Eric (Er) Fang, Robert W. Palmatier, Lisa K. Scheer, & Ning Li

Trust at Different Organizational Levels

The authors explore the effects of trust at three distinct organizational levels in a marketing collaboration: interorganizational trust between collaborating firms, each firm's agency trust in its own representatives assigned to a collaborative entity (coentity), and intraentity trust among the representatives assigned to the coentity. Dyadic survey and longitudinal objective performance data from 114 international joint ventures indicate that trust at each level has unique effects but similarly influences the collaborating firms' resource investments or the coentity's use of those resources. Interorganizational and agency trust motivate resource investments in the coentity, particularly in the context of a differentiation strategy, whereas intraentity trust promotes coordination within the coentity, and interorganizational trust and a differentiation strategy magnify that effect. Intraentity trust can also undermine coentity responsiveness to environmental change, especially when joined by interorganizational trust between collaborating firms and formalized decision making within the coentity. These findings demonstrate that managing and building trust at multiple levels is critical to the success of interorganizational marketing collaborations.

Keywords: trust, interorganizational relationship, strategy, performance

Interorganizational collaboration is critical to marketers' success in the global marketplace; even the few firms that have the necessary resources to consider operating independently typically choose to focus on their distinctive competencies and collaborate with partners for more peripheral operations. Interfirm marketing collaborations often entail the formation of a collaborative entity or coentity—an identified set of employees from each collaborating firm tasked to work together to achieve collaborative outcomes. Firms form coentities for diverse reasons, such as to develop new products (Rindfleisch and Moorman 2001), strengthen supply chains (Wathne and Heide 2004), reduce operating costs (Cannon and Homburg 2001), reach new markets (Bamford, Ernst, and Fubini 2004), devise industry standards (e.g., the 3G project of Qualcom, Ericsson, and others), or serve specific customers. A coentity may be as simple as an informal work group or as elaborate and complex as an equity-based joint venture.

Firms form collaborative entities to generate value and achieve objectives that would be difficult, if not impossible, to achieve independently, but collaborations often fail to reach these goals. A recent study of senior executives suggests that "often the ... difficulties within a venture are poor relations" (Buchel 2003, p. 91). Buchel (2003) describes how the fundamental lack of trust among key constituents led to conflict and the ultimate dissolution of a venture between Leica and Zeiss that aimed to become the key supplier of electron microscopes. Coentity failures often are attributed to a lack of trust (Inkpen and Beamish 1997), in which context trust refers to a willingness to rely on another (Moorman, Zaltman, and Deshpandé 1992), the belief that a partner will meet its future obligations, and the confidence that the other will behave with integrity and benevolence rather than pure self-interest (Scheer and Stern 1992). Trust is especially critical in marketing collaborations, which often involve large, specific investments that could prompt opportunistic resource transfers, involve multiple constituents with diverging and/or conflicting objectives, and require a high level of cooperation to generate value (Das and Teng 1998; Rindfleisch and Moorman 2001). This unique context of multiple firms, diverse motives, and mixed loyalties makes the role of trust in collaborative entities particularly complex. As Zaheer, McEvily, and Perrone (1998, p. 141) note, "considerable ambiguity is evident in the literature about the precise role of trust as it operates at different levels of analysis and its influence on performance."

Any marketing collaboration that creates a formal or informal coentity depends on trust at three distinct levels: interorganizational trust, or the collaborating firms' mutual trust; agency trust, or each firm's trust in its own representatives assigned to the coentity; and the intraentity trust between the collaborating firms' representatives within the coentity (see Figure 1). Although each of these trust levels may influence coentity performance through different pathways with potentially differential effects, "issues of similarities and differences in collaborative trust at the person,

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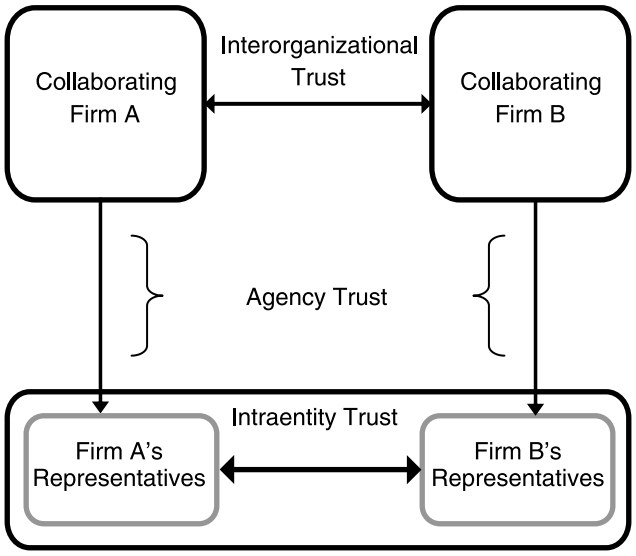
FIGURE 1
Trust at Multiple Levels Within a Collaborative Entity (Coentity)



group, and firm levels have received limited empirical attention from scholars" (Currall and Inkpen 2002, p. 479).

We shed light on this research gap by examining how the three levels of trust affect coentity performance and how coentity characteristics may moderate these effects. Our research extends marketing theory by integrating previous unilevel research on trust to provide a more holistic picture of its complex interplay at multiple organizational levels. Teasing apart the differential roles of the various levels of trust, rather than using the more typical single-level perspective, is a critical step to reducing the high failure rates of interfirm collaborations (Inkpen and Beamish 1997).

Furthermore, previous studies have tended to examine the effects of trust in isolation without considering other relevant coentity characteristics, such as decision making and strategic focus. As Schoorman, Mayer, and Davis (2007, p. 351) articulate, the existing studies "have neglected many specific context variables that would be relevant to trust," and the failure to address these factors may lead to an incomplete or even incorrect picture of the impacts on firm performance. This bias further distorts existing knowledge when combined with the assumption in current literature that building trust at any level leads to desirable outcomes (Dirks and Ferrin 2001; Morgan and Hunt 1994). We address this issue by exploring the moderating effect of coentity characteristics, as well as both positive and negative outcomes of different levels of trust, and therefore provide a more nuanced view of how a coentity can better manage different levels of trust to achieve improved financial performance.

Drawing on dyadic survey data and longitudinal objective performance data from 114 collaborative entities, we find that trust at diverse levels within a marketing collaboration differentially affects the success of the collaboration and interacts with trust at other levels, as well as management decision processes and the coentity's strategic focus, to both enhance and undermine coentity financial performance. Although we examine a specific type of coentity, we contend that the theoretical model, principles, and underlying relationships among constructs generalize to a wide variety of marketing collaborations, such as joint ventures, supply chains, product development task forces, project teams, and work groups.

We first offer our theoretical model and research hypotheses. Then, we discuss our research context and methodology. After summarizing the results from our research, we discuss the theoretical and managerial implications of our findings, note several limitations, and highlight promising avenues for further research.

Theoretical Background

Trust at Multiple Levels in a Coentity

A coentity forms when at least two collaborating firms agree to contribute designated representatives to an identifiable group with an independent mission that benefits both firms. At one extreme, the coentity may be an informal intersection of the two firms, such as a product development or project management team created by identifying specific members who remain formally attached to their original firms but simultaneously interact with their counterparts at the other firm. At the other extreme, the coentity may be a joint venture or wholly owned independent company that is distinct from either collaborating firm but staffed initially with personnel supplied by the firms.

However formal or informal the configuration of the coentity, each collaborating firm contributes tangible and intangible resources with the intention of achieving common, stated objectives, as well as any additional individual, private objectives each may have for the coentity. The firms' representatives assigned to the coentity must work together to integrate those resources if the coentity is to achieve its stated objectives. As boundary spanners, these representatives face a mixed-motive situation: As agents of the firm that assigned them to the coentity, they must represent the interests of their own collaborating firm, but to ensure the coentity's success, they must become colleagues and form strong working relationships with their counterparts who represent the other firm. Employees assigned to a joint new product development team, for example, have the responsibility to contribute to the successful development of a product, but they may also be required to gather specific knowledge and technology possessed by the other collaborating firm for the benefit of their initial firm.

