from academics and practitioners alike. Yet, understanding of IJV management lags behind the demands of practice. Although a wide variety of control mechanisms have been identified, managers have received minimal guidance about when and how to use them, as well as about the potential tradeoffs between alternative control options. As a result, many firms have chosen to bypass the IJV option or have entered ventures ill-prepared. These firms may not only be missing potentially valuable opportunities, they may ultimately be eliminating themselves as viable contenders within entire industries. This concern is particularly critical when it affects participation within highly competitive global (or globalizing) industries.

In addressing control of IJVs, this paper has attempted to bring into focus a critical variable influencing venture development and performance, and to provide a base for improved understanding and management of IJVs. Review of the literature leaves no doubt that control is a crucial organizational process, for IJVs as well as for any other organizational form. It is also a complex and multidimensional concept. This feature may help explain why researchers have used different approaches to study control in IJVs. These differences, as shown in this paper, are particularly evident in the conceptualization and operationalization of control. In addition, due to variations among, and weaknesses of, prior measures of IJV performance, many conclusions from these previous studies have to be interpreted with some degree of caution. Furthermore, the empirical component of many studies is not without its shortcomings. Methodological issues such as differences in the object of study and in dependent variables may constitute potentially serious threats to the external validity of many, if not all, prior studies of IJV control.

Differences in research approaches are also evident in the frameworks or rationales used to link parent control to IJV performance. The review of the literature provided in this paper illustrates that the development of JV theory, specifically for the issue of control, has not reaped the full benefits possible from cross-fertilization with theoretical developments within other disciplines. In particular, developments in both transaction cost theory and the strategy-structure model appear particularly relevant for examining this relationship.

Consequently, research opportunities regarding control in IJVs are numerous. Many opportunities remain for further research stressing theory development and testing, particularly for JVs in developed countries. The objective of this paper was to assist in this endeavor by synthesizing prior research on IJV control. The identification of three underlying dimensions of control—focus, extent and mechanisms—as well as three orientations which control mechanisms may evidence, should be valuable in improving the design of future research. Similarly, discussion of a conceptual framework of IJV control should further enhance development of JV theory, specifically as it concerns control and performance of IJVs.

REFERENCES

Anderson, E. & H. Gatignon. 1986. Modes of foreign entry: A transaction cost analysis and propositions. *Journal of International Business Studies*, Fall: 1-26.

Awadzi, W., B.L. Kedia & R. Chinta. 1986. Performance implications of locus of control and complementary resources in international joint ventures—An empirical study. Presented at Academy of International Business Conference, London.

Baliga, B.R. & A.M. Jaeger. 1984. Multinational corporation: Control systems and delegation issues. *Journal of International Business Studies*, Fall: 25-40.

Bartlett, C.A. 1986. Building and managing the transnational: The new organization challenge. In M. Porter, ed., *Competition in global industries*, 367-404. Boston: Harvard Business School Press.

______ & S. Ghoshal. 1986. Tap your subsidiaries for global reach. *Harvard Business Review*, November-December: 87-94.

Beamish, P.W. 1984. Joint venture performance in developing countries. Unpublished doctoral dissertation, University of Western Ontario.

______. 1985. The characteristics of joint ventures in developed and developing countries. *Columbia Journal of World Business*, 20(3): 13-19.

______ & J.C. Banks. 1987. Equity joint ventures and the theory of the multinational enterprise. *Journal of International Business Studies*, Summer: 1-16.

Behrman, J. 1970. *National interest and the multinational enterprise*. New York: Prentice Hall.

Brooke, M. & H. Remmers. 1978. *The strategy of multinational enterprise*. London: Pitman.

Buckley, P. & M. Casson. 1988. A theory of cooperation in international business. In F. Contractor & P. Lorange, eds., *Cooperative strategies in international business*, 31-53. Toronto: Lexington.

Chandler, A.D. 1962. *Strategy and structure: Chapters in the history of the American industrial enterprise*. Cambridge, Mass: MIT Press.

Child, J. 1977. *Organization: A guide to problems and practice*. New York: Harper & Row.

______. 1972a. Organizational structure, environment and performance—The role of strategic choice. *Sociology*, January: 1-22.

______. 1972b. Organization structure and strategies of control: A replication of the Aston study. *Administrative Science Quarterly*, 17: 163-77.

______. 1973. Strategies of control and organizational behavior. *Administrative Science Quarterly*, 18: 1-17.

Contractor, F. & P. Lorange. 1988. The strategy and economics basis for cooperative venture. In F. Contractor & P. Lorange, eds., *Cooperative strategies in international business*, 1-28. Toronto: Lexington Books.

Cray, D. 1984. Control and coordination in multinational corporations. *Journal of International Business Studies*, Fall: 85-98.

