BETWEEN TRUST AND CONTROL: DEVELOPING CONFIDENCE IN PARTNER COOPERATION IN ALLIANCES

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Strategic alliances have been recognized as arenas with potential for opportunistic behavior by partners. Hence, a firm needs to have an adequate level of confidence in its partner's cooperative behavior. In this article we examine the notion of confidence in partner cooperation in alliances and suggest that it comes from two distinct sources: trust and control. We make the argument that trust and control are parallel concepts and that their relationship is of a supplementary character in generating confidence. In addition, we suggest that control mechanisms have an impact on trust level and that the trust level moderates the effect of control mechanisms in determining the control level. Finally, we discuss various ways to build trust within strategic alliances and important alliance control mechanisms.

Strategic alliances are interfirm cooperative arrangements aimed at achieving the strategic objectives of the partners. Joint ventures, minority equity stake, coproduction and joint research and development are just some forms of strategic alliances. Because strategic alliances essentially involve coordinating two or more partners to pursue shared objectives, satisfactory cooperation is vital to their success (Doz, 1996; Kanter, 1994). Scholars often cite a lack of cooperation and the opportunistic behavior of partners as causes for the relatively high rate of failure of alliances. Given that it is often impossible to identify who is likely to act opportunistically, the interesting question is what enables alliance partners to garner enough confidence in partner cooperation so that they are not overwhelmed by the potential hazards in alliances. A low level of confidence not only discourages the formation of a strategic alliance but also leads partners to view each other with suspicion—with obvious deleterious effects on their working relationship—if an alliance is formed.

However, researchers have not given this notion of confidence in partner cooperation adequate recognition as a significant concept in the field of strategic alliances. Our purpose here is to discuss this concept, identify its sources, and suggest ways for developing it in strategic alliances. We define confidence in partner cooperation as a firm's perceived level of certainty that its partner firm will pursue mutually compatible interests in the alliance, rather than act opportunistically. We also argue that the sense of confidence comes from two distinct sources: trust and control. In that context we discuss the implicitly complementary relationship between trust and control found in the literature and make the basic point that the two concepts should be considered in parallel so that they may supplement each other in special ways—not merely in the restricted sense of being complementary to each other. This opens up the important issue of a deliberate building of trust and more effective control mechanisms as two distinct avenues that can (and should) be pursued simultaneously for generating confidence in partner cooperation.

We divide the article into six parts. First, we discuss the concepts of partner cooperation and confidence in partner cooperation. Second, we examine how the two concepts of trust and control operate in a parallel fashion to generate confidence in partner cooperation. In the third section we examine the role of trust, control, and confidence level in different types of alliances. In the fourth section we further explore the complexities of the trust-control relationship and discuss the impact of control mechanisms on trust level, as well as the role played by trust

level in moderating the effectiveness of control mechanisms in determining the control level. Fifth, we present several ways in which trust building can be accomplished in alliances. Finally, we suggest various control mechanisms for developing confidence in alliance partner cooperation.

CONFIDENCE IN ALLIANCE PARTNER COOPERATION

Partner Cooperation

As the term suggests, "strategic alliances" involve allying two or more partner firms. The key features setting strategic alliances apart from other single-firm strategies are the element of interfirm cooperation (Arino, 1997; Buckley & Casson, 1988; Doz, 1996; Teece, 1992) and the uncertainty, which has been called "relational risk" (Das & Teng, 1996), about the presence of such desired cooperation. We define *partner cooperation* as *the willingness of a partner firm to pursue mutually compatible interests in the alliance rather than act opportunistically*. Some theorists believe that "cooperation is obviously superior to individual action at achieving virtually all goals" (Maitland, Bryson, & Van de Ven, 1985: 59). *Opportunism,* defined as "self-interest seeking with guile" (Williamson, 1975: 9), can be seen as the opposite of partner cooperation in strategic alliances.

Whereas opportunistic behavior in alliances is exemplified by cheating, shirking, distorting information, misleading partners, providing substandard products/services, and appropriating partners' critical resources, partner cooperation is characterized by honest dealing, commitment, fair play, and complying with agreements. Arino (1997) suggests that cooperation may include two particular dimensions: (1) veracity (i.e., being truthful) and (2) commitment (i.e., making efforts). Partner cooperation should not be assumed to exist in all strategic alliances. Although it seems desirable to have mutual forbearance, too often alliance partners are caught in infighting, as each of them attempts to get ahead in a manner that hurts partner firms (Hamel, Doz, & Prahalad, 1989).

Partner cooperation in strategic alliances is a significant concept because it represents a somewhat paradoxical situation: firms are supposed to pursue their own interests, but they are simultaneously required to restrain this natural pursuit in order to make alliances work. Thus, the key is to strike a balance between competition and cooperation (Teece, 1992). Although strategic alliances may be a mutually beneficial strategy when both markets and hierarchies are inefficient, the essentially fickle and tentative nature of partner cooperation should not be overlooked.

Because of this, some authors have suggested that strategic alliances may be fundamentally self-defeating, unstable, and transitional in nature (Das & Teng, 1997b; Inkpen & Beamish, 1997; Kogut, 1989; Williamson, 1985). After all, if cooperation and competition are at odds with each other, one cannot take for granted that a satisfactory level of cooperation will be sustained in alliances (Das & Teng, 1997a; Koot, 1988; Park & Russo, 1996). As Parkhe has noted, opportunistic behaviors are "individually rational yet produce a collectively suboptimal outcome" (1993: 794). In sum, it seems that partner cooperation, although desirable for the effectiveness of alliances, may not be easy to come by. The question, then, is how this issue of ensuring satisfactory cooperation is reflected in firms' perceptions and consequent conduct in strategic alliances.

Confidence in Partner Cooperation

In our view, this need for satisfactory partner cooperation means that a firm has to have sufficient confidence in partner cooperation for alliances to work. We define *confidence in partner cooperation* as *a firm's perceived certainty about satisfactory partner cooperation*. We must note that the concept is about a firm's expectations about its partner's behavior only; it has little to do with its own conduct in the alliance. The assumption is that, regardless of its own hidden agendas in an alliance, a firm will be concerned about its partner firm's opportunistic behavior.

This definition underscores the uncertainty aspect of partner cooperation. Because the concept is linked to perceived probability and uncertainty of a partner's behavior, it suggests the need for reducing the level of uncertainty by increasing the predictability of satisfactory cooperative behavior. Hence, we see the role of control level, in addition to trust level, in engendering confidence in partner cooperation. In the

next section we discuss these two concepts of control and trust as they relate to our proposed concept of confidence in partner cooperation, as well as the relationship between control and trust. We also clarify how this confidence in partner cooperation differs from the concept of trust, in both its essence and in terms of its role in the dynamics of strategic alliances.

Authors in the alliance literature thus far have not paid adequate attention to the concept of confidence in partner cooperation—a concept we believe has important implications for the alliance-making process. A lack of confidence in partner cooperation may well abort a potential alliance. Given the possibility of losses from an ill-considered alliance (such as unintended knowledge transfer and cover for subsequent acquisition), confidence in partner cooperation is essential to justify this otherwise highly risky strategy. It can be reasonably argued that, everything else being equal, firms with a high level of confidence in partner cooperation will be more willing to join an alliance. Confidence in partner cooperation is essential, but far from automatic. So what are the sources of this confidence? The literature does suggest two key sources—that is, trust and control—but the relationship between them needs clarification. In the following section we briefly review this literature and suggest that trust and control operate in a parallel fashion, supplementing each other as the key sources of partner cooperation.

SOURCES OF CONFIDENCE IN PARTNER COOPERATION

The Control Perspective

The extant literature suggests that control is a key source of confidence in partner cooperation. Firms in alliances tend to be more confident about partner cooperation when they feel they have an adequate level of control over their partners (Beamish, 1988; Sohn, 1994). Control is an important concept in management; some consider it, essentially, a cybernetic process. Others, however, have adopted broader perspectives, treating control as any process in which one party affects the behavior of others. Authors have used a variety of terms in the literature on the control paradigm, such as "level of control," "mode of control," "controlling," "control mechanisms," and "control systems"

(see Bradach & Eccles, 1989; Das, 1989, 1993; Flamholtz, Das, & Tsui, 1985; Geringer & Hebert, 1989; Goold & Quinn, 1990; Simons, 1991).

