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# **Interorganizational Trust**

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t has become increasingly clear that interorganizational trust is an important factor affecting the actions and performance of organizations engaged in dyadic and network relationships such as strategic alliances. Scholars from a number of disciplines—from strategic management and organization theory to economics and marketinghave conceptually and empirically addressed the role that interorganizational trust, as well as trust in general, plays in firm behavior and performance. In this chapter, we look broadly at the scholarship in the area of interorganizational trust, with special attention to the extant empirical work. We take a broad-brush approach to the literature, aiming to be inclusive but focusing primarily on the burgeoning literature on the topic within the strategy and organizational literature.

The goal of the chapter is to provide a comprehensive, high-level, definitive statement on interorganizational trust, an area of particular interest to both scholars and practitioners of strategic alliances. Specifically, in the following sections of the chapter, we survey the literature

on interorganizational trust, identify and integrate the key themes that emerge from the empirical contributions on the subject, and explore theoretical issues around conducting research in this domain, concluding with directions for future research in both theoretical and methodological areas.

# Interorganizational Trust: The State of the Art

Issues associated with organizational trust have generated a great deal of broad scholarly interest in the field, as evidenced by the dozens of articles and special issues of the leading journals that have been devoted to the theme of trust. Yet, although there exists a significant amount of literature on trust in an organizational context—as well as research in related areas such as alliances, social networks, and interpersonal trust—scholarly work specifically dealing with interorganizational trust is a more limited area of research. Empirical

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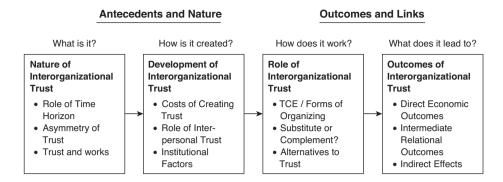


Figure 10.1 A Staged Model of Interorganizational Trust: Four Empirical Themes

work on the topic is an even smaller—yet growing—subset of this literature; a grasp of the existing empirical findings is crucial to understanding and taking stock of the current state of the field. In this section, we focus on synthesizing the empirical research on the subject in an effort to establish both what we know and what we do not about interorganizational trust, thereby identifying areas for future research.

In surveying the empirical work on interorganizational trust, individual findings tend to fall into one of four primary areas of inquiry. We use these areas in turn to formulate a staged model of interorganizational trust. These areas are the nature of interorganizational trust, the development of interorganizational trust, the role of interorganizational trust, and the outcomes of interorganizational trust. These four areas can be seen as exploring the following four questions, with respect to interorganizational trust: What is it? How is it created? How does it work? What does it lead to?

We further divide each of these topic areas into several subcategories that have occupied the primary interest of empirical research in each area (see Figure 10.1). We discuss the empirical findings and implications from the organizational literature according to these four themes in the conceptual order of the staged model, addressing the nature of trust and its development, role, and outcomes. In addition to the synopsis of empirical

work and theoretical discussion of the themes, also see Table 10.1 for an article-by-article summary of empirical work on interorganizational trust in the organizational literature.

# Nature of Interorganizational Trust

What is the nature of trust between organizations? The pursuit of an answer to this question remains the focal subject of much interorganizational trust research. We begin our discussion by defining interorganizational trust. A commonly used definition of interorganizational trust is the extent to which members of one organization hold a collective trust orientation toward another organization (Zaheer, McEvily, & Perrone, 1998). Relatedly, Currall and Inkpen (2002) draw attention to the socially constructed shared history within an organization toward another organization that constitutes a collective orientation. In this vein, it is important to avoid anthropomorphizing the organization by treating interorganizational trust as equivalent to an individual trusting another individual.

The fact that trust is such a broad concept, complicated by its various connotations in common usage, results in researchers parsing trust into a variety of finer-grained dimensions, teasing out various aspects of trust. These dimensions

(Text continues on page 181)

(Continued)

relationships.

positively influence

via survey.