Collaborative entities are particularly complex because relationships between parties exist simultaneously at multiple levels, and the coentity itself owes allegiance to multiple constituents with potentially conflicting objectives. We contend that trust at three distinct levels is important to the success of any marketing collaboration that involves the creation of a coentity (see Figure 1): interorganizational trust between the collaborating firms, each firm's agency trust in its representatives assigned to the coentity, and intraentity

trust among those representatives. In Table 1, we list research on trust at these levels that offers insight into their effects on coentity performance. However, most of these studies focus on trust only at a single level, raising the possibility that the type of trust they explicitly examine may be confounded with trust at another, unobserved level. Because trust is critical to the survival and long-term performance of collaborative entities (Dirks and Ferrin 2001; Doney and Cannon 1997; Morgan and Hunt 1994), we believe that disentangling the role of trust at multiple levels is critical.

How does trust at each level generate actions that ultimately drive performance? The resource-based view (RBV) highlights two mechanisms through which an organization can generate superior gains and competitive advantages (Barney 1991), namely, resource investments and resource utilization (Dyer and Singh 1998; Morgan, Kaleka, and Katsikeas 2004; Palmatier, Dant, and Grewal 2007). In collaborative entities, the interplay between these two mechanisms becomes complicated because each collaborating firm invests resources but lacks direct control over their usage. This disconnect between control over resource investment versus utilization, coupled with the conflicting loyalties of individual members assigned to the coentity, suggests that both investment and utilization can be affected by trust between the parties involved in the collaboration. We first examine how trust at multiple levels may affect resource investment and utilization and then turn our attention to how these processes may affect coentity performance (see Figure 2).

Effects of Trust at Multiple Levels on Collaborating Firms' Resource Investments

Collaborating firms' resource investments in a coentity typically include both nonfungible physical assets, such as manufacturing facilities or specialized machine tools, and human assets, such as employees who possess irreplaceable tacit knowledge. Because these specific investments would be lost if the coentity were dissolved prematurely, they create a lock-in situation (Williamson 1985) that exposes each collaborating firm to the other's opportunism, which can lead to suspicion and conflict (Bamford, Ernst, and Fubini 2004). Investment in a coentity carries considerable risk because the involvement of multiple parties with diverse goals and partially conflicting interests increases the potential leakage of the firms' tacit knowledge and strategic resources. We theorize that trust between the collaborating firms affects their resource investments, as does each collaborating firm's agency trust in its own representatives assigned to that coentity.

Trust in interorganizational relationships increases relationship investments, communication, and performance and reduces costs and opportunistic behaviors (Selnes and Sallis 2003; Smith and Barclay 1997). In the absence of trust, conflict between collaborating firms may prevent future investments or even lead to the withdrawal of existing investments (Inkpen and Beamish 1997). Mutual trust functions as a safeguarding and controlling mechanism that promotes information sharing and reduces collaborating firms' incentives and propensity to engage in opportunistic behaviors (Lane, Salk, and Lyles 2001). We hypothesize that interorganizational trust between collaborating firms reduces the perceived risk of opportunism and conflict, leading to a greater willingness to invest resources in the coentity.

H_1: Interorganizational trust between collaborating firms positively affects each firm's resource investment in the coentity.

The managers assigned to the coentity develop situation-specific knowledge and cultivate unique interpersonal relationships that make them critical to the coentity's success. They also experience mixed motives and conflicting loyalties between the collaborating firm they represent and their colleagues within the coentity (Bonoma and Johnston 1978; Zaltman and Bonoma 1977). Therefore, a collaborating firm confronts potential opportunistic behavior by representatives who may strive to negotiate better personal compensation or positions (Wathne and Heide 2000), shift their primary allegiance to the coentity, or misuse knowledge generated within the coentity to compete with the collaborating firm. Kumar and Seth (1998) suggest that staffing the coentity with trusted representatives encourages collaborating firms to provide the ongoing resources needed for the coentity's success. That is, a collaborating firm is more likely to share additional intellectual property, manufacturing technology, and other sensitive resources with its coentity when its trust in its own representatives is greater. As a firm's trust in its representatives increases, it becomes more committed to those representatives, which motivates the firm to increase support (Child and Mollering 2003; Gilliland and Bello 2002). When a collaborating firm's agency trust is greater, the firm perceives less risk, expects invested resources to be used wisely, and is willing to make greater resource investments in the coentity. Thus:

H_2: A collaborating firm's agency trust in its representatives within a coentity positively affects its resource investment in the coentity.

Effects of Trust at Multiple Levels on Coentity Resource Utilization

Resource utilization involves the idiosyncratic organizational processes used to combine, integrate, and redeploy component resources while responding to changing environmental conditions (Moran and Ghoshal 1999; Reed and DeFillippi 1990). We examine one internally focused process, coordination, and one externally focused process, responsiveness (Eisenhardt and Martin 2000; Teece, Pisano, and Shuen 1997). Coentity coordination is the representatives' effectiveness in working together to integrate, combine, and deploy resources. Coentity responsiveness is the coentity's effectiveness in marshalling and redeploying resources in response to environmental changes. We theorize that both intraentity trust and interorganizational trust between collaborating firms affect resource utilization.

Collaborating firms control their resource investments, but the use of these resources depends on the people directly involved in the day-to-day operations of the coentity. The interaction of key representatives assigned to a coentity involves "a continuous negotiation of the overarching interests" of their parent firms (Loess and Yavas 2003,

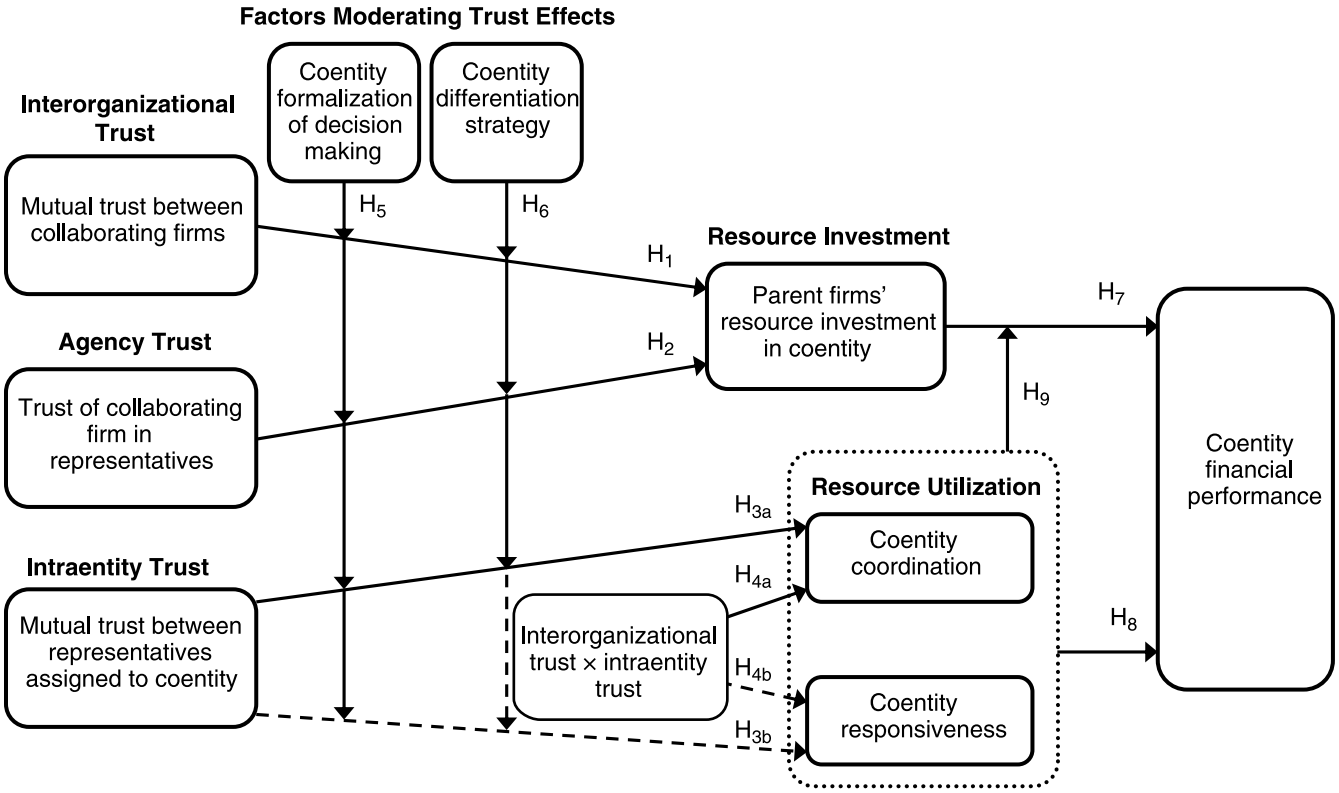
TABLE 1
Summary of Illustrative Research on the Influence of Interorganizational, Agency, and Intraentity Trust on Key Outcomes