A consequence of all these diverse formulations is that control is referred to simultaneously as an organizational setup, a process of regulating behaviors, and an organizational outcome. For the purpose of this article, we consider control as "a regulatory process by which the elements of a system are made more predictable through the establishment of standards in the pursuit of some desired objective or state" (Leifer & Mills, 1996: 117). In addition, control mechanisms and level of control are two other important concepts. Whereas control mechanisms are the organizational arrangements designed to determine and influence what organization members will do, level of control is the direct outcome of the controlling process—that is, the degree to which one believes that proper behavior of the other party is ensured.

According to Merchant, "*Good control* means that an informed person can be reasonably confident that no major, unpleasant surprises will occur" (1984: 10, emphasis in original). The objective of control mechanisms is to help achieve an adequate level of control. Clearly, the logic is that, through the establishment of proper control mechanisms, the attainment of desirable goals becomes more predictable. Indeed, the purpose of control is to fashion activities in accordance with expectations so that the ultimate goals of the organization can be attained. Firms may want to use control mechanisms to either routinize their activities or to promote nonroutine activities, such as learning (Sitkin, Sutcliffe, & Schroeder, 1994), risk taking, and innovation. Regardless of the focus, firms use control to make the attainment of organizational goals more predictable, which ensures more certain outcomes, and it is in this sense that effective control is believed to help generate a sense of confidence.

Researchers of strategic alliances conform with this logic and focus on the characteristics of control mechanisms that enhance the level of control. Topics of special interest in this area include the role of ownership control in joint ventures (Blodgett, 1991; Mjoen & Tallman, 1997) and contractual control in order to deter opportunistic behavior (Parkhe, 1993; Provan & Skinner, 1989). In this article we focus on partner control, rather than on alliance control, since partner control appears to be the direct source of

confidence in partner cooperation. Partner control in alliances can be seen as a regulatory process by which the partner's pursuit of mutually compatible interests is made more predictable.

The Trust Perspective

Besides control, the literature suggests interfirm trust as a second source of confidence in partner cooperation (Ring & Van de Ven, 1992). Organizations develop close bonds over time and form a positive attitude regarding each other's reliability. We need to note here that a certain minimum level of interfirm trust is indispensable for any strategic alliance to be formed and to function. As Arrow puts it, "Virtually every commercial transaction has within itself an element of trust" (1972: 357), which is certainly true of any transaction conducted over a period of time. Because it is impossible to monitor every detail in most exchanges, firms must always have a minimum level of trust. Trust is especially valuable in alliances because, in varying degrees, firms have to rely on their partners' performance and themselves remain vulnerable to partners' actions (Kumar, 1996).

Scholars have examined interfirm trust in such areas as supplier relations (Lane & Bachmann, 1996; Moorman, Zaltman, & Deshpande, 1992), joint ventures (Inkpen & Currall, 1997; Madhok, 1995), and strategic alliances in general (Ring & Van de Ven, 1992; Zaheer & Venkatraman, 1995). The benefits of interfirm trust in strategic alliances seem wide ranging in character, including lowering transaction costs (Gulati, 1995), inducing desirable behavior (Madhok, 1995), reducing the extent of formal contracts (Larson, 1992), and facilitating dispute resolution (Ring & Van de Ven, 1994).

The concept of trust is perhaps as diversely interpreted as the control concept. On the one hand, scholars have broadly referred to trust as one's belief and expectation about the likelihood of having a desirable action performed by the trustee (Deutsch, 1973; Sitkin & Roth, 1993). On the other hand, some have narrowly defined it in terms of one's assessment of others' goodwill and reliability (Cummings & Bromiley, 1996; Ring & Van de Ven, 1992; Sabel, 1993). Those with a more restrictive approach define trust as "positive expectations about another's motives with respect to oneself in situations entailing risk"

(Boon & Holmes, 1991: 194). We adopt this definition of trust and note that, like most others (e.g., Currall & Judge, 1995; Mayer, Davis, & Schoorman, 1995), it regards risk as the core of trust. It has been argued that only in risky situations is trust a relevant factor (Deutsch, 1962; Kee & Knox, 1970), and to trust essentially means to take risk and leave oneself vulnerable to the actions of trusted others (Hosmer, 1995; Johnson-George & Swap, 1982).

Trust is believed to be a source of confidence because, by definition, trust is the degree to which the trustor holds a positive attitude toward the trustee's goodwill and reliability in a risky exchange situation (Gambetta, 1988; Nooteboom, Berger, & Noorderhaven, 1997; Ring & Van de Ven, 1992), and, as we stated before, confidence in partner cooperation is a firm's perceived certainty that its partner will act in a responsive manner. Obviously, the more the trustor believes in the goodwill and reliability of the trustee, the more confidence in cooperation he or she will harbor. As Luhmann (1979) has observed, trust is used to reduce the complexity of the events and gain positive expectations. Lane and Bachmann (1996) also have noted that trust is instrumental in reducing uncertainty, which is in line with our notion of confidence. Just as control mechanisms are meant to enhance the probability of having the desired behavior, trust also is useful in enhancing the *perceived* probability of desired behavior.

At this point, we believe it useful to clarify how the concept of confidence in partner cooperation is distinct from the concept of trust. First, we need to note that trust relates to expectations about the motives of the trustee. Confidence, however, deals with the perceived level of certainty that the partner will behave in a desirable manner. Thus, the key difference is that whereas trust refers to expectations about positive motives, confidence refers to certainty about cooperative behaviors.

Second, whereas trust is a contributor to confidence in partner cooperation—along with control—confidence, in terms of certainty of partner cooperation, cannot be equated with trust, which is merely about positive expectations about partner motives. Since trust and control are the two contributory factors of confidence in partner cooperation, either one by itself is insufficient to explain this confidence. Regarding confidence as the same as trust negates the role

of control in partner dynamics. In fact, even with minimum trust the partners still can develop a fairly high level of confidence, if adequate control mechanisms are in place.

Third, in terms of the implications of this difference between trust and confidence, while trust can be developed in specific ways (discussed later), confidence in partner cooperation can be developed in significant additional ways through control mechanisms (also discussed in a later section). In sum, these points demonstrate the nature of the difference between our proposed concept of confidence in partner cooperation and the concept of trust.

The Trust-Control Relationship

Although both trust and control may be related to confidence in partner cooperation, in no study have authors systematically examined all three concepts in an integrated manner. We find the literature to be unclear and inconclusive about the relationship between trust and control. Beyond the sense that trust is especially needed when the trustor has inadequate control over the trustee (Dasgupta, 1888), there is little consensus regarding the relationship between trust and control.

One view is that trust is simply a specific type of control mechanism. For instance, Bradach and Eccles (1989) treat trust as a control mechanism that governs economic transactions. However, they use the term "controlling exchanges" to essentially mean the conduct and facilitation of transactions, which is different from the concept of control as regulation. As a related matter, some researchers discuss self-control (e.g., Merchant, 1984) in organizations, which is essentially trust based. In our approach, because self-control does not involve influencing the behavior of others, it is not really a control mechanism. Sohn (1994) argues that social knowledge can be viewed as a social control mechanism and has found that it can be a substitute for formal control mechanisms, such as majority equity ownership in joint ventures. Nevertheless, social knowledge—that is, the ability to understand and predict others' behavior—is not the same as trust, which is a sense of goodwill and reliability. In sum, although some scholars suggest that trust and certain related concepts may be used as control mechanisms, the argument appears to be weak, if we adhere to the conventional understandings of trust and control discussed here.