(cooperation).

joint action

Exchange theory and Various management other management distributive justice. TCE and various Framework **Theoretical** theories. theories. concept of joint action strongly parallels the idea of 'closeness' in and Interpers. Trust Between Interorg. Implied close link; interpersonal Relation ¥ N ¥ None with respect to to increased resource trust; no support for claim that trust leads No support for claim formalization destroy that monitoring and Non Findings or Mixed Results dependence. joint action. ¥ cooperate, making the increase propensity to causal chain circular.) satisfaction with the relationship. (Which oresumably would Consequences Trust leads to Findings: ΑM M Cooperation builds verification efforts, expectations, Antecedents and specific investments Continuity Findings: trust.  $\forall$ boundaries. Measured outcomes for the firm. interdependent action reciprocity. Measured satisfaction with the ustice.Measured via that another organifulfillment, fairness, Frust: a firm's belief interpenetration of 'Norms of equity': zation will act to Trust is Defined/ and distributive create positive with expected organizational the degree of How Interorg. other party's commitment Cooperation: coordinated Joint action: Measured via survey. survey. 1. Van de Ven and Walker (1984) 3. Heide & John Narus (1990) 2. Anderson & Study

Empirical Research on Interorganizational Trust

Table 10.1

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Table 10.1 (Continued)

=	How Interorg. Trust is Defined/ Measured	Findings: Antecedents Diminishing	Findings: Consequences	Non Findings or Mixed Results	Relation Between Interorg. and Interpers. Trust	Theoretical Framework
Not mair dissc relat Atta Atta dyac of th	Not directly addressed; main focus on the dissolution of dyadic relationships. Attachment in the dyad affects continuity of the relationship.	resource fit' in the dyad leads to dissolution; attachment between boundary spanners lessens the likelihood of dissolution.	Decreased interpersonal commitment between boundary spanners can lead to the demise of the relationship.	ouo O	boundary spanner attachments may be "critical," and that such attachments "may rely on personal knowledge and trust."	Resource dependence perspective and org. theory related to commitment.
Trust rely part has Mea	Trust: willingness to rely on an exchange partner in whom one has confidence. Measured via survey.	Perceptions of the other party's expertise, sincerity, integrity, tact, timeliness, and confidentiality increase trust.  Perceived congeniality and org. formalization decrease trust.	N/A	Factors such as perceived dependability, collective orientation, culture, location, and various moderating variables are not found to boost trust. Mixed results for organizational power.	Implied close link; surveys sent to key boundary spanners.	Various management theories.
Trusi rely parti has inclu of cr bene Mea	Trust: willingness to rely on an exchange partner in whom one has confidence; includes expectations of credibility and benevolence.  Measured via survey.	Perceptions of specific investments increase trust. Also, positive reputation fosters credibility-based trust in that partner.	Credibility-based trust is positively related to a long-term relationship orientation.	Amount of– and satisfaction with– past interactions not shown to build trust.	N/A	TCE and various other management theories.

Table 10.1 (Continued)

Study	How Interorg. Trust is Defined/ Measured	Findings: Antecedents	Findings: Consequences	Non Findings or Mixed Results	Relation Between Interorg. and Interpers. Trust	Theoretical Framework
11. Mohr and Spekman (1994)	Trust: belief that a party's word is reliable, and that a party will fulfill its obligations in an exchange. Measured via survey.	N/A	Trust (along with communication quality, info sharing, commitment) predicts partnership success (measured as sales and satisfaction).	None related to trust.	NA	Various management theories.
12. Morgan & Hunt (1994)	Trust: confidence in an exchange partner's reliability and integrity. Measured via survey.	Shared values and communication lead to trust, opportunism decreases trust.	Trust leads to relationship commitment, cooperation, and functional conflict. Trust decreases uncertainty.	None related to trust.	NA	Commitment-trust theory of relationship marketing.
13. Gulati (1995)	Trust: expectation of low opportunism. Assumed to exist in repeated alliances; represented by absence of equity arrangement.	History of interaction and familiarity lead to trust. Repeat partners and those from the same country are less likely to safeguard.	N/A	Number of partners does not affect governance form. Prior nonequity alliances don't impact equity use in new ventures.	N.A.	TCE and sociological theory
14. Zaheer and Venkatraman (1995)	Trust: predictable, fair, and reciprocal action with respect to commitments.  Measured via survey.	NVA	Trust is significantly associated with hierarchical forms of organizing. Trust increases the explanatory power of TCE factors.	None	Identified as an area or future research.	TCE and sociological exchange theory