Illustrative Research	Context	Moderator Variables	Outcome Variables	Key Findings
Interorganizational Trust Between Two Organizations				
Grayson and Ambler (1999)	Advertising agencies and their clients	Relationship age	Commitment, quality of interaction, involvement, and performance	Trust positively affects commitment, interaction quality, involvement, and performance. Trust's effect on performance is lower for long-term versus short-term relationships.
Selnes and Sallis (2003)	Suppliers to medium-sized and large business customers	Relationship learning	Multidimensional measure of relationship performance	Trust positively affects relationship performance (payoff of investments in relationship, synergies, flexibility, lower costs). There is a negative interaction effect of trust and relationship learning on performance, leading to less information exchange, fewer meetings, less evaluation of relationship, and less adjusting to end-user performance.
Smith and Barclay (1997)	Suppliers of computer equipment to business customers		Relationship investments, communication, and opportunism	Mutual perceived trustworthiness positively affects relationship investments, communication, and performance and reduces opportunism. Relationship investment and communication have a subsequent positive effect on performance.
Zaheer, McEvily, and Perrone (1998)	Electrical equipment manufacturers and their component suppliers		Negotiation cost, conflict, and performance	Trust directly affects performance, but the effects are not mediated through reduced conflict or reduced negotiation costs. According to post hoc analysis, trust's effect on performance may be mediated not by gains in efficiencies as much as by "exchange of personnel," shared decision making, and improved coordination (p. 155).
Agency Trust in an Organization's Representatives				
Child and Mollering (2003)	Corporate managers and their representatives in foreign (Chinese) ventures		Growth in sales and profits	Corporate managers' trust in their foreign entities' performance is positively related to growth in sales and profits.

TABLE 1
Continued

Illustrative Research	Context	Moderator Variables	Outcome Variables	Key Findings
Gilliland and Bello (2002)	Suppliers and their industrial product distributors and dealers		Loyalty commitment	Suppliers' trust in their distributors positively affects their loyalty commitment to the relationship.
Intraentity Trust Between Two Groups Within One Organizational Entity				
Atuahene-Gima and Li (2002)	Sales managers and salespeople within one organization	Output control, supervisor accessibility, achievement orientation, and role ambiguity	Sales performance	Trust is likely to enhance entity sales performance when output control is high (low) for the Chinese (U.S.) sample, supervisor accessibility is low, achievement orientation is high, and, in the Chinese sample, role ambiguity is high.
Dirks and Ferrin (2001)	Review of 40 years of research on intraorganizational trust	Goals, motives, incentives, and other organizational factors	Communication, citizenship behaviors, conflict, individual and entity performance, and satisfaction	Review of literature suggests that trust has a strong effect on organizational citizenship behaviors, satisfaction, and individual performance, but trust's effect on group behaviors and performance is mixed. The authors argue that trust may provide the organizational context for other drivers of performance to operate; trust may interact with employees' goals, motives, and other organizational factors.
Gargiulo and Benassi (2000)	Special unit responsible for managing various change initiatives within an organization		Coordination failures	The results support structural hole theory; cohesive social bonds undermine the ability of social actors to adapt to changes in the environment. For example, the autonomy of managers (e.g., communication levels) in dealing with key third parties is reduced for managers with strong relationships (e.g., trust) with others in the group.
Maltz and Kohli (1996)	Different functional departments within one organization		Frequency, accuracy, clarity, and relevance of information	Trust in another department positively affects the frequency, accuracy, clarity, and relevance of information provided by that department.
Tsai and Ghoshal (1998)	Different business units within one organization		Resource exchange and resource combination	Trust in other business units positively affects resource exchange and resource combination.

FIGURE 2
Impact of Trust at Different Levels on Collaborative Entity (Coentity) Financial Performance



Notes: Dashed lines represent hypothesized negative effects.

p. 313), which can be problematic if insufficient trust marks their relationships. Representatives from one firm often have difficulty understanding the culture, knowledge, and competency of their colleagues from the collaborating firm, a situation that may be exacerbated by cultural distance. Information asymmetry may lead a firm's representatives to resist adapting their work patterns to those of their counterparts (Jeffries and Reed 2000) or to free ride on the efforts of the other firm's representatives (Wathne and Heide 2000). In contrast, intraentity trust among colleagues increases the frequency and accuracy of information exchange and resource coordination (Dirks and Ferrin 2001; Maltz and Kohli 1996), motivates cooperative decision making, reduces fears of exploitation, and increases resource sharing and risk taking (Chiles and McMackin 1996). Therefore, we posit that greater intraentity trust among collaborating firms' representatives increases coordination within the coentity.

In contrast, intraentity trust could reduce the coentity's responsiveness to external conditions. Drawing on structural hole theory, Gargiulo and Benassi (2000) demonstrate that social capital has a dark side; strong relational bonds can filter external information and generate a cognitive lock-in that isolates bonded parties from the outside world (Grabher 1993). People with strong bonds tend to build self-reinforcing business processes that make them less able to adapt to environmental changes (Tushman and Anderson 1986). When representatives within the coentity build interpersonal relationships and trust one another, routine rigidity is more likely to develop because they feel less need to adjust established procedures or to monitor their counterparts.[1] Therefore, as intraentity trust increases, collaborative entities may develop relational inertia and routine rigidity, which reduces the coentity's responsiveness by minimizing its motivation to engage in environmental scanning and impeding its ability to redeploy resources quickly in the face of environmental change. Thus:

> H_3: Intraentity trust between representatives of both collaborating firms (a) positively affects coentity coordination and (b) negatively affects coentity responsiveness.

Confidence in another's trustworthiness provides a motive to behave in a trusting manner, but whether that motivation is manifest in actions depends on other factors. On the basis of a review of 40 years of research in management literature, Dirks and Ferrin (2001) posit that intraorganizational trust may interact with other motives and objectives to determine the level of cooperation. Researchers investigating channels and interorganizational relationships in marketing and management (e.g., Doney and Cannon 1997; Zaheer, McEvily, and Perrone 1998) note the importance of the interrelationships among constructs at both the interfirm (e.g., supplier and customer firms) and interpersonal (e.g., salesperson and buyer) levels

[1]We thank a reviewer for this insight.

to comprehend the full effects of cross-firm ties. Extending this logic, we consider how the interfirm relationship between collaborating firms could affect relationships among their representatives who must work together within the coentity.

We posit that the extent to which intraentity trust affects coordination and responsiveness depends on the interorganizational trust between the collaborating firms. Regardless of a coentity manager's confidence in a counterpart's trustworthiness, acting on that trust is inherently risky if it runs counter to the collaborating firm's beliefs. Representatives face significantly less risk in acting on their own trust in their counterparts if interorganizational trust between the collaborating firms reinforces or confirms their intraentity trust. Thus, we anticipate that interorganizational and intraentity trust have an interactive effect on coentity coordination and responsiveness.

H_4: Collaborating firms' interorganizational trust amplifies the (a) positive effect of intraentity trust on coentity coordination and (b) negative effect of intraentity trust on coentity responsiveness.

Other Factors Moderating the Effects of Trust

Trust provides the motivation to act, but other elements may encourage or discourage a person from actually translating that motivation into behavior. Consistent with our desire to develop a generalized model of marketing collaborations, we investigate two factors that are relevant for a wide variety of collaborative entities: the level of formalization in the coentity's decision making and the degree to which the coentity implements a differentiation strategy.

Formalization of decision making refers to the extent to which the decision-making process emphasizes and follows specific rules and procedures (Zaltman, Duncan, and Holbek 1973). Formalization enhances the likelihood that a trustee behaves cooperatively and not opportunistically (Das and Teng 1998), provides the trustor with greater confidence that his or her trust will not be abused, and promotes more risk-taking behaviors (Kogut 1989). Thus, we theorize that formalized decision making within a coentity enhances the entire constellation of risk-taking behaviors associated with each type of trust.

Specifically, we argue that formalized decision making enhances the positive effects of the collaborating firms' interorganizational trust and agency trust on resource investment and magnifies the positive effect of intraentity trust on coentity coordination. We similarly anticipate that formalized decision making inflates the negative effect of intraentity trust on coentity responsiveness. When decision-making policies and procedures become more formalized, each party's duties become increasingly predefined and divided (Kelly and Amburgey 1991). Routine rigidity and relational inertia bred by intraentity trust increase as decision making becomes more formalized, which further reduces the coentity's adaptability and responsiveness to change. Thus:

H_5: More formalized decision making within the coentity amplifies (a) interorganizational trust's positive effect on resource investment, (b) agency trust's positive effect on resource investment, (c) intraentity trust's positive effect on coordination, and (d) intraentity trust's negative effect on responsiveness.