In contrast to the above approach, another point of view is that trust itself is not a control mechanism but is a substitute for hierarchical control in organizations (e.g., Aulakh, Kotabe, & Sahay, 1997; Zaheer & Venkatraman, 1995). Sitkin and Roth (1993) report that organizations often use "legal remedies" as a substitute for trust. As Leifer and Mills put it, "While trust might be seen as a reason not to use objective controls, trust is not, in and of itself, a control mechanism" (1996: 129). Other researchers seem to concur with this conceptualization. Ring and Van de Ven (1994) discuss the substitutive relationship between formal legal contract (control) and psychological contract (trust) in interfirm cooperation. Madhok (1995) also argues that managing opportunism and relying on trust are two alternative approaches in managing joint ventures.

Although not clearly spelled out, the following logic seems to be implied in this substitutive conception. Because trust involves a positive attitude about others' motivations, conceptually, it is not about influencing and affecting others' behavior but is about believing that others will perform whatever serves the trustor's best interests, even in the absence of control. Thus, trust not only cannot be a control mechanism but it also implies the exclusion of deliberate control over the behavior of others. In fact, to trust and to control seem to be two completely different kinds of approaches. When it is possible to fully trust a partner, there is no need to control its behavior. Control comes into play only when adequate trust is not present. For instance, if a manager trusts employees to be self-motivated to do the best job possible, no behavior or outcome control will be needed.

Looking at it another way, the reason scholars may view trust and control as substitutes for one another is that they both contribute to something in common, and we believe that this is confidence in partner cooperation. Since both trust and control are instrumental in achieving a high level of confidence (see our earlier discussion), we suggest that they contribute jointly to the total level of confidence one has in partner cooperation.

Although many researchers have treated trust and control as substitutes, an implicit assumption in the literature is that there is a complementary relationship between the two—that is,

the more there is of trust, the less there is of control, and vice versa (e.g., Inkpen & Currall, 1997; Leifer & Mills, 1996). We believe that this restrictive complementary relationship needs reassessment, because an open-ended supplementary one would more appropriately capture the nature of trust and control as parallel concepts.

We are aware that a complementary relationship between trust and control is evident in the literature, in terms of the frequent assertion that both control mechanisms and trust building are usually costly for organizations. The selection, development, and implementation of control mechanisms, such as budgets, planning systems, and cost-accounting systems can be expensive (Simons, 1991). Trust is not free either; trust building is a planned activity and takes considerable resources from organizations over time. Creed and Miles (1996) have made it explicit that one has to simultaneously consider costs of control mechanisms, costs of failing to reach minimal levels of trust, and costs of trust building. Since both trust and control are costly to come by and jointly contribute to the level of confidence, scholars have argued that organizations will not pursue an excessive level of confidence in any given situation. For strategic alliances this means that, to reach a minimum level of confidence in cooperation, partners can use trust and control to complement each other (Beamish, 1988).

Despite the merits of this cost-based argument, a complementary relationship between trust and control may not be useful in a general sense, because there is no common level of confidence that is minimally acceptable to everybody. Partner firms will demand different confidence levels that they feel are needed, and these levels will be affected by a number of factors, including partner firms' risk propensity (Sitkin & Pablo, 1992; Sitkin & Weingart, 1995), the type of knowledge involved (Chesbrough & Teece, 1996), the amount of resources committed (Blodgett, 1991), the objective in the alliance (Bleeke & Ernst, 1995), and the type of alliance (see the next section). Thus, the level of trust and the level of control may not be related in a strictly inverse manner, if the confidence level fluctuates from partner to partner and from case to case. In fact, Inkpen and Currall (1997) hypoth-

esize such an inverse relationship in their study of joint ventures and find no support for it.

A supplementary relationship, by comparison, seems to describe the dynamics more realistically. That is, the trust level and the control level jointly *and* independently contribute to the level of confidence in partner cooperation, which may vary greatly for different partner firms. The key question here is whether the confidence level should be viewed as given and static. We believe it is not a zero-sum calculus, in which trust and control contribute to a specific level of confidence. In the supplementary conception we are suggesting, a higher trust level does not automatically dictate a lowering of the control level, and vice versa. All it means is more confidence in partner cooperation predicated upon certain levels of trust and control functioning as parallel phenomena.

A firm would be free to build more trust without being required to reduce controls. If the firm deems it necessary to have a higher level of confidence in partner cooperation, it may pursue changing both trust and control simultaneously and in a parallel fashion, without any zero-sum complementarity constraints linking trust and control. This means that the two can be employed simultaneously, in full awareness of the role and efficacy of each other.

In sum, we can see how the trust level and the control level have a supplementary relationship and how they have a joint effect on a firm's confidence in partner cooperation in a strategic alliance (see Figure 1). Hence:

> *Proposition 1: The aggregated level of trust and control will determine a firm's confidence in partner cooperation.*

TRUST AND CONTROL IN DIFFERENT ALLIANCE TYPES

We have so far discussed the supplementary relationship between trust and control and how this supplementarity is useful when considering the level of confidence in partner cooperation from case to case. One critical contingency seems to be alliance types. That is, strategic alliances are a variegated phenomenon, and their internal differences should not be overlooked in theory-building efforts

FIGURE 1
Trust and Control in Strategic Alliances
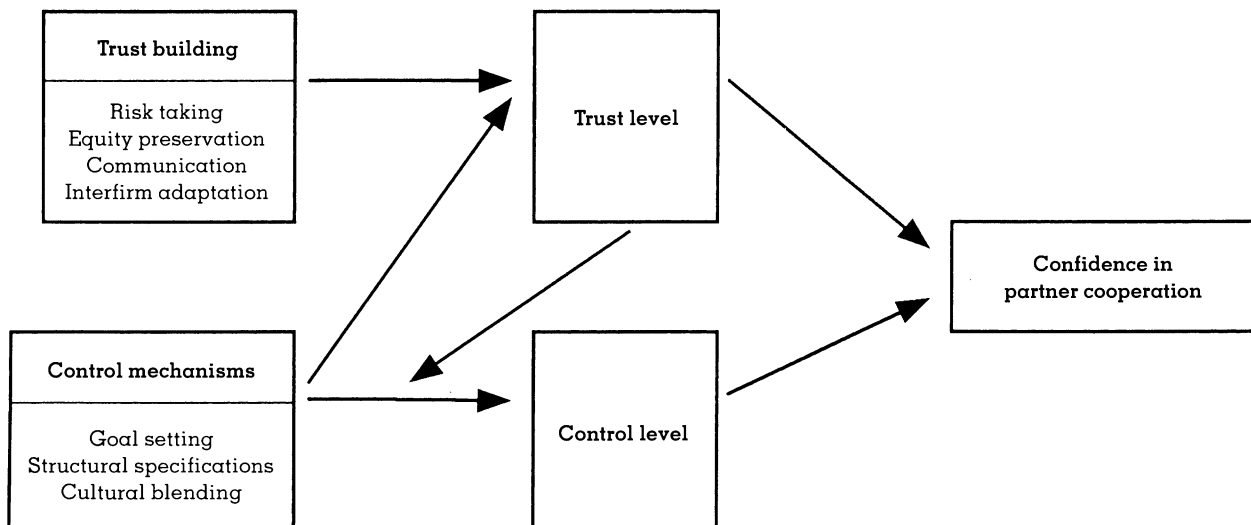
(Oliver, 1990; Stafford, 1994). Variances in alliance structural configurations may have important implications for our examination of trust, control, and confidence level relating to strategic alliances. In this section we discuss these contingent relationships and their integration.

Scholars often differentiate between equity and nonequity alliances (Das & Teng, 1996; Osborn & Baughn, 1990), and the difference is whether the alliance agreements include equity creation or equity exchange. Some researchers (e.g., Killing, 1988; Yoshino & Rangan, 1995) have identified three major alliance structures: (1) joint ventures (JVs), (2) minority equity alliances, and (3) nontraditional contracts (or nonequity alliances). JVs are independently incorporated entities that are separated from, but jointly run by, parent firms. Whereas minority equity alliances involve one party taking an equity stake in its partner (or equity swap), nonequity alliances are contractual agreements without any equity arrangements. Both of the latter types may have a variety of configurations, including, but not limited to, joint R&D, joint production, joint marketing, supplier partnerships, and licensing agreements. In this article we adopt the three-part typology and examine how the different alliance structures are related to trust, control, and confidence level (see Table 1).