Theoretical Framework	Relational norms, social control, and TCE	Procedural justice theory	TCE, other management theories.	Coordination costs (TCE) and interdependence perspective.
Relation Between Interorg. and Interpers. Trust	Close relationship is implied	Tightly linked-interorg. trust is essentially equated with trust between entrepreneurial CEO and lead investor.	Implied close relationship.	N/A
Non Findings or Mixed Results	No support for link between trust and performance (measured by increased sales and market share of the partnership).	Mixed results for the claim that investor influence also leads to greater trust in the entrepreneur.	Indications that only intentional trust (habitualization) reduces perceived risk, and not competence trust, although the concepts are difficult to disentangle.	Mixed support (among regions) for regional commonality leading to hierarchy. No support for claim of multi-partner alliances reducing trust.
Findings: Consequences	None found.	N/A	Trust reduces risk, envisioned as the perceived probability of loss rather than the perceived size of the loss.	Trust (repeated ties) leads to hierarchical alliances.
Findings: Antecedents	Flexibility, expectation of continuity, and open information exchange lead to greater trust in cross-border dyads.	Timely feedback (i.e. communication from entrepreneur to investor) leads to greater trust in the entrepreneur.	Z/A	Repeated interactions, commonality of national location, and bilateral relationship are all assumed to be measures of frust, but not directly tested.
How Interorg. Trust is Defined/ Measured	Trust: "the degree of confidence the individual partners have on the reliability and integrity of each other." Measured via survey.	Undefined but implied; specific focus is on whether relationship partners act 'justly.' Trust measured via survey and initial lab experiment.	Trust: confidence in another's reliability in fulfilling expectations (competence-based trust) as well as in the another's benevolence (intentional trust).  Measured via survey.	Trust: confidence in the predictability of each other's actions. Three proxies used to 'measure' trust: repeated ties, regional commonality, bilateral relationship.
Study	15. Aulakh et al. (1996)	16. Sapienza and Korsgaard (1996)	17. Nooteboom, Berger, & Noorderhaven (1997)	18. Gulati & Singh (1998)

Table 10.1 (Continued)

g. Theoretical rust Framework	Various management theories.	d but Psychological and sociological theories of trust and conflict; organization economics.	TCE, social exchange theory.	at high Relationship-based onnel at view, process-based ons view, and economic ary (hostage-based) view.  ed view.
Relation Between Interorg. and Interpers. Trust	N/A	Highly correlated but distinct.	4 72	They suggest that high stability of personnel at both organizations may be "necessary to produce relationship-based trust," suggesting a close tie to interpersonal trust.
Non Findings or Mixed Results	Mixed support for formal contracts leading to increased trust. (Results varied by international region.)	No support for the claim that interpersonal trust leads to less conflict in the interorganizational relationship.	No support for the claims that previous relations or length of time in the relationship would both be positively correlated with trust.	No support for the claim that trust can be produced through economic ties or hostages.
Findings: Consequences	Trust is positively related to performance (continuous improvement and just-in-time delivery).	Interorg. trust associated with higher performance (four-item measure of goal fulfillment in the dyadic relationship).	Trust leads to two kinds of strategic flexibility (measured in terms of exit opportunity and modification).	N/A
Findings: Antecedents	Customer service, informal commitment and info exchange lead to trust.	N.A	Shared values and communication increase trust. Economic hostages increase trust. Relationship asymmetry discourages trust.	Consistency and routines highly correlated with trust. Institutional factors affect trust; results mixed across three cultural settings. Quantified costs of creating trust.
How Interorg. Trust is Defined/ Measured	Trust: expectation that a party will behave in a mutually acceptable manner; distinguishes between competence and goodwill trust. Measured via survey.	Trust: relational concept that incorporates reliability, predictability, and fairness. Measured via survey.	Trust: dependability, predictability, good faith. Measured via survey.	Trust: one party's confidence that the other party in the exchange relationship will not exploit its vulnerabilities. Measured via survey.
Study	19. Sako (1998)	20. Zaheer, McEvily, and Perrone (1998)	21. Young-Ybarra and Wiersema (1999)	22. Dyer and Chu (2000)