A differentiation strategy captures the strategic emphasis of the coentity in creating and delivering unique customer benefits in new and distinct ways (Porter 1985), an effort that often requires highly specialized investments (Ghosh and John 1999). Because these specialized investments likely are context and market specific, a collaborating firm's vulnerability to opportunism increases. Thus, when coentities focus more on a differentiation strategy, trust becomes an even more critical safeguard against opportunism, and the positive effects of interorganizational and agency trust on resource investment should be greater.

A differentiation strategy also requires constant adjustments to provide unique value to customers. For example, state-of-the-art technology providers must incorporate frequent engineering and technology changes into their product offerings. Because a differentiation strategy creates adaptation and coordination challenges for the managers assigned to a coentity, opportunities for conflict increase; intraentity trust becomes more critical to avoid and resolve such conflicts while maintaining the high level of coordination needed to facilitate strategic changes. Thus, we expect that intraentity trust has a more positive impact on coordination when coentities adopt a differentiation strategy.

In contrast, a differentiation strategy may lessen intraentity trust's negative impact on responsiveness. The adaptation requirements inherent in pursuing a differentiation strategy force the coentity's managers to develop new processes and form new relational ties. The high level of change required by a differentiation strategy also diminishes the potential relational inertia and routine rigidity associated with intraentity trust (Ghosh and John 1999). Furthermore, because differentiation generates frequent internal changes, role ambiguity and potential conflict emerge among representatives. Thus, the intricacies and demands of pursuing a differentiation strategy counter the tendency of intraentity trust to dampen responsiveness.

H_6: A coentity's differentiation strategy (a) amplifies interorganizational trust's positive effect on resource investment, (b) amplifies agency trust's positive effect on resource investment, (c) amplifies intraentity trust's positive effect on coordination, and (d) suppresses intraentity trust's negative effect on responsiveness.

Effects of Resource Investment and Usage on Coentity Financial Performance

Consistent with the RBV, we posit that the collaborating firms' resource investments in the coentity positively affect the coentity's financial performance. Each collaborating firm invests tangible and intangible resources, such as specialized development tools, information technology, equipment, and employees' knowledge and skills, to implement specialized tasks. These resource investments form the coentity's component competencies, which generate competitive advantage (Prahalad and Hamel 1990), promote the achievement of objectives, and generate superior performance (Smith and Barclay 1997). Consistent with the RBV,

we hypothesize that the coentity's resource utilization promotes financial performance; both coordination and responsiveness reflect dynamic capability and therefore should improve performance (Eisenhardt and Martin 2000).

Coordination and responsiveness also can leverage the effect of resource investments on performance (Makadok 2001). Collaborative entities operated by people who coordinate their actions and respond to external changes should generate higher returns on the resources at their disposal. Thus, we hypothesize that there is a positive interaction between the resource utilization processes and resource investment; specifically, coentity coordination and responsiveness should enhance the positive effect of the collaborating firms' resource investments on coentity performance.

H_7: Collaborating firms' resource investments in a coentity positively affect the coentity's financial performance.

H_8: A coentity's (a) coordination and (b) responsiveness positively affect its financial performance.

H_9: A coentity's (a) coordination and (b) responsiveness positively moderate the effects of collaborating firms' resource investments on the coentity's financial performance.

Research Methods

Research Context

We test our hypotheses using a sample of equity-based collaborative entities, specifically, international joint ventures (IJVs). Joint ventures provide an ideal context for testing our model because they consist of collaborating firms that invest tangible and intangible resources in a clearly defined coentity and are staffed by representatives of both firms who are tasked to pursue the objectives set by those firms. In addition, IJVs often have diverse degrees of decision-making formalization and differentiation strategies, which offers an opportunity to test how these factors may leverage the effects of trust on coentity performance. Our focus on IJVs in China offers additional advantages. Notably, lack of trust likely represents a critical factor in the failure of collaborative ventures in China (Luo 2000). Furthermore, China provides a managerially relevant context because equity-based IJVs are frequent vehicles for foreign market entry, and the Chinese market itself is economically important. By the end of 2005, approximately 320,000 collaborative ventures had been established in China; the associated $600 billion in foreign direct investments constitutes approximately half of such investments in developing countries. In 2004, China surpassed the United States to become the largest recipient of foreign direct investments, mainly through IJVs.

Survey Data Collection Process

Our sample consists of 200 IJVs in China, gleaned randomly from high-tech zones in Jiangsu Province. Jiangsu is second among Chinese provinces in luring foreign capital, third in generating gross domestic product, and representative of the nation's cultural norms and standards (Luo 2005). Moreover, IJVs in this region are representative of those in China (Luo 2005). Each venture involves at least one collaborating firm based outside China and at least one collaborating firm headquartered in China. When more than two collaborating firms are involved, we focus on the largest domestic and the largest foreign participants.

Within our specific research context, we adopt the terminology our study participants used: The coentity is a "joint venture," the collaborating firms are the "foreign parents" and the "local parents," and the collaborating firms' respective representatives to the coentity are "foreign partners" and "local partners." To test our theoretical model, we engaged in a two-stage data collection process. First, we collected matched, dyadic survey data from the senior managers assigned to the IJV by each parent. Theoretical considerations and field interviews guided the development of our measures and our survey design. The original English version of the survey was translated into Chinese and back translated into English to ensure equivalence. We pretested the questionnaire for instrument validity with paired dyads of 30 managers who represent 15 joint ventures. The results reveal a high degree of internal consistency in the responses to the questionnaire items between the paired managers (Guttman split-half $R > .86$).

In May 2003, we placed telephone calls to the general managers of the 200 IJVs in our initial sample to explain the purpose of the study, stress the endorsement of the relevant government administrative agency, and offer a summary copy of the aggregate results and customized analyses in return for their participation. We also verified that a clear distinction existed between each parent company and its representatives within the venture (i.e., the local parent is distinct from the local partner, and the foreign parent is distinct from the foreign partner). Then, we eliminated any ventures for which there was no such clear distinction.[2] Of the initial 200 joint ventures in our sample, 146 met our qualification standards and agreed to participate.

Surveys were personally delivered to the two senior managers in each IJV, one associated with the local partner and the other associated with the foreign partner. In the initial visit, the interviewer assured respondents of their confidentiality and discussed the government agency endorsement to enhance the researchers' credibility. Personal delivery establishes a tangible connection between the manager and the researcher, and the knowledge that the same researcher would personally return to pick up the survey increased the manager's obligation to participate. Even this minimal personal interaction appears to increase response among Chinese participants. We received completed questionnaires from representatives of both parent firms (i.e., the manager of the local partner and the manager of the foreign partner) for 131 joint ventures, for a 90% response rate.

We evaluated each informant's overall knowledge of the IJV's operation, strategy, resources, and capabilities, as well as his or her involvement in the strategy making and daily operations of the joint venture, using seven-point scales (1 = "very low," and 7 = "very high"). We dropped five cases for which an informant expressed less than 4 on either knowl-

[2]In some IJVs, the Chinese parent firm becomes the local partner in the coentity; in such cases, no distinct representatives are assigned to the joint venture.

edge or involvement, which left 126 IJVs in our sample. The 252 informants average 6.3 on the knowledge and 5.9 on the involvement scales.

In the second stage, we gathered longitudinal, objective performance data two years later (June 2005) from each joint venture's archives. This two-year period should provide adequate time for the effects of resource investment and resource usage to become manifest in the venture's tangible outcomes. Because of management turnover or ownership changes, we could not obtain archival data for 12 ventures. Therefore, our multistage data collection generated a final data set of 114 IJVs with primary data from both senior representatives of the collaborating parent firms and archival financial performance data (57% of the initial sample, 78% of those receiving surveys). Our comparisons of the 114 participating IJVs with the 86 nonparticipating ventures on available demographic characteristics yielded no significant differences, suggesting that nonresponse bias is not a concern. The IJVs in our data set operate in the consumer electronics, computer hardware, electronic components, medical supplies, and industrial controls industries.