Object of Control

JVs are separate from parent firms and usually have their own boards of directors and organizational hierarchy. For JVs one object of control is the JV per se—that is, the parent company determines what should or should not be done by the JV. Schaan defines control in JVs as "the process through which a parent company ensures that the way a JV is managed conforms to its own interest" (1983: 57). Because JVs operate independently of parent firms, scholars emphasize the need to treat JVs as separate organizations, so controlling JVs is more or less like controlling a subsidiary (Geringer & Hebert, 1989; Harrigan & Newman, 1990). Less attention is given to the fact that control in JVs is not only about regulating what the JV may do but also controlling what the partners may do (Bleeke & Ernst, 1991; Kogut, 1989). In fact, partners often use JVs as a cover to learn the other firms' know-how (Hamel, 1991; Hennart & Reddy, 1997). In this sense, control in JVs may be more complicated than we think, since the object of control includes both the JV per se and the partner firms.

In contrast, minority equity alliances and nonequity alliances do not involve the creation of separate entities. Partner firms simply work jointly, in accord with their agreement. Thus, the object of control in these two types of alliances is the partner only. In other words, the purpose

TABLE 1
Trust, Control, and Confidence in Different Alliance Types

Dimensions	Alliance Types		
	Joint Ventures	Minority Equity Alliances	Nonequity Alliances
Object of control	JV and partner	Partner	Partner
Type of control	Hierarchical control and ownership control	Ownership control	Contractual control
Manifestation of trust	Delegation and JV autonomy	Using equity share more as a distribution mechanism than as a voting mechanism	Contractual flexibility
Requisite confidence level	High	Moderate	Low

of control is to ensure that the partner does not behave opportunistically.

Type of Control

Since JVs are separate entities jointly owned by two or more partners, the type of control used in JVs includes both hierarchical and ownership control (Aulakh et al., 1997). On the one hand, hierarchical control refers to the type of control used within organizations. It is based on authority and involves giving orders to subordinates and then evaluating their performance. Staffing, reporting structure, meetings, policies, and procedures are a few examples of hierarchical control. For instance, when a partner exercises control by appointing its executive as the general manager of a JV, the general manager relies on hierarchical control to get the job done.

On the other hand, controlling JVs also involves ownership because the JV is jointly owned. Researchers have focused on the role of ownership control in JVs (see Geringer & Hebert, 1989). One view expressed is that equity ownership is the ultimate means of control, owing to the fact that more equity shares give a partner more voting power (Blodgett, 1991). The opposite view is that control is not "a strict and automatic consequence of ownership" (Geringer & Hebert, 1989: 238), so ownership plays only a limited role in providing control in JVs (Heide & John, 1992). In our view, since both hierarchical and ownership control are useful in controlling JVs, the finding that control level is not equivalent to one's equity share in JV is only to be expected (Mjoen & Tallman, 1997).

Unlike in JVs, partners in minority equity alliances often rely on ownership control, for equity ownership is the glue that binds the partner firms. Hierarchical control is not pertinent here, because there is no separate entity, and one partner cannot exercise hierarchical control over the other. Since one or more firms may be cross-held by their partners, the means of equity ownership becomes the more prominent one (Das & Teng, 1998a). Thus, the percentage of minority position held by the partner firms (i.e., whether it is 1 percent or 49 percent) strongly influences how much say (or control) each partner has in the alliance (Sohn, 1994).

In contrast, nonequity alliances do not involve any equity arrangement, so neither hierarchical nor ownership control is possible. Nonequity alliances, such as licensing agreements and supplier agreements, essentially are contract based, in the sense that these contracts are less open ended than those of JVs. Thus, contractual control becomes especially important in governing the partnership. Without shared equity ownership, it is difficult to align the interests of potential partners. Thus, partner firms use contractual rigidity to make sure that contingencies are covered and opportunism is deterred.

Manifestation of Trust

Since trust and control are parallel concepts, the manifestation of trust among partners in strategic alliances is tied to the type of control they use. Essentially, for a given confidence level, the development of trust is the opposite of the tightening up of control. Thus, trust in JVs is manifested in the grant of more autonomy and delegation to the JV (Lyles & Reger, 1993). Since JVs are separate entities, trust in the partner's goodwill and reliability ultimately leads to the

belief that the JV will comply with the parent firm's best interests. Thus, more discretion and decision-making autonomy will be granted—both to the JV and to the partner—in managing the entity.

As we noted above, ownership position plays an important role in minority equity alliances. Thus, the use of equity share is a manifestation of the level of trust between the partners. Although scholars often highlight the controlling function of equity share (Blodgett, 1991; Lecraw, 1984), in relationships characterized by interfirm trust, the function of equity share may become purely a distribution mechanism. In such circumstances, partners use shared ownership as a guide for allocating residuals, rather than for merely determining the voting power among themselves.

Finally, trust among partner firms in nonequity alliances often is manifested in contractual flexibility. Nonequity alliances are also called "nontraditional contracts," since they rely more on explicit contracts compared to other types of alliances, and "relational contracting," because the existence of trust makes incomplete contracts conceivable (Borch, 1994; Macneil, 1980). When partners trust each other, they are in a better position to appreciate the benefits of contractual flexibility, which include faster response and more efficient environmental and interfirm adaptation.

Requisite Confidence Level

Various types of alliances may require different levels of confidence in partner cooperation. First of all, some types of alliances require much more alliance-specific investments than other types (Joskow, 1987). Alliance-specific investments often are nonrecoverable investments, since they represent the amount of resources committed to the alliance that cannot be fully recovered if there is an unplanned alliance dissolution. The more alliance specific the investments, the more risk there is for partner firms. Thus, a higher level of alliance-specific investments demands a higher level of confidence in cooperation, which helps assuage the partners' concerns about alliance performance. In other words, partners need more certainty about cooperation in order to commit substantially to an alliance. Among the three types of alliances, JVs clearly require the highest level of alliance-

specific investments, since a separate entity needs to be set up. By comparison, the need for alliance-specific investments tends to be relatively low in nonequity alliances. For example, in licensing agreements the licensor provides patents and/or know-how to the licensee for a fee, so there is little nonrecoverable investment involved on the part of licensor.

The second reason that needed confidence level may differ is that the level of embeddedness varies across alliance types (Osborn & Baughn, 1990). Embeddedness refers to the degree of mutual dependence and connectedness among the exchange parties (Granovetter, 1985; Provan, 1993). Interfirm embeddedness contributes to the formation of strategic alliances, for firms in social networks need each other more than what regular business contracts can accommodate. More importantly, strategic alliances, in turn, also raise the level of interfirm embeddedness (Proven, 1993), because the partner firms cannot freely exit the relationship. In this sense interfirm embeddedness is tantamount to exit barriers in alliances. It is apparent that JVs invite a high degree of interfirm embeddedness, whereas partner firms in nonequity alliances are least embedded. That is, licensing agreements can be terminated without much complication, whereas the dissolution of JVs and minority equity alliances involves equity relinquishment. Thus, only if partner firms have a fairly high level of confidence in partner cooperation will they be willing to enter into a JV.

Finally, apart from the initial nonrecoverable investment, potential harm (or down-side risk) because of opportunistic behavior also differs greatly from one type of alliance to another. Strategic alliances are often noted for being a fertile arena for unintended resource transfer, especially technological and managerial know-how (Hamel, 1991). Partner firms often use alliances as a cover for appropriating firm-specific resources (Inkpen & Beamish, 1997). Thus, partner firms are exposed to the risk of losing competitive advantage through ill-suited alliances. Among the three alliance types, JVs are potentially the most susceptible to the unintended transfer of knowledge and know-how, as partners work closely in a single organization (Hennart & Reddy, 1997; Mowery, Oxley, & Silverman, 1996). By comparison, in minority equity alliances and nonequity alliances, partner firms often carry out their part of responsibilities sepa-

rately (i.e., more contract based), thus reducing the scope and possible impacts of opportunistic behavior. Again, a higher degree of confidence in cooperation is demanded for JVs since this structure is the most conducive of the three for opportunism.