Study	How Interorg. Trust is Defined/ Measured	Findings: Antecedents	Findings: Consequences	Non Findings or Mixed Results	Relation Between Interorg. and Interpers. Trust	Theoretical Framework
23. Fryxell, Dooley, & Vryza (2002)	Trust: willingness to be vulnerable, based on perception of the qualities of the other party. Measured via survey.	N/A	Social controls positively influence performance if affect-based trust is present; without such trust, social controls have the opposite effect.	None related to trust.	N/A	Various management theories.
24. Luo (2002)	Cooperation: exchange process that acts as a safeguard mechanism—essentially, calculative trust. Measured via survey.	Contingency adaptability in contracting increases cooperation. Trust and contracting are complements.	Cooperation leads to contract adaptability. Cooperation improves performance (sales, ROI); this relationship improves if the contract is more complete.	No support for the claim that term of contract influences, or is influenced by, cooperation.	N/A	Relational governance, TCE.
25. Poppo and Zenger (2002)	Trust: norms of flexibility, solidarity, and information exchange. Measured via survey.	Increase in level of contract complexity is associated with increased relational governance (trust).	Increase in level of trust associated with increased contract complexity. Both are associated with higher performance.	No support for the claim that contractual complexity and trust are substitutes. (Whereas complementarity view supported.)	N/A	TCE and sociological embeddedness.
26. Zaheer, Lofstrom, and George (2002)	Trust: expectation that other party will fulfill obligations, behave predictably, and negotiate fairly.  Examined in inductive multiple case studies.	Interpersonal trust among CEOs a key factor in alliance formation and issue resolution. Trust among mid-level managers impacts day-to-day efficiency.	Loss of trust results in alliance dissolution.	N/A	Interorganizational trust not mere aggregation of interpersonal trust. Decline in interorg. trust also related to decline in interpersonal trust.	Grounded theory building.

Table 10.1 (Continued)

<i>Theoretical</i> Framework		Information processing, relational governance.	Procedural justice theory; interpersonal justice theory.	Relational governance.
10	TCE	Info prov gov	s; rectly	t has effect s
Relation Between Interorg. and Interpers. Trus	N/A	N/A	Reinforces idea of separate construct relationship not di explored.	Interpersonal trusi less of a positive e on performance a organization-level opportunism rises
Non Findings or Mixed Results	Mixed results for findings grouped by individual country supporting the idea of national variation in trust norms.	No support for claim that co-location of client and supplier increases positive effect of trust on task performance.	Mixed results for interpersonal trust leading to better performance.	√.
Findings: Consequences	Trust significantly lowers transaction costs. Trust tied to information sharing. Trustworthiness brings higher performance.	Trust-based governance positively relates to task performance. This relationship is also magnified by client's skill level, task teachability, and task overlap.	Interorganizational trust associated with higher performance (four dimensions measured by survey).	Trust improves partner performance, competitive advantage, joint profits, and relationship extendedness. These positive effects decrease as ex post opportunism rises.
Findings: Antecedents	N/A (although they acknowledge that causality could be reversed or reciprocal).	Client skill level, teachability of the task, co-location, and task overlap (parallel execution) all increase trust-based governance.	Interpersonal justice leads to interpersonal trust. Procedural justice leads to interorganizational trust.	N/A
How Interorg. Trust is Defined/ Measured	Trust: one party's confidence that the other party in the exchange relationship will not exploit its vulnerabilities.  Measured via survey.	Trust: confidence in expected behavior and goodwill of other party regarding business actions. Measured via survey.	Trust: willingness to accept vulnerability. Measured via survey-distinguishing between interpersonal trust vs. trust in the organization.	Trust: interpersonal willingness to be vulnerable to the actions of another party, with the expectation of reliability. Measured via survey.
Study	27. Dyer & Chu (2003)	28. Carson et. al. (2003)	29. Hagen and Simons (2003)	30. Jap & Anderson (2003)