Measurement

The foreign partner in the joint venture is the parent firm's representative within the coentity, just as the local partner represents the Chinese parent. Two constructs in our model—agency trust and resource investment—are specific to each collaborating parent firm; the senior manager in the corresponding IJV partner represents the single informant for the parent firm's agency trust and resource investment. For all other constructs, which pertain to the parents' dyadic relationship or to the joint venture itself, both the local and foreign partner senior managers serve as dual informants. Both foreign and local senior managers are suitable informants because of their high involvement in the joint venture (5.8 and 6.0 on a seven-point scale, respectively). Following Van Bruggen, Lilien, and Kacker's (2002) suggestions, we adopt a confidence-based weighted mean to obtain construct scores. In addition, we asked informants about their confidence in each conceptually similar section of the questionnaire, which minimized their cognitive burden because it captures any variations in their confidence about different questions.

To validate that a parent's representative could provide useful data about that parent firm's agency trust and interorganizational trust, we contacted additional informants at 21 parent firms and compared their reports with those of their representatives. We evaluated interrater reliability between the representatives and the parent firm informants using intraclass correlation coefficient (ICC), the widely used indicator of interjudge reliability in behavioral science literature (McGraw and Wong 1996; Snedecor and Cochran 1980). The ICC indicates that the representatives reliably reported the parent firm's agency trust (.64, $p < .001$) and interorganizational trust (.70, $p < .001$). (For a summary of all measures, see the Appendix.)

Constructs specific to each collaborating parent firm. We measure each parent firm's agency trust using two items adapted from the work of Hewett and Bearden (2001) that pertain to the extent to which the parent firm assesses its representatives as reliable and serving its best interests. Using an eight-item formative scale adapted from the work of Jap and Ganesan (2000), we assess the resource investments in the joint venture by each parent firm after the coentity's formation; informants reported tangible and intangible resources invested in eight functional areas, such as product development, sales personnel and training, and research and development. Thus, we obtain separate measures for the local parent's agency trust and resource investment (from the local partner manager) and for the foreign parent's agency trust and resource investment (from the foreign partner manager).

Dyadic parent firm and coentity constructs. We develop a new scale to measure parent firms' interorganizational trust and use three items to assess the extent to which the collaborating firms consider their partner reliable and benevolent (ICC = .64, $p < .01$). For intraentity trust, we adapt three items from the work of Johnson and colleagues (1996) that assess the extent to which both parents' representatives in the coentity believe that their partners are reliable and benevolent (ICC = .70, $p < .001$). We measure coentity coordination, or the effectiveness with which the representatives work together to use invested resources (ICC = .72, $p < .001$), with four items adapted from the work of Jap (1999). We develop three new items to measure coentity responsiveness to rapid environmental changes (ICC = .67, $p < .001$). Finally, we measure formalization of decision making with a four-item scale adapted from the work of Jaworski and Kohli (1993) (ICC = .68, $p < .001$) and differentiation strategy using four items (ICC = .70, $p < .001$).

Control variables. We capture several control variables that theoretically could affect both parent firms' resource investments and the joint venture's resource utilization and financial performance. Dysfunctional competition is the degree to which the competitive behaviors of firms in the market are perceived as opportunistic or unfair; this measure is based on four items adapted from the work of Li and Atuahene-Gima (2001) (ICC = .71, $p < .001$). We also measure environmental dynamism, or the degree of change and unpredictability in the market environment, with four items adapted from the work of Jaworski and Kohli (1993) (ICC = .69, $p < .001$). We examine the variation across joint ventures according to several dimensions. Consistent with Luo (2005), we measure cultural distance between the foreign parent's country of origin and China using Kogut and Singh's (1988) index. We also determine the joint venture's years of operation. Similar to Rindfleisch (2000), if the parent firms' primary businesses are similar (i.e., competitors), we classify the coentity as a horizontal joint venture; if their primary businesses occupy different levels within the vertical channel, we classify it as a vertical joint venture. Finally, we control for whether the joint venture's primary industry is a business or consumer market.

We also account for various additional control mechanisms that may affect resource investment and/or utilization. First, we measure contract specificity, which could affect both parent firms' resource investments and the joint

venture's resource utilization (Luo 2002), using three items adapted from the work of Jap and Ganesan (2000) (ICC = .65, $p < .001$). Second, we examine the potential impact of parent monitoring on resource investment using three items adapted from the work of John (1984). Third, we control for interest alignment between the partners, measured as the equity share difference between the joint venture partners (Kogut 1989), which could affect resource utilization.

Longitudinal Data Collection: Coentity Financial Performance

Two years after the dyadic survey data collection, we contacted each joint venture to obtain objective financial performance data, specifically, sales/total assets for 2005 and profits/investment for 2003–2005. On the basis of factor loadings obtained through confirmatory factor analysis, we aggregate these two indicators using weighted averages to account for their respective importance in contributing to the latent measure of financial performance (Gerbing and Anderson 1988).

Measurement Model Analysis

For each measurement scale for which dual informants provided data, ICC indicates that sufficient similarity exists to aggregate the responses. Aggregating multiple informants' responses has significant advantages for perceptual constructs, in that it avoids a reliance on the attributions of a single individual, a major source of common method bias (Ayers, Dahlstrom, and Skinner 1997). Using multiple informants also can enhance data accuracy significantly by reducing the random error associated with individual response data (Van Bruggen, Lilien, and Kacker 2002). Following Steenkamp and Baumgartner's (1998) recommendations, we first establish full metric invariance across the two informants. None of the measures differ significantly across the local and foreign representatives subsamples ($p > .05$), which gives us additional confidence in combining the data from the two sources.

We estimate three separate measurement models by grouping theoretically related constructs together into (1) trust constructs, (2) governance-related constructs (parent monitoring, contract specificity, and formalization of decision making), and (3) strategic behavior and environmental constructs (all others). We restrict each scale item's loading to its a priori specified factor and allow correlations among factors. The fit indexes for each model are good. For the trust constructs' measurement model, $\chi^2_{(29)} = 43.43$ ($p > .10$), comparative fit index (CFI) = .95, normed fit index (NFI) = .93, and root mean square error of approximation (RMSEA) = .05. For the governance constructs' measurement model, $\chi^2_{(24)} = 40.17$ ($p > .10$), CFI = .93, NFI = .92, and RMSEA = .05. For the strategic and environmental constructs' measurement model, $\chi^2_{(215)} = 401.02$ ($p > .10$), CFI = .91, NFI = .89, and RMSEA = .07. All factor loadings are positive and significant ($p < .01$). Composite reliabilities are greater than .70 (for details, see the Appendix).

The average variance extracted by each construct is greater than the square of the latent correlation between that construct and all other constructs in that measurement model (Fornell and Larcker 1981). In addition, we conduct pairwise chi-square difference tests for each pair of constructs in the overall model (Bagozzi, Yi, and Phillips 1991). Discriminant validity is supported if an unconstrained model demonstrates significantly better fit than a constrained model in which we constrain the correlation between those constructs to one ($\Delta\chi^2$ significant at $p < .01$). These analyses suggest that we achieved discriminant validity among the constructs in our study. We summarize the descriptive statistics and correlations in Table 2.

Hypothesis-Testing Procedure

We use two estimation procedures to test the hypotheses presented in our theoretical model. To test H_1–H_6, we estimate a series of four models and examine our resource investment and resource utilization variables using seemingly unrelated regression (SUR). Because the error terms associated with these variables could be correlated, SUR is appropriate; it enables the estimation of theoretically related sets of equations and permits error terms to be correlated across equations. In such conditions, SUR provides more efficient estimates than ordinary least squares (OLS) (Zellner 1962). To test H_7–H_9, which pertain to the antecedents of financial performance, we use OLS. Table 3 summarizes the results from our SUR analyses of foreign parent resource investment, local parent resource investment, coordination, and responsiveness, and Table 4 offers the results from our OLS analysis. After mean-centering the independent and moderating variables to reduce potential multicollinearity (Aiken and West 1991), we find that the variance inflation factors (ranging from 1.24 to 3.11) suggest no serious problems.