In sum, since JVs come with more alliance-specific investments, a higher level of interfirm embeddedness, and more possibilities for opportunistic resource transfer, a high level of confidence in partner cooperation is essential. By the same token, nonequity alliances demand only a relatively low level of confidence, and minority equity alliances a moderate level.

We can also examine requisite confidence levels in terms of how trust and control jointly contribute to the confidence level in partner cooperation. This additive relationship has different implications for the three types of alliances, as we represent in summary fashion in Table 2. Both the trust level and the control level have been dichotomized into high and low values, in order to explore these differences in terms of four categories of confidence.

When both the trust level and the control level are high, the firm will have high confidence in partner cooperation. In alliances high confidence is generated when mutually trusting partners negotiate substantive control mechanisms to ensure cooperation. This high-high situation is most likely to exist for JVs, since they demand a high level of confidence. Partners entering into a JV, irrespective of their previous good relationship, are known to devote considerable time and effort in developing elaborate control mechanisms, such as frequent meetings between the partners, periodic written reports of all relevant

transactions, and so on (Geringer & Hebert, 1989; Parkhe, 1993).

Along similar lines, a low-low situation will lead to low confidence in partner cooperation; this is most appropriate for nonequity alliances, such as licensing arrangements and supplier partnerships. Low confidence is present when partners have limited trust in each other and limited ability to influence each other's behavior.

As to the low-trust, high-control situation, the resulting confidence category may be labeled "moderate." Partners establish the essentially control-based confidence mainly through stringent regulations and common norms, rather than on the basis of perceived goodwill and reliability. Although the trust level may be low, sufficient technical rules are provided to foster a moderate level of confidence in partner cooperation. By the same token, the high-trust, low-control situation also leads to moderate confidence, based mainly on a sense of positive expectations of partners' motives. Since both these situations reflect a moderate confidence level, minority equity alliances are the most likely structural choice under these two circumstances.

TRUST LEVEL, CONTROL MECHANISMS, AND CONTROL LEVEL

Although, as mentioned earlier, we regard trust and control as parallel sources of confidence in partner cooperation, our conceptualization does not suggest that trust and control are completely noninteracting concepts. In fact, we believe that control mechanisms may have

TABLE 2
Requisite Confidence Levels in Different Alliance Types

		Control Level	
		High	**Low**
Trust Level	High	*High* confidence in partner cooperation Joint ventures	*Moderate* confidence in partner cooperation Minority equity alliances
	Low	*Moderate* confidence in partner cooperation Minority equity alliances	*Low* confidence in partner cooperation Nonequity alliances

some direct impact on the trust level and that trust level plays a moderating role between control mechanisms and control level (see Figure 1).

Effect of Control Mechanisms on Trust Level

We have noted that control mechanisms are organizational arrangements intended to enhance the level of control. The relationship between control mechanisms and trust is far from clear in the literature. In essence, the dispute is about whether the deployment of control mechanisms damages trust among exchange members. Argyris (1952) notes that control mechanisms imply that one party does not trust the other. Since trust has the characteristic of reciprocity, one tends to think along the lines of "I do not trust because you do not trust." Consequently, this may evolve into a vicious cycle, tending toward trust dissolution. Following this logic, control mechanisms will undermine the trust level in strategic alliances.

Nevertheless, those holding the contrary viewpoint maintain that control mechanisms, if used properly, may help build mutual trust (Goold & Campbell, 1987). The basic argument here is that, because control mechanisms provide a "track record" for those who perform well, trust between the parties may eventually be nurtured and strengthened. Thus, a track record and an objective evaluation process are more conducive for generating trust than a subjective evaluation process. Furthermore, Sitkin suggests that legalization, in terms of "reliance on formal rules and standardized procedures" (1995: 189), can facilitate "the development, diffusion, and constructive institutionalization of trust in organizational settings" (1995: 187). Goold and Quinn (1990) also note that control mechanisms may not always militate against the development of trust.

Apparently, this dispute about the effect of control mechanisms on trust level has important implications for strategic alliances. Although we agree that control mechanisms do not necessarily undermine trust, we believe there needs to be a more refined and contingent approach. Ouchi (1979) differentiates outcome, behavior, and clan (or social) control mechanisms. Formal control includes outcome control and behavior (or process) control, which measures, evaluates, and rewards either outcomes or behaviors. He proposes that the optimal choice of control mechanisms is determined by task char-

acteristics (i.e., outcome measurability and task programmability). Thus, there needs to be a fit between task characteristics and the control mechanisms employed. More recently, some have suggested that agency theory variables (behavior observability and outcome uncertainty) are also critical in this choice (Eisenhardt, 1985; Kirsch, 1996).

Hence, one type of contingency is that a lack of fit between the situation and the choice of control mechanisms leads to an erosion of trust. Another type of contingency, which we explore in this article, is when different effects on trust stem directly from different control mechanisms. Aulakh et al. (1997) argue that the three types of control mechanisms (i.e., output, process, and social) have different effects on trust in partnership. According to their hypothesis, output control is negatively related to trust level, whereas process and social control are positively related to trust level. However, they found empirical support only for a positive relationship between social control and trust level.

In our view it is necessary to consider formal control and social control for their distinctive implications for trust. Whereas formal control employs codified rules, goals, procedures, and regulations that specify desirable patterns of behavior, social control utilizes organizational values, norms, and cultures to encourage desirable behavior. The key difference is that formal control is more of a strict evaluation of performance while social control is about dealing with people. Thus, formal controls may create stress, thereby affecting mutual trust.

Formal control serves to influence people's behavior patterns by delineating clear boundaries. Whether the target of control is prescribing specific performance goals (output control) or specific processes (behavior control), the implication is that one cannot have full autonomy in deciding what is best for the organization. This reservation often suggests a lack of belief in one's goodwill, reliability, or competence. Sitkin and Roth (1993) report limited effectiveness of legalistic remedies (i.e., formal rules and contracts) for building trust. Hence, it appears that the nature of formal controls is at odds with a trusting environment, which suggests a negative relationship between formal control and trust level.

This is also the case with strategic alliances. When extensive contractual safeguards, such as lawsuit provisions, are featured, a sense of sus-

picion rather than trust tends to dominate the relationship. Each alliance has a contract, but the difference is in terms of the degree to which process and conduct are specified. In their study of international JVs, Cullen, Johnson, and Sakano (1995) found no support that formal control led to more commitment in alliances. Also, Sitkin and Stickel found that formal control systems "can lead to escalating distrust if they are ill-suited to the task at hand" (1996: 209). Of course, this does not mean that nothing can be done about formal control to help build trust. For instance, Mayer and Davis (1996) report that replacement of an appraisal system with a more valid one increases the level of trust. The implication is that poorly designed formal control mechanisms can undermine trust.

In contrast to formal control, social control relies on normative considerations to influence others' behavior. Social control is about inducing desirable behavior through "soft" measures, so it is associated more with such terms as "informal control," "normative control," and "clan control" (Leifer & Mills, 1996). The underlying assumption of social control is that people can ultimately determine their own behavior. Influence comes only in the form of shared goals, values, and norms. Since there is no explicit restriction on members' behavior, more interpersonal respect and less mistrust are implied in social control than in formal control. As such, social control is manifested in a certain level of confidence in members' judgment and competence, which lays the foundation for trust (Larson, 1992).