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Theoretical Framework	TCE and exchange theory.	Various management theories.	Game theory, TCE, and social relations perspectives.	Agency theory, negotiation theory. Qualitative, multiple case studies.
Relation Between Interorg. and Interpers. Trust	Distinct but positively correlated.	Interorg. Trust mediates the relationship between an organizational trait and the interpersonal trust between boundary spanners.	N/A	Implied close relationship, given the context of small, entrepreneurial firms.
Non Findings or Mixed Results	No support for claims that vulnerability increases trust in the partner, or that supplier vulnerability increases buyer trust.	None related to interorganizational trust.	No support for the claim that higher exchange hazard levels are associated with greater relational governance (an indicator of trust).	NA
Findings: Consequences	Z/A	Interorg. trust mediates the relationship between an individual's firm's clan culture and the trust placed in that individual by other boundary spanners.	Relational governance mitigates the detrimental effect of historical social contact on performance.	Trust reduces info asymmetry and competitive negotiation between entrepreneurial firm owners and MBO successors.
Findings: Antecedents	Vulnerability generally reduces trust in the partner. Buyer vulnerability increases supplier trust in buyer.	√N/2	History of social contact and longer contract duration are associated with increased relational governance (an indicator of trust).	NA
How Interorg. Trust is Defined/ Measured	Trust: expectation that other party will fulfill obligations, behave predictably, and negotiate fairly. Measured via survey.	Trust: expectation that other party will fulfill obligations, behave predictably, and negotiate fairly.  Measured via survey.	Relational governance: composite concept that includes promise-keeping, information sharing, and open communication. Measured via survey.	Trust: perception of fairness and justice.
Study	31. McEvily, Zaheer, & Perrone (2003)	32. Perrone, Zaheer, & McEvily (2003)	33. Poppo, Zhou, and Zenger (2003)	34. Howorth, Westhead, & Wright (2004)

Table 10.1 (Continued)

Study	How Interorg. Trust is Defined/ Measured	Findings: Antecedents	Findings: Consequences	Non Findings or Mixed Results	Relation Between Interorg. and Interpers. Trust	Theoretical Framework
35. Lui & Ngo (2004)	Trust: expectation that other party intends to fulfill their role in the relationship. Composed of goodwill trust and competence trust. Measured via survey.	NA	Trust moderates the relationship between contractual safeguards and performance. Goodwill trust is a safeguard substitute; competence trust a complement.	Although prior relations are sometimes used as a proxy for trust, they find only mild correlation between prior relations and trust.	Goodwill trust arises from interpersonal trust. Competence trust may derive from things such as reputation effects.	TCE, social relations perspectives.
36. Mayer & Argyres (2004)	Trust: not explicitly defined, but encompasses vulnerability and expectation of reliability.	Appears that contract completeness increases trust.	Completeness may contribute to the positive effects of contracts on trust.	N/A	NA	TCE.
37. Mellewigt, Madhok, & Weibel (2004)	Trust: willingness to be vulnerable, based on a positive expectation of partner's intentions.  Measured via survey.	NA	The effect of transaction hazard on contract complexity is weakened by trust, whereas trust boosts the effect of strategic importance on contract complexity.	None related to trust.	NA	TCE, RBV, and inter- organizational relations perspectives.
38. Saparito, Chen, & Sapienza (2004)	Relational trust: confidence that other party will act beneficially out of consideration for the trustor's welfare. Distinct from calculative trust. Measured via survey.	NA	Trust mediates the relationship between bank customer service efforts and customer loyalty, even after self-interest assumptions are accounted for.	N/A	NA	Relational and self interest perspectives.

often frame very different descriptive views of trust; for example, interorganizational trust can be seen as goodwill-based (Saparito, Chen, & Sapienza, 2004) or competence-based (Lui & Ngo, 2004). Because trust has developed into a multidimensional construct, researchers both conceive of and measure trust in various ways (Table 10.1). A major, economics-derived stream on trust views it as a quasirational calculation of the probability of another's future benevolent actions (Gambetta, 1988) or as a dispositional characteristic of the trustor (Dasgupta, 1988).