Results

Main Effects of Trust on Resource Investment and Utilization

Trust at each level has a direct effect on resource investment or utilization, but we advise caution in interpreting these main effects because of the presence of significant interactions. Parent firms' interorganizational trust positively affects resource investments in the coentity (foreign: $\beta = .16$, $p < .05$; local: $\beta = .11$, not significant [n.s.]), but we find support for H_1 only among the foreign parent firms in our sample. Parent firm agency trust generates resource investments among both foreign ($\beta = .15$, $p < .10$) and local ($\beta = .27$, $p < .01$) parent firms, in support of H_2 (Table 3, Models 1 and 2). Intraentity trust between representatives positively affects coentity coordination ($\beta = .21$, $p < .05$) and negatively affects responsiveness ($\beta = -.27$, $p < .01$), in support of both H_{3a} and H_{3b} (Table 3, Models 3 and 4).[3]

[3]Among the control variables investigated, resource investments appear to decrease with dysfunctional competition (foreign: $\beta = -.11$, $p < .10$; local: $\beta = -.12$, $p < .10$) and increase with years of operation (foreign: $\beta = .16$, $p < .05$; local: $\beta = .13$, $p < .10$), as well as in business versus consumer markets (foreign: $\beta = .23$, $p < .05$; local: $\beta = .18$, $p < .05$). The foreign parent's monitoring positively affects its own resource investments ($\beta = .16$, $p < .05$). Interest alignment increases coordination ($\beta = .15$, $p < .05$) and respon-

TABLE 2
Means, Standard Deviations, and Correlations

Constructs	M	SD	Correlation Matrix 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
1. Interorganizational trust: mutual trust between collaborating firms	3.79	1.01	.62																		
2. Agency trust: collaborating firm's trust in its representatives assigned to the coentity (foreign parent)	3.97	1.21	.11	.60																	
3. Agency trust: collaborating firm's trust in its representatives assigned to the coentity (local parent)	4.12	1.14	.13	.14	.62																
4. Intraentity trust: mutual trust between representatives of different firms assigned to the coentity	4.35	1.20	.23*	.17	.08	.52															
5. Collaborating firm's resource investment (foreign parent)	3.65	1.11	.13	.22*	.19*	.09	N.A.														
6. Collaborating firm's resource investment (local parent)	3.81	1.02	.14	.05	.20*	.08	.16	N.A.													
7. Coentity coordination	4.15	1.07	.14	.12	–.12	.23*	.30*	.17	.69												
8. Coentity responsiveness	4.87	1.21	.16	.10	.10	–.25*	.19*	.12	.19*	.65											
9. Coentity financial performance	.17	.15	.04	–.15	.17	.24*	.29*	.21*	.08	.24*	N.A.										
10. Coentity formalization of decision making	3.87	1.27	.18*	.03	.04	–.12	.04	.17	.09	–.01	–.13	.66									
11. Coentity differentiation strategy	3.77	1.10	.14	.05	.05	.11	–.15	–.13	.08	–.09	.23*	–.11	.60								
12. Dysfunctional competition	4.50	1.35	–.24*	–.17	–.12	–.34*	–.31*	–.29*	–.08	.11	–.15	.09	.11	.59							
13. Environmental dynamism	4.32	1.03	–.25*	–.03	.04	.02	.11	.27*	–.13	.09	.09	–.07	.12	.32*	.58						
14. Cultural distance	5.73	1.45	–.04	.02	.13	.07	–.06	–.18*	.09	–.06	.19*	.04	–.03	.09	.12	N.A.					
15. Years of operation	5.52	2.22	.16	.07	.03	.13	.10	.03	.21*	.20*	–.10	–.11	.01	.10	.11	.11	N.A.				
16. Parent monitoring (foreign parent)	5.03	1.04	–.11	–.22*	.05	.03	.25*	–.05	–.10	.07	–.14	.17	.01	.01	.16	–.02	–.18*	.60			
17. Parent monitoring (local parent)	4.23	1.21	–.16	.06	–.14	–.06	.09	.14	.04	.15	.13	.20*	.04	.07	.08	–.05	–.20*	.11	.63		
18. Contract specificity	4.05	1.18	–.13	.05	.09	–.10	.14	.16	.05	.07	–.06	.18*	–.03	.10	.05	.13	–.14	.08	.17	.53	
19. Interest alignment	–.13	.25	.07	–.04	–.03	.14	.06	.04	.24*	.20*	–.01	–.05	.18*	.04	.13	–.04	.11	–.05	–.06	.02	N.A.

*$p < .05$.
Notes: Variance extracted reported on the diagonal for all latent constructs. N.A. = not applicable.

TABLE 3
Determinants of Collaborative Entity (Coentity) Resource Investment and Utilization

Variables	Hypotheses	Resource Investment (Foreign Parent)[a] Model 1	Resource Investment (Local Parent)[a] Model 2	Coentity Coordination[a] Model 3	Coentity Responsiveness[a] Model 4
Control Variables					
Dysfunctional competition		–.11*	–.12*	–.03	–.09
Environmental dynamism		.09	.04	.06	–.02
Cultural distance		.04	.02	.07	.02
Years of operation		.16**	.13*	.07	.11
Contract specificity		.05	.06	.09	–.09
Joint venture type (1 = vertical; 0 = horizontal)		.06	.12	.16**	–.05
Industry (1 = business market; 0 = consumer market)		.23**	.18**	.02	.05
Interest alignment				.15**	.14*
Parent monitoring (foreign parent)		.16**			
Parent monitoring (local parent)			.11		
Main Effects					
Interorganizational trust	H_1	.16**	.11	.04	.05
Agency trust (foreign parent)	H_2	.15*			
Agency trust (local parent)	H_2		.27***		
Intraentity trust	H_{3a}, H_{3b}			.21**	–.27***
Coentity formalization of decision making		.03	.08	.14*	–.10
Coentity differentiation strategy		.08	.04	.15*	.17*
Moderating Effects					
Interorganizational trust × intraentity trust	H_{4a}, H_{4b}			.19**	–.22**
Formalization of decision making × interorganizational trust	H_{5a}	.05	.09		
Formalization of decision making × agency trust (foreign parent)	H_{5b}	.06			
Formalization of decision making × agency trust (local parent)	H_{5b}		.23**		
Formalization of decision making × intraentity trust	H_{5c}, H_{5d}			.13	–.29***
Differentiation strategy × interorganizational trust	H_{6a}	.21**	.13		
Differentiation strategy × agency trust (foreign parent)	H_{6b}	.23**			
Differentiation strategy × agency trust (local parent)	H_{6b}		.11		
Differentiation strategy × intraentity trust	H_{6c}, H_{6d}			.25**	.05
Weighted R^2		.27	.18	.20	.25

*$p < .10$.
**$p < .05$.
***$p < .01$.
[a]Standardized coefficients reported for SUR analyses.

Factors Moderating the Effects of Trust

Parent firms' interorganizational trust amplifies the positive effect of intraentity trust on coordination ($\beta = .19$, $p < .05$) and its negative effect on responsiveness ($\beta = –.22$, $p < .05$). Thus, we find support for both H_{4a} and H_{4b} (Table 3, Models 3 and 4). Formalization of decision making enhances both the positive effect of the local parent firm's agency trust on resource investment ($\beta = .23$, $p < .05$) and the negative effect of intraentity trust on responsiveness ($\beta = –.29$, $p < .01$). Therefore, H_{5b} receives partial support, and H_{5d} receives full support, but we must reject H_{5a} and H_{5c}.

siveness ($\beta = .14$, $p < .10$). Coordination is greater in vertical than horizontal joint ventures ($\beta = .16$, $p < .05$).

The coentity's differentiation strategy positively moderates the positive effects of interorganizational trust (β = .21, $p < .05$) and agency trust (β = .23, $p < .05$) on the foreign parent firms' resource investment. For the local parents, differentiation strategy does not significantly moderate the effect on investment of either interorganizational trust (β = .13) or agency trust (β = .11). That is, we find support for H_{6a} and H_{6b} only among foreign parent firms. A differentiation strategy enhances intraentity trust's positive effect on coordination (β = .25, $p < .05$) but does not significantly affect coentity responsiveness (β = .05, n.s.), in support of H_{6c}; however, we must reject H_{6d}.

Several main effects of trust and interactions of trust and differentiation strategy on resource investment achieve statistical significance only among either local or foreign parent firms; however, we find similar directional effects for the other parent as well. The statistical differences across the foreign and local parent firms appear to be superficial differences in effect sizes rather than statements of the nature or direction of the effects. Therefore, in larger samples, interorganizational trust, agency trust, and intraentity trust are likely to exhibit a consistent pattern of directional effects across both foreign and local parent firms.