Like trust building, social control tends to take a long-term orientation toward a relationship, for cultural systems and norms are nurtured only slowly. Although this characteristic does not rule out the use of social control in more short-lived alliances, it is more likely to be effective in more long-term arrangements, such as JVs. Social control in alliances often takes the form of socialization, interaction, and training. Some natural by-products of socialization and interaction are better understanding and shared values, which then lead to interfirm trust (Creed & Miles, 1996; Madhok, 1995). Moreover, social control often provides a supportive environment for partner firms to understand the process and objective of alliance management, which is often ambivalent at the beginning (Doz, 1996). Thus, considerable overlaps exist between social control mechanisms and trust building. Fi-

nally, as we mentioned, scholars have found empirical support for a positive relationship between social control and trust level (Aulakh et al., 1997). In summary, we propose the following:

> *Proposition 2a: The deployment of formal control mechanisms will undermine the level of trust among partners.*

> *Proposition 2b: The deployment of social control mechanisms will enhance the level of trust among partners.*

Trust Level As a Moderator Between Control Mechanisms and Control Level

Regarding the relationship between control mechanisms and actual control level, we cannot take for granted the direction of causality. Merchant notes that "more controls [control mechanisms] do not necessarily give more control, but the reasons why this occurs are not clear" (1984: 2). Thus far, scholars suggest that a number of unintended negative consequences result from implementing control mechanisms, which may, in turn, hamper effective control (Goold & Quinn, 1990). Major side effects from controlling include behavioral displacement, gamesmanship, operating delays, and negative attitudes (Merchant, 1984). Since these side effects are dysfunctional for achieving the ultimate purpose of the organization, partners do not automatically achieve effective control by implementing control mechanisms.

Apparently, we still do not know enough about the relationship between control mechanisms and actual control level. Goold and Quinn (1990) propose a contingency theory to explore the effectiveness of control mechanisms, as moderated by types of business. Vryza and Fryxell (1997) also report that interfirm trust moderates the relationship between informal control and JV performance.

In line with this contingency thinking, we suggest that trust level may be a moderator between control mechanisms and control level in strategic alliances. According to Goold and Quinn, "[T]rust is a prime prerequisite of effective control" (1990: 54), because the implementation of control mechanisms requires a certain level of trust. Using a similar logic for marketing partnerships, Heide and John argue that norms provide the conditions under which effective

control can be exercised (1992: 36). Without a minimum level of trust, it is extremely difficult to agree on goals, to impose rules, and to conduct teamwork. With the presence of interfirm trust, control is less likely to backfire, as partners understand each other better and are more willing to exercise mutual forbearance.

Mohr and Spekman (1994) have noted that trust induces desirable behavior in alliances, including more efficiency with conflict resolution. Although a good level of control requires the presence of trust, trust per se is unlikely to be a direct attribute of control (Leifer & Mills, 1996). The reason for this is that trust as one's own perception about others does not directly influence others' behavior. Otherwise, trust would be conceptualized as a control mechanism.

Accordingly, we propose that trust plays a moderating role between control mechanisms and control level. When there is a high level of trust, control mechanisms are more likely to be effective in generating an adequate level of control. In other words, trust will facilitate the operation of control mechanisms. Thus:

> *Proposition 3: In strategic alliances the trust level will exert a moderating effect in a manner so that control mechanisms will achieve a greater level of control in high-trust situations than in low-trust situations.*

TRUST BUILDING IN STRATEGIC ALLIANCES

We noted earlier that the difference between a complementary view and a supplementary view of trust and control is not without significance. Although Creed and Miles (1996) have noted that trust level is not static in any given relationship, most researchers have not paid sufficient attention to the fact that trust needs to be developed in a conscious and gradual manner (Bhide & Stevenson, 1992). Based on the restrictive notion of a necessarily complementary relationship between trust and control in alliances, scholars' emphasis seems to have been on how best to institute adequate control mechanisms when trust is not available (Blodgett, 1991; Yan & Gray, 1994). Consequently, not enough thought has been given to the question of trust building in alliances, as compared to the attention given to deploying control mechanisms in lieu of needed trust. In this section we turn to trust building in strategic alliances.

Many have viewed trust as an essential ingredient in almost all kinds of human relationships, since it has a smoothing effect on exchanges in a very efficient way (Arrow, 1972; Deutsch, 1973; Luhmann, 1979; Williamson, 1993; Zand, 1972). Thus, psychologists and sociologists have done extensive studies on how to develop trust among individuals (Boon & Holmes, 1991; Gabarro, 1978; Lewicki & Bunker, 1996; Zucker, 1986). By comparison, the literature does not offer much help in adequately comprehending the process by which interfirm trust develops. In this section we present some selected trust-building techniques in strategic alliances. The more significant techniques include risk taking, equity preservation, communication, and interfirm adaptation, and they are intended to assist firms in accumulating information on the basis of which the trustworthiness of partners can be evaluated. Some of these techniques have been mentioned in the literature but have not been closely linked with strategic alliances. Thus, our contribution here is in terms of systematically presenting trust-building techniques in the alliance context.

Trust from Risk Taking

Most theorists would agree that trust is intimately associated with risk and risk taking (Coleman, 1990) and that trust and risk can be considered "mirror images" of each other (Das & Teng, 1998b). Trust and risk taking are believed to form a reciprocal relationship: trust leads to risk taking, and risk taking, in turn, buttresses a sense of trust, given that the expected behavior materializes (Boon & Holmes, 1991; Madhok, 1995; Rempel, Holmes, & Zanna, 1985). When a trustee realizes that a trustor has taken considerable risk in trusting her, she tends to be motivated to behave in a trustworthy manner.

Such reciprocity has been found to be a key element in trust building (Johnson, Cullen, Sakano, & Takenouchi, 1997; Larson, 1992). The logic is one of "I trust because you trust" (McAllister, 1995) or "trust begets trust" (Creed & Miles, 1996). Only if some initial risk is taken is it possible for the trustee to demonstrate his or her trustworthiness. It is in this sense that Strickland (1958) suggests that, in order to develop trust, one needs to take risk first—as if the trustee deserves the trust. Gulati, Khanna, and Nohria (1994) have argued that because strate-

gic alliances often do not constitute the prisoner's dilemma situation, unilateral commitments may well be a good strategy. Also, a significant level of nonrecoverable investment in an alliance signals one's commitment and trust, thus further boosting the trust level among partners. Indeed, although strategic alliances are often motivated by a need to reduce risk in the marketplace, they also invite firms to take relational risk with their partners.

Although risk taking breeds trust, firms do not blindly take unjustified risk in the hope of developing a trustful relationship. It is more likely that a gradual approach is adopted, in which partners start with limited investments. As options theorists suggest, incremental resource commitments may be the preferred strategy when risk and uncertainty levels are high (Bowman & Hurry, 1993). Deeply rooted in historical engagement, trust is most likely to be the accumulation of prior satisfactory experiences (Gulati, 1995; Luhmann, 1988). Locating a partner with a good reputation seems to be an effective starting point. A firm with a reputation of being honest, fair, and trustworthy gives one the needed first piece of evidence to take some initial risk (Barney & Hansen, 1994).

Once a trustworthy partner is found, alliance partners rely on the trial-and-error approach in building up interfirm trust. Trust earned from prior engagement then serves as the evidence to justify a subsequent risky step beyond the accumulated evidence. Larson (1992) provides case studies of how a trial period is used among entrepreneurial firms to build up mutual trust in an incremental fashion.

Trust from Equity Preservation

Besides risk taking, a second way to build trust among partners is to ensure that equity and fairness are mostly preserved (Korsgaard, Schweiger, & Sapienza, 1995; Sheppard & Tuchinsky, 1996). In essence, equity means that the firm contributing the most resources (both tangible and intangible) to the alliance should get the most from it. According to the equity theory of motivation, people have a strong need to maintain their sense of equity in exchange relationships (Adams, 1963).