A more organizationally oriented view is that trust is reciprocal or relational in nature (Hardin, 1991; Zaheer & Venkatraman, 1995). The term relational as it applies to trust has at least two implications: relational as social, and relational as dyadic. First, relational-as-social trust, in contrast to "calculative" trust or trust as quasirational choice, implies the inclusion of relational elements, or possessing a social orientation. Macneil (1980) draws attention to relational contracting as a contrast to more explicit classical and neoclassical contracting. Relational contracting includes social elements such as norms and expectations as well as encompassing long-time horizons. Relational-as-dyadic trust suggests trust relative to an identified other and favors a dynamic and reciprocal—rather than dispositional—view of trust. In this way, a relational view of interorganizational trust implies that a specific organization is the object of trust (Zaheer et al., 1998). Yet this does not preclude organizations from possessing or acquiring reputations for being trustworthy; to that extent, interorganizational trust is not exclusively dyadic or relational but can be network-based as well. Reputations may be more easily spread when the firm is embedded in a dense network of ties.

The relational issue in trust naturally raises the question of time horizons, as it implies that one is prepared to defer reciprocation in some way. The reciprocal relationship between trust and trustworthiness also brings up the issue of possible asymmetries in trust between parties. Finally, as mentioned above, network membership may influence the nature of interorganizational trust. In the rest of this section, we consider the empirical research and raise theoretical issues around the role of time horizons in relational trust, as well as the notion of asymmetries in dyadic interorganizational trust and the nature of trust within networks.

Role of Time Horizon. It has often been noted, perhaps apocryphally, that for sociologists trust is only about the past, whereas for economists it is only about the future. In other words, the history of past relations is what a sociologist might use to explain trust. An economist, on the other hand, is concerned only with the prospects for future gain or loss—the past is merely sunk cost.

One of the original, forward-looking frameworks commonly employed in thinking about trust was the game-theoretic view on the evolution of cooperation proposed by Axelrod (1984), who showed that expectations of continued interaction change the behavior of relationship partners. Organizational scholars have built upon this game-theoretic framework (Doz, 1996; Parkhe, 1993), finding that organizational perceptions of the interfirm relationship continuing into the future encourage cooperation between the organizations involved (Heide & Miner, 1992). The valuation of the future is where the issue of the organization's time horizon, or rate of time discount, becomes salient. If the organization's rate of time discount is low, it will value the future more than will one with a higher rate of time discount. In the former case, the potential benefits of future trust and cooperation will be valued higher than will the immediate benefits of opportunism (Axelrod, 1984, 1997), because from this perspective an organization will cooperate with another only if the prospective gains from cooperation exceed those from opportunism. Accordingly, one would expect organizations that have a lower rate of time discount to be more trusting and trustworthy than organizations with a higher rate of time discount. However, the implicit rate of organizational time discount is clearly a deep-seated cultural

assumption (Schein, 1992) that would be difficult to surface empirically.

On the other hand, studies emphasizing the role of the past in the creation of trust show that the history of previous interaction between the organizations-including familiarity as well as relationship history—leads to increased trust (Gulati, 1995), and some research goes so far as to use repeated ties as a proxy for interorganizational trust (Gulati & Singh, 1998). However, other research (Lui & Ngo, 2004; Young-Ybarra & Wiersema, 1999) has found that the length of time the partner organizations have been together or even the mere presence of prior relations between two organizations is unrelated to trust. Although previous history clearly does not equate exactly to prospects for extended future collaboration, the question of how past ties and history serve as a signal of the "shadow of the future," and the associated trust or cooperation emanating from it, appears to be an unresolved issue. A way to reconcile the divergent sociological and economic perspectives is to look to the past history of the relationship as well as casting an eye toward prospects for future cooperation.

Asymmetry of Trust. Trust research usually assumes that trust between two alliance or exchange partners is symmetrical. If "trust begets trust" in a virtuous cycle, this implies a close relationship between trust and trustworthiness, potentially creating a self-reinforcing cycle of trusting and being trusted. The extent of trust on either side of the dyad is often assumed to be approximately the same. Yet it is by no means self-evident that trust should in fact be symmetric across the dyad; if anything, a symmetric alignment in trust may be the exception rather than the rule, because the bases of trust across the dyad may differ (McEvily, Zaheer, & Perrone, 2003).