Dang, T. 1977. Ownership, control and performance of the multinational corporation: A study of U.S. wholly-owned subsidiaries and joint ventures in the Philippines and Taiwan. Unpublished doctoral dissertation, University of California, Los Angeles.

Davidson, W.H. 1982. *Global strategic management*. New York: Wiley.

Doz, Y. 1986. *Strategic management in multinational companies*. Oxford: Pergamon.

______ & C.K. Pralahad. 1981. Headquarters influence and strategic control in MNCs. *Sloan Management Review*, Fall: 15-29.

______ & C.K. Prahalad. 1984. Patterns of strategic control within multinational corporations. *Journal of International Business Studies*, Fall: 55-72.

Drucker, P. 1974. *Management: Tasks, responsibilities, promise*. New York: Harper & Row.

Edstrom, A. & J.R. Galbraith. 1977. Transfer of managers as a coordination and control strategy in multinational organizations. *Administrative Science Quarterly*, 22: 248-63.

Egelhoff, W.G. 1984. Patterns of control in U.S., U.K., and European multinational corporations. *Journal of International Business Studies*, Fall: 73-84.

Etzioni, A. 1965. Organizational control structure. In J. G. March, ed., *Handbook of organization*, 650-77. Chicago: Rand McNally.

______. 1961. *The comparative analysis of complex organizations*. New York: Free Press.

Franko, L.G. 1971. *Joint venture survival in multinational corporations*. New York: Praeger.

Frayne, C.A. & J.M. Geringer. 1987. Self-management: A key to improving international joint venture performance. *Proceedings*. Conference on International Personnel and Human Resource Management, Singapore.

Friedmann, W.G. & J.P. Beguin. 1971. *Joint international business ventures in developing countries*. New York: Columbia University Press.

Gatignon, H. & E. Anderson. 1987. The multinational corporation's degree of control over foreign subsidiaries: An empirical test of a transaction cost explanation. Report *87-03. Cambridge: Marketing Science Institute.

Geringer, J.M. 1986. Criteria for selecting partners for joint ventures in industrialized market economies. Ph.D. dissertation, University of Washington, Seattle.

______. 1988. *Joint venture partner selection: Strategies for developed countries*. Westport, Conn.: Quorum Books.

Ghoshal, S. 1987. Global strategy: An organizing framework. *Strategic Management Journal*, 8(5): 425-40.

Giglioni, G.B. & A.G. Bedeian. 1974. A conspectus of management control theory: 1900-1972. *Academy of Management Journal*, 17: 292-305.

Gomes-Casseres, B. 1987. Joint venture instability: Is it a problem? *Columbia Journal of World Business*, Summer: 97-107.

Good, L. 1972. United States joint ventures and manufacturing firms in Monterrey, Mexico: Comparative styles of management. Unpublished doctoral dissertation, Cornell University.

Green, S.G. & M.A. Welsh. 1988. Cybernetics and dependence: Refining the control concept. *Academy of Management Review*, 13(2): 287-301.

Gullander, S. 1976. Joint ventures and corporate strategy. *Columbia Journal of World Business*, Spring: 104-14.

Gupta, A.K. 1987. SBU strategies, corporate-SBU relations, and SBU effectiveness in strategy implementation. *Academy of Management Journal*, 30: 477-500.

Harrigan, K.R. 1987. Strategic alliances: Their new role in global competition. *Columbia Journal of World Business*, Summer: 67-9.

______. 1988. Strategic alliances and partner asymmetries. In F. Contractor & P. Lorange, eds., *Cooperative strategies in international business*, 205-26. Toronto: Lexington.

Hennart, J.F. 1988. A transaction costs theory of equity joint venture. *Strategic Management Journal*, 9(4): 361-74.

Hulbrut, J.M. & W.K. Brandt. 1976. Patterns of communication in the multinational corporation: An empirical study. *Journal of International Business Studies*, Spring: 57-64.

Jaeger, A.M. 1982. Contrasting control modes in the multinational corporation: Theory, practice and implications. *International Studies of Management and Organization*, 12(1): 59-82.

Janger, A.R. 1980. *Organization of international joint ventures*. New York: Conference Board.

Jones, G.R. & C.W.L. Hill. 1988. Transaction cost analysis of strategy-structure choice. *Strategic Management Journal*, 9(2): 159-72.

Killing, J.P. 1983. *Strategies for joint venture success*. New York: Praeger.

Kogut, B. 1988a. A study of the life cycle of joint ventures. In F. Contractor & P. Lorange, eds., *Cooperative strategies in international business*, 169-85. Toronto: Lexington.

______. 1988b. Joint ventures: Theoretical and empirical perspectives. *Strategic Management Journal*, 9(4): 319-32.

Lawrence, P. & L. Lorsch. 1967. *Organization and environment: Managing differentiation and integration*. Homewood, Ill.: Irwin.

Lorange, P. & M.F. Scott Morton. 1974. A framework for management control systems. *Sloan Management Review*, Fall: 41-56.