Equity is essential not only for cooperation within organizations, but also for interfirm cooperation. Kumar (1996) stresses the importance of

distributive and procedural justice in creating trust in manufacturer-retailer relationships, and Johnson (1997) reports that perceptions of procedural justice in strategic decision making have important impacts on partners' commitment to JVs. Should partners become concerned about potential inequities in profit distribution, for instance, their confidence in and commitment to the alliance most likely would recede, even if the alliances are about to bring positive results. The reason, as equity theory of motivation suggests, is that people may be preoccupied with maintaining a fair relationship. An unfair relationship may lead one firm to feel that someone is taking advantage of it. Ring and Van de Ven (1994) have stated that, sometimes, partners view equity as a more important performance criterion than efficiency. As such, equity is an important source of trust in alliances, and a lack of equity may undermine mutual trust significantly.

That said, the relationship between trust and equity appears to go both ways—that is, a high level of trust tends to encourage partners to tolerate short-term inequity or mutual forbearance. Given a certain trust level among partners, it is also apparent that extended periods or growing instances of inequity will create tension and strain existing trust. Therefore, for the sake of trust building, profit distribution needs to be kept on an equitable basis.

Trust from Communication

Communication and proactive information exchange form yet another tactic to boost trust among partners (Macneil, 1980; Thomas & Trevino, 1993). There may be several reasons why communication and information processing play important roles in trust building. First of all, open and prompt communication among partners is believed to be an indispensable characteristic of trusting relationships (Kanter, 1994; Larson, 1992). Without proper communication, cooperative relationships tend to suffer. Only if the partners can constantly sound off on their differences, of which there are always some in any relationship, will they be able to avoid fatal conflicts. Thus, communication irons out the potential kinks in daily operations and makes for a satisfactory working relationship.

Second, firms need to collect evidence about their partners' credibility and trustworthiness,

and communication facilitates this process. Creed and Miles (1996) have stressed the importance of being open to the evidence of others' trustworthiness, but without proactive information exchange, this process would take a long time. Hart and Saunders have emphasized the significance of sharing information with partners, which leads to "information symmetry rather than information asymmetry" (1997: 34). Firms may deliberately provide unsolicited— including even somewhat sensitive—information to their partners as a way of showing both goodwill and intimacy. As the reciprocal process starts to gain credibility, sustained information flow between the partners should create a trusting environment.

Third, communication helps build trust because it provides the basis for continued interaction, from which partners further develop common values and norms (Leifer & Mills, 1996). Madhok (1995) notes that sustained interaction is a crucial mechanism for holding the partners together. Through information exchange, partners should identify and develop more commonalities, so a sense of trust would be reinforced.

Trust from Interfirm Adaptation

Trust is earned from partners if one adapts to the needs of cooperation in partnerships (Heide & John, 1992). Interfirm adaptation refers to the adjustment of one's own behavioral pattern in order to bring about a fit between the partners or between the alliance and the environment (Hallen, Johanson, & Seyed-Mohamed, 1991). Flexibility and the willingness to accommodate deviations from the contract when necessary are key to interfirm adaptation. Macneil (1980) has recognized that a willingness to carry out such adaptations is essential for trust building, and Madhok (1995) has proposed that bilateral adaptation in JVs provides incentive for acting for mutual interests rather than self-interests. Being flexible enough to respond positively to the changing needs of a partnership demonstrates that the firm not only values the alliance but is also willing to make considerable efforts toward desirable accommodations.

Sometimes, the nature of an alliance calls for mutual adaptation—for example, to ease a potential cultural clash (Sankar, Boulton, Davidson, Snyder, & Ussery, 1995) or to make firm-specific investments. At other times interfirm adaptation becomes a necessity because a changing environment requires modifications in the way partners cooperate. For example, if the host country of a JV imposes new laws banning a majority equity share owned by foreign partners, then the situation calls for both partners to adapt to the new situation. A willingness to do this, although possibly painful in economic or other terms, would earn much trust from the partner. Hence, making adaptations according to the needs of the partnership is an effective way to develop trust.

CONTROL MECHANISMS IN STRATEGIC ALLIANCES

So far, we have explored various trust-building tactics in strategic alliances. We now discuss specific control mechanisms to develop confidence in partner cooperation. Control theorists have examined and proposed a number of control mechanisms, such as cybernetic regulations and information-processing devices. Nevertheless, not all control mechanisms are fully relevant for strategic alliances. As Sheppard and Tuchinsky note, in network organizations "control is not exercised in the form of hierarchical authority" but, rather, in terms of "relationships between relative equals" (1996: 142).

As we mentioned earlier, one key differentiation in the control literature is that between formal control and social control. We maintain that both formal control and social control can be used effectively in strategic alliances, and we discuss the following three specific control mechanisms that appear to be particularly relevant to strategic alliances: (1) goal setting, (2) structural specifications, and (3) cultural blending.

Goal Setting

Goal setting emphasizes the importance of establishing specific and challenging goals in organizations (Locke & Latham, 1984). Based on this idea, management by objectives, as a prominent form of goal setting, has gained acceptance as a management program for enhancing control and boosting performance. Besides goal content, the process of setting goals also has drawn the attention of researchers in recent years. For the purpose of control in strategic alliances, partners normally would prefer a high

degree of goal formalization. For instance, partners in strategic alliances may pursue either long-term goals or short-term goals. Firms with a high need for control would prefer alliance goals of short-term orientation, because performance evaluation and feedback can be monitored more frequently against immediate objectives. However, because explicit goals often are difficult to formulate in the initial stages of forging alliances, firms would give more attention to an effective goal-setting process.

Scholars often regard goal setting as critical in strategic alliances because of the potential for goal incongruence among partners. Merchant (1984) discusses several dimensions of goals, including congruence, specificity, communication and internalization, and completeness. Authors of the control literature have emphasized that the definition of desired results (or goals) is an essential part of a control process, which also includes measurements and reinforcements (Eisenhardt, 1985; Ouchi, 1979). The logic of a cybernetic process suggests that goals are a prerequisite in control, since there must be a pre-existing objective against which results will be evaluated. Formal control becomes very difficult in the absence of agreed goals. Thus, ensuring that one's own interests are reflected in the official goals of the alliance is the starting point of control (Geringer & Hebert, 1989). Clear objectives not only help set the direction for the alliance but also facilitate the establishment of specific rules and regulations. Goals are important for formal control mechanisms because they specify what is expected of partners. Although partners may still engage in dysfunctional activities, having clear goals makes it much easier to identify these activities.

That said, having explicit goals in strategic alliances is not always possible, or even desirable. Partner firms often cannot agree on goals for the alliance that will effectively serve their respective interests. Moreover, given information asymmetry and the presence of hidden agendas, partner firms often have to tolerate a certain degree of goal ambiguity. One can even argue that goal ambiguity and uncertainty about the future are the very conditions that prompt firms to consider entering into alliances. If so, the negative effects of having specific goals (i.e., sacrificing flexibility) may outweigh the benefits of better control.

Thus, the *process* of goal setting may become even more important as a useful social control mechanism in strategic alliances. Participatory decision making serves the purpose of controlling, because in the process partners interact among themselves to gain a better understanding of each other. As a result, collective norms and values of the alliance are developed. Because the goal-setting process allows partners to form a consensus gradually, their incentive to deviate from agreed-upon objectives tends to be significantly curbed. In this sense, we can view goal setting as a form of normative control (Leifer & Mills, 1996; Simon, 1957). In sum, the goal-setting process is important for both formal and social control.

Structural Specifications

Structural arrangements, including rules and regulations, are the heart of formal control. In strategic alliances formal control tends to be especially relevant, owing to the relatively high degrees of goal incongruence and performance ambiguity. Partners often use a variety of structural specifications to ensure desirable behavior in strategic alliances (Geringer & Hebert, 1989). Parkhe (1993) uses "ex ante deterrents" and "ex post deterrents" to refer to certain structural arrangements that discourage opportunistic behavior in alliances.