Effects of Resource Investment and Utilization on Financial Performance

As we show in Table 4, in general, our findings support the RBV's theoretical perspective regarding the drivers of coentity performance. Financial performance is positively affected by the resource investments made by both parent firms (foreign: β = .23, $p < .01$; local: β = .18, $p < .05$) and the coentity's responsiveness (β = .19, $p < .05$); coentity coordination does not influence financial performance (β = .10, n.s.). Thus, we find support for H_7 and H_{8b}, but we must reject H_{8a} because the positive coefficient does not achieve statistical significance.[4]

We also find partial support for both H_{9a} and H_{9b}, in that resource investment's positive effect on financial performance is enhanced by both coordination (foreign: β = .18, $p < .05$; local: β = .12, n.s.) and responsiveness (local: β = .20, $p < .05$; foreign: β = .11, n.s.). Although two of these resource investment × resource utilization hypothesis tests do not achieve statistical significance, in all four cases, the coefficients are positive. In larger samples, these interactions likely would be detected across both foreign and local parent firms' investments. It is also possible that a more comprehensive assessment of resource investments that encompasses both the level and the quality of the parent firm's investments would generate more consistent results.

Discussion

Theoretical Contributions

Marketing literature has highlighted the critical role of trust (e.g., Atuahene-Gima and Li 2002; Morgan and Hunt 1994; Palmatier et al. 2006) and blames insufficient trust for the

[4]Of the control variables we examined, only dysfunctional competition affects the coentity's financial performance (β = –.16, $p < .05$).

TABLE 4
Determinants of Collaborative Entity (Coentity) Financial Performance

Variables	Hypotheses	Financial Performance (Standardized Regression Coefficient)
Control Variables		
Dysfunctional competition		–.16*
Environmental dynamism		.11
Cultural distance		.03
Years of operation		.09
Joint venture type (1 = vertical; 0 = horizontal)		.04
Industry (1 = business market; 0 = consumer market)		.10
Main Effects		
Resource investment (foreign parent)	H_7	.23**
Resource investment (local parent)	H_7	.18*
Coentity coordination	H_{8a}	.10
Coentity responsiveness	H_{8b}	.19*
Moderating Effects		
Resource investment (foreign parent) × coentity coordination	H_{9a}	.18*
Resource investment (local parent) × coentity coordination	H_{9a}	.12
Resource investment (foreign parent) × coentity responsiveness	H_{9b}	.11
Resource investment (local parent) × coentity responsiveness	H_{9b}	.20*
R^2		.43
Adjusted R^2		.35
F-value		4.79**

*$p < .05$.
**$p < .01$.

poor results of collaborations, as well as for their failure to meet managers' expectations (Buchel 2003; Inkpen and Beamish 1997). Marketing and management researchers, including Doney and Cannon (1997) and Zaheer, McEvily, and Perrone (1998), note the importance of considering both interfirm (e.g., supplier and customer firms) and interpersonal (e.g., salesperson and buyer) factors to achieve full explications of the nature and effects of cross-firm ties. Therefore, we extend this line of inquiry by identifying three distinct levels at which trust operates within a coentity—between the collaborating firms, between a collaborating firm and its representatives, and among the members assigned by both firms to the coentity—and find that these three levels have distinct patterns of effects.

First, a collaborating firm's agency trust in its representatives increases the firm's resource investment in the coentity. Intraentity trust among the representatives assigned to the coentity affects resource utilization by both encouraging coordination and reducing responsiveness. The collaborating firms' interorganizational trust promotes their investment in the coentity and simultaneously enhances intraentity trust's positive effect on coordination and negative effect on responsiveness. These results imply that theoretical models of marketing collaborations and marketing relationships must carefully consider how forces operating at diverse levels can affect consequences. Particular attention should focus on the potential impact of factors at higher levels of aggregation; for example, interorganizational trust between the collaborating firms moderates the effects of intraentity trust on two constructs internal to the coentity, namely, coordination and responsiveness. Depending on the specific construct, relevant antecedents may exist at both the same and other levels. Therefore, limiting a theoretical focus to a single organizational level risks overestimating same-level effects and simultaneously missing important cross-level effects. A single-level focus may be problematic in any interorganizational marketing relationship, but it is especially troublesome in marketing collaborations that involve multiple firms, diverse constituents, partially conflicting agendas, mixed-motive situations, and complex divided loyalties.

A marketing collaboration involves a coentity when (1) two collaborating firms deliberately pursue a mutual collaboration to achieve one or more mutual goals; (2) each collaborating firm devotes and invests tangible and/or intangible resources in the collaboration, including assigning specific employees to the collaboration; and (3) the specific employees identified and assigned by each collaborating firm must engage with the other firm's representatives to plan, implement, and enact strategies to achieve the collaboration's mutual goals. The members of the collaboration constitute the coentity. Although we test our model using a sample of IJVs, we expect that the theoretical model and the underlying relationships among constructs generalize to strategic alliances, product development teams, project teams, and other marketing collaborations that involve the creation of a coentity.

For example, consider a product development team created by an automaker and a Tier 1 supplier. The collaborating firms must establish a sufficient level of interorganizational trust before the collaboration can begin or investments flow into it. If the firms have low levels of trust, they may incorporate other safeguards, such as nondisclosure agreements, and governance mechanisms, such as detailed reporting procedures, into the coentity's (product development team's) operations. Furthermore, to be successful, the product development team members need to share information, ideas, and insights and work together effectively. Because this sharing and coordination creates vulnerabilities that the partner might exploit, trust must be established within the team (i.e., intraentity trust). Over time, as the product development proceeds, the development team probably requires more resource input and more sensitive information from the collaborating firms. If the firms do not have sufficient agency trust in their respective project team members, they will not provide such information and resources. Therefore, deficient agency trust in the firm's own team members inhibits critical additional resource investments in the collaboration and results in suboptimal performance. Thus, as reflected in this example, all three types of trust are required for optimal coentity performance.

To examine trust at these three different levels, we focus on a specific trustor and specific trustee at each level. However, trust could also be examined in multiple ways that focus on different trustors and trustees at each level. At the interorganizational level, interorganizational trust could be operationalized and examined between the collaborating firms, or interpersonal trust could be operationalized and examined between the collaborating firms' chief executive officers. We could focus on interorganizational trust between a collaborating firm and the coentity, interpersonal trust between the collaborating firm's venture manager and the senior representative assigned to the coentity, or person-to-group trust between the collaborating firm's venture manager and the collective set of representatives assigned by the firm to the coentity. Intraentity trust assessments could include interpersonal measures of senior managers representing each parent or intergroup trust between the set of representatives assigned by each collaborating firm. Even more trustor–trustee configurations are possible; researchers' selection of a focal trustor–trustee relationship should be guided by theory and the specific set of antecedents, consequences, and other constructs under study. Our framework provides helpful guidance for identifying and examining relationships at multiple levels within complex collaborative entities.

Second, we demonstrate that building multilevel trust in isolation, without considering the relevant coentity's strategic and structural context, could be problematic. Although trust provides a motivation to engage in various positive behaviors, whether that motivation becomes manifest in actions depends on a host of factors, such as the coentity's formalized decision making and differentiation strategy. Specifically, formalized decision making not only increases the likelihood that representatives' intraentity trust motivates actual behaviors (i.e., parent firm's resource investments) but also enhances the negative inertial tendencies associated with intraentity trust. When the collaborative entity pursues a differentiation strategy, the insular tendencies generated by high intraentity trust are mitigated by the

necessity of tuning in to the external environment. Our findings suggest that the more the coentity enacts a differentiation strategy, the more intraentity trust is manifest in coentity coordination. This recognition that a trusting party may be encouraged or prevented from acting on the motivation that arises from trust may help explain the inconsistency of trust's effects on performance outcomes, as revealed in a recent meta-analysis (Palmatier et al. 2006).

Third, in contrast to most previous studies, which suggest that trust building always leads to desirable outcomes (Dirks and Ferrin 2001), our research reveals that trust can be counterproductive in ways that extend beyond the obvious vulnerabilities discussed in previous research. The negative impact of intraentity trust on external responsiveness appears to be caused not by excessive vulnerability but rather by excessive closeness, insularity, and perhaps even a perception of invulnerability. In dynamic environments, the negative effects of intraentity trust—and how those effects may be exacerbated by trust at other levels, as well as by governance mechanisms—should be considered.

Managerial Implications

Our research offers several implications for managerial practice. Most extant research suggests that business executives should build trust with their partners to improve performance, but we consider this recommendation an oversimplification. When initiating a marketing collaboration, firms' decisions regarding coentity staffing, compensation decisions, and governance and management processes must balance the need for resource investment with the coentity's resource utilization requirements. If significant resource investments are required, maintaining a high level of agency trust is critical, and the selection and compensation of representatives could bolster agency trust by maximizing representatives' cultural similarity to the firm and tying part of their compensation to the firm's performance. Alternatively, if coordination is deemed to be the most critical, intraentity trust is paramount, and the selection and compensation of representatives should promote smooth and effective interactions with the partner's representatives, perhaps by linking compensation more closely to coentity performance.