______, M.F. Scott Morton & S. Ghoshal. 1986. *Strategic control*. St. Paul: West.

Merchant, K. A. 1982. The control function of management. *Sloan Management Review*, Summer: 43-55.

Miner, J. 1982. The uncertain future of the leadership concept: Revisions and clarifications. *Journal of Applied Behavioural Sciences*, 18(3): 293-307.

Mintzberg, H. 1979. *The structuring of organization*. New York: Prentice-Hall.

Moxon, R.W. & J. M. Geringer. 1985. Multinational consortia in high technology industries: Commercial aircraft manufacturing. *Columbia Journal of World Business*, Summer: 55-62.

Ouchi, W.G. 1977. The relationship between organizational structure and organizational control. *Administrative Science Quarterly*, 22: 92-112.

______. 1978. The transmission of control through organizational hierarchy. *Academy of Management Journal*, 21: 173-92.

______ & M.A. McGuire. 1975. Organizational control: Two functions. *Administrative Science Quarterly*, 20: 559-69.

Parry, T.G. 1985. Internationalization as a general theory of foreign direct investment: A critique. *Weltwirtschaftliches Archiv*, September: 564-69.

Perlmutter, H.V. & D.A. Heenan. 1986. Cooperate to compete globally. *Harvard Business Review*, March-April: 136+.

Porter, M.E. & M.B. Fuller. 1986. Coalitions and global strategy. In M. E. Porter, ed., *Competition in global industries*, 315-44. Boston: Harvard Business School Press.

Pucik, V. 1988. Strategic alliances with the Japanese: Implications for human resource management. In F. Contractor & P. Lorange, eds., *Cooperative strategies in international business*, 487-98. Toronto: Lexington.

Rafii, F. 1978. Joint ventures and transfer of technology to Iran: The impact of foreign control. Unpublished doctoral dissertation, Harvard University.

Raveed, S. 1976. Joint venture between U.S. multinational firms and host governments in selected developing countries: A case study of Costa Rica, Trinidad and Venezuela. Unpublished doctoral dissertation, Indiana University.

Reich, R.B. & E.D. Mankin. 1986. Joint ventures with Japan give away our future. *Harvard Business Review*, March-April: 78-86.

Renforth, W.E. 1974. A comparative study of joint international business ventures with family firm of non-family firm patterns: The Caribbean Community experience. Unpublished doctoral dissertation, Indiana University.

Rugman, A.M. 1985. Internalization is still a general theory of foreign direct investment. *Weltwirtschaftliches Archiv*, September: 570-75.

Rumelt, R.P. 1974. *Strategy, structure and economic performance*. Boston: Harvard Business School.

Schaan, J.L. 1983. Parent control and joint venture success: The case of Mexico. Unpublished doctoral dissertation. University of Western Ontario.

______ & P.W. Beamish. 1988. Joint venture general managers in LDCs. In F. Contractor & P. Lorange, eds., *Cooperative strategies in international business*, 279-99. Toronto: Lexington.

Schreyogg, G. & H. Steinmann. 1987. Strategic control: A new perspective. *Academy of Management Review*, 12(1): 91-103.

Skinner, W. 1968. *American industry in developing countries*. New York: Wiley.

Stopford, J.M. & L.T. Wells. 1972. *Managing the multinational enterprise*. New York: Basic Books.

Tannebaum, A.S. 1968. *Control in organization*. New York: McGraw-Hill.

Tomlinson, J.W.C. 1970. *The joint venture process in international business: India and Pakistan*. Cambridge, Mass.: MIT Press.

Vancil, R.F. 1979. *Decentralization: Managerial ambiguity by design*. Homewood, Ill.: Irwin.

Vernon, R. 1983. Organizational and institutional responses to international risk. In R.G. Herring, ed., *Managing international risk*, 191-216. Cambridge: Cambridge University Press.

West, M.W. 1959. Thinking ahead: The jointly-owned subsidiary. *Harvard Business Review*, July-August: 31-32.

White, R.E. 1986. Generic business strategies, organizational context and performance: An empirical investigation. *Strategic Management Journal*, 7: 217-31.

______ & T.A. Poynter. 1984. Strategies for foreign-owned subsidiaries in Canada. *Business Quarterly*, Summer: 59-69.

Wilkins, A.L. & W.G. Ouchi. 1983. Efficient cultures: The relationship between culture and organizational performance. *Administrative Science Quarterly*, 32: 468-81.

Williamson, O.E. 1981. The economics of organization: The transaction cost approach. *American Journal of Sociology*, 87(3): 548-77.

______. 1975. *Markets and hierarchies: Analysis and antitrust implications*. New York: Free Press.

Young, G.R. & S. Bradford, Jr. 1977. *Joint ventures: Planning and action*. New York: Financial Executives Research Foundation.