Ex ante deterrents are designed to minimize partners' incentive for opportunism. They have been specified as nonrecoverable investments, which lose much of their value should the alliance fail. Because each partner holds considerable stake, it will be embedded in the alliance and, hence, will behave more responsibly. Williamson (1983) has recognized that credible commitments partially come from being mutual hostages. Thus, Das and Teng (1996) suggest that equity alliances, such as JVs and minority equity investment, will be more desirable if controlling opportunistic behavior is the priority. In line with this view, some theorists have suggested that, in JVs, shared equity ownership, rather than dominant ownership, may be a more effective control mechanism (Geringer & Hebert, 1989; Sohn, 1994).

Unlike ex ante deterrents, ex post deterrents refer to structural safeguards against opportunism in the process of managing alliances. Specific arrangements include reporting and check-

ing devices, written notice of any departure from the agreement, accounting examination, cost control, quality control, arbitration clauses, and lawsuit provisions. Deciding upon these structural specifications requires partners' investment of considerable energy and time during the negotiation stage. In case partners cannot agree on specific structures of the alliances, they may as well resort to their respective bargaining power (Neale & Bazerman, 1992; Yan & Gray, 1994). It is equally costly in the operation stage, since substantial resources and information-processing capacity have to be allocated just for the purpose of internal control. Nevertheless, rigid structural arrangements do effectively set the boundaries for the behavior of alliance partners.

Cultural Blending

Unlike in formal control, the central element of social control is organizational culture—"a system of shared values . . . and norms that define appropriate attitudes and behaviors for organizational members" (O'Reilly & Chatman 1996: 160). Organizational culture provides a sense of control, for it unifies the way organizational members process information and react to the environment, which facilitates the achievement of a higher level of behavioral predictability (Trice & Beyer, 1993). Because people are guided by their shared values and norms, they voluntarily behave in a manner that is desired by other organizational members as well. Compared to hierarchical organizations, in strategic alliances the managing of organizational culture presents both a daunting challenge and a potential opportunity (Sankar et al., 1995).

Managing alliance culture is a challenge because it is about blending and harmonizing two different organizational cultures (Wilkof, Brown, & Selsky, 1995). Cultural clash has caused many mergers/acquisitions to fail, simply because two companies cannot be pulled together easily and then expected to work seamlessly as one. Acculturation (or cultural diffusion) in mergers and acquisitions may take the mode of integration, assimilation, separation, and deculturation (Nahavandi & Malekzadeh, 1988). Some have suggested that the acquiring firm and the acquired firm have very different perspectives in deciding upon the acculturation mode, and incongru-

ence in partner preference may create acculturation stress resulting in unsuccessful mergers.

A similar form of acculturation stress is likely to occur in strategic alliances. This issue may become especially serious for alliances in which one partner plays a dominant role. Whereas in a merger/acquisition it is acceptable for one organizational culture to prevail, in alliances this is rarely so, for partners in alliances are still independent firms so that both are concerned about losing their own organizational identity in a strategic alliance. Thus, the challenge is to make cultural blending work, while largely preserving the separate cultures. Furthermore, there are certain organizational cultures that are inherently discordant, such as the rigid form of large organizations and the flexible one of small firms.

Despite the difficulties, managing culture is critical, particularly owing to a lack of alternative effective control mechanisms in alliances. As we mentioned earlier, goal setting and structural specifications are useful, but the degree of goal incongruence and task complexity may well require a higher level of control in alliances. Therefore, to a certain extent, blending organizational cultures offers an attractive alternative. The key seems to be in the socialization and training of alliance managers. Socialization provides much-needed interaction among managers from both sides, thus enabling managers to familiarize themselves with their partner's organizational culture. Such personal interaction helps develop common values and norms for the alliance.

CONCLUDING REMARKS

One of the key questions for partners in strategic alliances is whether to trust or to control. The major theme here is that trust and control are two alternative sources in developing confidence in partner cooperation, although the two are not linked by a simple complementary relationship. In this article we have proposed an integrated framework of trust and control for developing a firm's confidence in partner cooperation in strategic alliances.

We first examined, at some length, the notion of confidence in partner cooperation in a strategic alliance, defined as a firm's perceived certainty about satisfactory partner cooperation. We also discussed how this notion of confidence

in partner cooperation is conceptually different from trust, which relates to the trustor's positive expectations about the motives of the trustee. One distinction, among others, between trust and confidence is that of expectations of motives as against perceptions of certainty about cooperative behavior. Since partners recognize strategic alliances as potential arenas for opportunistic behavior, the significance of confidence in partner cooperation seems clear for the formation and management of alliances.

Second, we discussed how trust and control are two distinct sources of confidence in partner cooperation. After conceptually differentiating trust and control as two parallel concepts, we examined them in an integrated manner. Although some theorists have suggested that trust is itself a control mechanism, we have found the existing literature to be unclear on this point and have argued that trust cannot be a control mechanism, if both trust and control are defined restrictively for increased clarity. We have defined trust here as a positive expectation about others' motives, and control as the process of regulating others' behavior to make it more predictable. The confusion in the literature stems from authors using the terms, perhaps unwittingly, as if they were causally linked within an implied complementary straightjacket.

A more appropriate construction of the relationship, we have contended, would be of a supplementary character—flexible and open ended—which would disentangle the tightly coupled conception of the trust-control relationship evident in the literature, thereby facilitating the consideration of the two concepts on their own terms. This, of course, recognizes the possibility of substituting one concept for the other (given a specific desired level of confidence), but without the obvious limitations of a strictly complementary relationship between the two. Such an uncoupled conception of trust and control in the development of confidence in partner cooperation enables us to consider the significant issue of the two concepts interacting to supplement each other in special ways. That is, in a particular alliance situation, the two concepts can be developed in parallel, but with due regard to their interactive effects should the need arise for increased confidence in partner cooperation.

Third, by uncoupling the implied complementary linkage between trust and control that per-

vades the literature, we were able to explore the relationship between trust level and control mechanisms, as well as the moderating role of trust level in control. We suggested that although trust and control are parallel concepts, they are not completely independent in the sense of being isolated from each other. In fact, the deployment of control mechanisms may either enhance or undermine the trust level, depending on the specific type of control mechanisms partners use. Furthermore, we suggested that trust level plays a moderating role between control mechanisms and control level. In other words, we proposed that trust level will facilitate the deployment of control mechanisms, even though some of these very mechanisms may be suggestive of a lack of trust.

Fourth, in examining these relationships, we discussed some of the complexities introduced by the variety of alliance types. Adopting a contingent approach, we examined three major types of alliances in terms of the roles of trust, control, and confidence level. It appears that, whereas the basic roles of these constructs we delineate in this article can be generalized across alliance types, the specifics of each construct can differ fairly widely because of the structural differences among strategic alliance types. For instance, the requisite level of confidence in partner cooperation appears to be high in JVs, compared to only a relatively low level for nonequity alliances.

Fifth, we systematically addressed the issues of trust building and control mechanisms in strategic alliances. For trust building in alliances, we discussed four key techniques: (1) risk taking, (2) equity preservation, (3) communication, and (4) interfirm adaptation. We also discussed three key control mechanisms in strategic alliances: (1) goal setting, (2) structural specifications, and (3) organizational culture blending. This discussion should help us to better understand the various alternatives for developing confidence in partner cooperation.

Finally, regarding future research based on this integrative examination of trust and control in developing confidence in partner cooperation in strategic alliances, we see one area that seems particularly promising (but that we have not addressed here). Some scholars have suggested that the optimal combination of trust building and control mechanisms depends on their respective costs. The conventional wisdom

is that one should employ control mechanisms when adequate trust is wanting. The assumption underlying this argument is that trust is ostensibly something of a static phenomenon. In fact, as we have tried to show, trust can (and should) be developed whenever it is deemed appropriate. However, trust building can be costly, for considerable organizational resources are necessary, in some form or other. Thus, we believe it would be of interest to explore the calculus of optimal combinations of trust and control in developing confidence through a detailed analysis of the relative costs of trust building and control mechanisms. To that end, our discussion on specific trust-building techniques and control mechanisms should provide a useful starting point.

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