The people who staff a coentity must balance their allegiance to their respective firms with their roles as colleagues of their counterparts. Because agency and intraentity trust have unique effects and operate through different mediators, collaborating members likely face situations in which their own firms' interests diverge from those of the coentity. In some cases, these representatives must choose between actions that build agency trust (and resource investment) and actions that increase intraentity trust, with its related improvements to the coentity's resource coordination. Selecting employees who have the capacity to deal with such conflicting loyalties is advisable.

Furthermore, managers can help ensure that trust-building efforts pay off by complementing relationship marketing activities with coentity structure and strategy. Specifically, if significant resource investments are needed, implementing formalized decision-making processes within the coentity will be particularly helpful because doing so can boost the effects of interorganizational trust on resource investment. In contrast, if high responsiveness is required, formalized decision making may worsen the negative effect of intraentity trust on resource responsiveness. The strategic context provides another factor worth considering because if a coentity pursues a differentiation strategy, the relative effects of multilevel trust on the coentity's resource investment and utilization are greater than if it adopts a low-cost strategy. Finally, building trust is not without drawbacks; intraentity trust may harm the coentity's external responsiveness, presumably because of the resultant excessive closeness and insularity. Thus, if it is important for a project team or strategic alliance to keep its edge, some of the employees assigned to that coentity should be rotated to deter excessive insularity.

Limitations and Future Research Directions

Although we develop our theoretical model to apply to all types of collaborative entities and believe that the underlying theoretical relationships are applicable to many types of marketing collaborations, our empirical sample is limited to IJVs. We have no empirical evidence that our specific results can be generalized to joint ventures in other contexts, strategic alliances, industry work groups, interfirm project teams, internal new product development task forces, or other collaborative entities. Only additional studies can address questions about generalizability.

We believe that the generalizability of some of our findings regarding formal decision-making procedures may be limited. The security provided by formal decision-making procedures appears to reduce concerns about exploitation and motivate greater investment by Chinese firms, but we do not find similar magnitude of effects for foreign collaborating firms. This moderating effect may be based in the underdevelopment of the institutional and legal infrastructure in China, which creates a more uncertain and riskier decision-making environment (Dahlstrom and Nygaard 1995). Thus, the interaction between agency trust and formalization of decision making and their effects on resource investment may be generalizable only to collaborating firms that face a similar lack of institutional protections. Further research should explore how the national or cultural background of the collaborating firms or the location of the coentity itself might affect resource investment, resource utilization, and, ultimately, performance.

Because we find that trust at each of the three levels has unique effects on performance, further exploration of their antecedents is worthwhile. Agency theory may shed light on the antecedents of agency trust, which could be affected by how representatives deal with the inherent mixed-motive situations of a coentity. To what extent do the representatives further the collaborating firm's objectives or act in accord with the coentity's unique interests, in the interests of their fellow representatives, or in their own self-interests? Channels and other interorganizational research might provide insights about trust building between parent firms, and management research could shed more light on the genesis of intraentity trust.

We focus on the effects of trust, but we also find that several control variables affect coentity performance. These findings point to avenues for further research. The signifi-

cant effects of parent monitoring and interest alignment on resource investments and utilization suggest that these alternative governance mechanisms are worthy of attention, particularly in terms of whether trust's beneficial effects might be enhanced by some governance mechanisms, such as interest alignment, or whether trust can be undermined by other types of governance, such as monitoring programs. In addition, exploring whether the roles of trust at multiple levels differ in horizontal versus vertical collaborations might be fruitful; the potential for conflicts of interest multiply when collaborating firms are also competitors. Other factors, such as the coentity's life cycle, duration, leadership structure, and market environment, may leverage the impact of trust at various levels on resource investment and utilization.

Perhaps previous studies have focused too narrowly by investigating only the beneficial effects of trust. This implicit limited scope may have missed potential negative effects and limited the understanding of the full range of trust's effects. Therefore, additional research should investigate whether trust at various levels might have other negative ramifications.

APPENDIX

Constructs	Loading
Interorganizational Trust: Mutual Trust Between Collaborating Firms (Composite Reliability [CR] = .87)	
Both partners' parent companies trust each other.	.81
Both partners' parent companies are always frank and truthful in dealing with each other.	.83
Both parent companies believe that the other parent company would go out of its way to make sure the relationship is not damaged or harmed.	.71
Agency Trust: Collaborating Firm's Trust in Its Representatives Assigned to Coentity (CR = Foreign .75 and Local .74)	
(Please think of "we" and "us" as senior management representing your party in this joint venture and "our partner" as the senior management representing the other joint venture party identified at the beginning of the questionnaire)	
Our parent company trusts us in our ability to run this joint venture.	.75/.74
Our parent company trusts us in keeping their best interests in mind when running this joint venture.	.82/.81
Intraentity Trust: Mutual Trust Between Representatives of Different Firms Assigned to Coentity (CR = .85)	
(Please think of "we" and "us" as senior management representing your party in this joint venture and "our partner" as the senior management representing the other joint venture party identified at the beginning of the questionnaire)	
Our partner and we can rely on each other to do our job in the joint venture.	.76
In this relationship, our partner and we are both concerned about what happens to each other.	.67
When our partner and we share our problems with each other, both of us know that the other party will respond with understanding.	.74
Collaborating Firm's Resource Investment in Coentity (Formative)	
Please indicate the extent to which your parent organization has invested into the joint venture *after* the establishment of the joint venture.	
Product development, sales personnel and training, capital equipment, information systems, research and development, manufacturing and technology, marketing and distribution, and intellectual property (responses provided for all items)	N.A.
Coentity Coordination (CR = .93)	
Both partners play an active role in making important decisions such as product development, sales management, etc., for the joint venture.	.73
Both partners consult with each other concerning important decisions regarding the joint venture.	.82
Both partners work effectively together to improve the operations of this joint venture.	.91
Both partners are always looking for synergistic ways to do business together.	.85
Coentity Responsiveness (CR = .93)	
Our joint venture can very quickly deploy our resources in places to face competitive actions.	.76
Our joint venture can quickly adjust our business process in response to environmental changes.	.81
Our joint venture can effectively sense the changes and trends in the marketplace, and act on them promptly.	.84
Coentity Formalization of Decision Making (CR = .89)	
Plans must be rigidly followed during implementation in our joint venture.	.74
There is a "standard operating procedure" for almost all major decisions.	.86
There are rules and procedures for most things.	.84
Our joint venture follows written procedures in most aspects of business in our joint venture.	.80
Coentity Differentiation Strategy (CR = .88)	
Our strategy can be described as:	
Maintaining a technological edge over competition in our market.	.76
Maintaining higher quality standards for our products.	.80
Maintaining a unique image for our products.	.71
Providing innovative products and/or service to our customers.	.82

APPENDIX
Continued

Constructs	Loading
Dysfunctional Competition (CR = .89)	
In the market of our principle industry, unlawful competitive practices such as illegal copying of new products are quite common.	.72
Our joint venture has experienced counterfeiting of our new products by other firms.	.73
There is no effective market competitive laws to protect our alliance's intellectual property.	.81
Our joint venture has experienced increased unfair competitive practices by other firms in the industry.	.82
Environmental Dynamism (CR = .88)	
In the market of our joint venture, customers' preferences change quickly over time.	.73
For our joint venture, market demand and consumer tastes have been unpredictable.	.80
Actions of local and foreign competitors of the joint venture have been highly unpredictable.	.77
The competition of our joint venture is changing very rapidly.	.75
Contract Specificity (CR = .84)	
Our relationship with our partner is governed primarily by written contracts.	.75
Everything is spelled out in detail in the contract of the joint venture.	.77
Over time, we have developed ways of doing things with our partner that never need to be expressed formally in the contract. (R).	.67
Parent Monitoring (CR = Foreign .82 and Local .80)	
Our parent company watches us closely to be sure that we keep their best interests in mind.	.77/.75
Our behaviors in the joint venture are monitored constantly by our parent company.	.80/.77
Our parent company requires us to report our handling of joint venture operation regularly.	.75/.72

Notes: All items were measured using seven-point scales anchored by 1 = "strongly disagree" and 7 = "strongly agree." R = reverse scored. N.A. = not available.

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