Although the effects of interorganizational trust are generally assumed to arise from bilateral, essentially equivalent norms of cooperation (e.g., Aulakh, Kotabe, & Sahay, 1996), some research has started to examine the potentially asymmetric nature of interfirm trust. Although

overall relationship asymmetry appears to discourage the formation of interorganizational trust (Young-Ybarra & Wiersema, 1999), other research indicates that vulnerability is an important aspect of trust creation (McEvily et al., 2003). If vulnerability leads to trustworthiness, this may have indirect implications for organizational performance, because trustworthiness and performance have been shown to be linked (Dyer & Chu, 2003).

The exploration of dyadic trust asymmetry evokes notions of power and resource dependence (Pfeffer & Salancik, 1978), because asymmetric trust is likely to arise from the presence of greater vulnerability on the part of one of the alliance partners. Wicks, Berman, and Jones (1999) suggest that such an imbalance of power and trust may result in negative performance outcomes for the alliance, but there remains great potential for this issue to be explored empirically. Trust asymmetry is also likely to be part of a dynamic cycle of trust creation and development and may shift as the interorganizational relationship matures (Narayandas & Rangan, 2004).

*Interorganizational Trust and Networks.* Numerous points of convergence exist between research on interorganizational trust and research on interorganizational networks. However, little crossfertilization has occurred between the two fields. This is surprising, because trust is recognized as a major element of social capital and is often invoked as the logic for the benefits of cohesive networks. Research, for example, shows that relational flexibility in a dyad—a norm strongly associated with interfirm trust-can affect the norms of firms throughout the dyad's larger supply-chain network (Wathne & Heide, 2004). Husted's (1994) inductive research suggests that the density of individual social network ties is positively related to interfirm trust. A number of network effects rely fundamentally on the mechanism of trust. For instance, the notion of closure is fundamentally based on the idea that tightly knit cliques are strongly undergirded by trust. Similarly, "structural embeddedness" (Gulati &

Gargiulo, 1999) refers to third-party reputation effects that are again mainly trust-based—that is, reputations for trustworthy behavior. High trust is thought to be associated with strong ties (Wicks et al., 1999).

Yet this research leaves specific questions about interfirm trust and networks unanswered; for example, would a network rich in structural holes discourage trust more than a network that is more dense? This seems plausible, because the theorized value of structural holes arises from, among other things, the ability of an organization to play one network relationship against another, a strategy that is inherently Machiavellian. In situations where trust matters, such as with the exchange of tacit knowledge, one would expect to find, as Ahuja (2000) does, that closure counts for more than holes. Thus, interorganizational trust becomes an important contingency mechanism that influences the relative benefits or detriments of different forms of network structure.

Although Larson's (1992) inductive study indicates that interorganizational trust generally has positive effects on the successful governance of firm networks, this relationship has been little researched. As mentioned above, Gulati (1995) suggests that repeat alliance partners are more likely to trust; and Lui and Ngo (2004) suggest that competence-based trust can arise from reputation effects—results with important ramifications for network governance. McEvily and Zaheer (2004) explore the central role an institutional "network facilitator" plays in creating trust in geographical industrial networks. Overall, the nature of interorganizational trust presents a number of open questions for future research.

# Development of Interorganizational Trust

A fundamental question that researchers have attempted to answer is how interorganizational trust is created and developed (e.g., Ring & Van de Ven, 1994). There are several lines of inquiry into this question that occur throughout the

literature, including the costs of creating trust, the role of interpersonal trust in the development of interorganizational trust, particularly questions about the unit and level of analysis, and the influence of institutional factors such as geographic region or culture in promoting or hindering trust creation.

Costs of Creating Trust. An examination of the costs of trust creation is an obvious counterpoint and complement to an analysis of the *benefits* arising from trust. (Our attention to the benefits arising from interorganizational trust comes later in our staged model, when we consider the outcomes of trust.) It is worth noting that a focus on the beneficial effects of trust underlies the majority of scholarly research on the topic, and this is precisely what makes an inquiry into the costs associated with trust's development so interesting.

Research largely treats trust creation costs as implicit rather than as quantifiable expenditures, difficult trade-offs, or opportunity costs. For example, in the exploratory inductive study cited above involving network dyads of entrepreneurial firms, Larson (1992) shows that the development of trust between organizations requires significant time and resources—in other words, costs. Other research identifies specific organizational actions and behavior leading to trust creation, such as flexibility and information exchange in the case of cross-border partnerships (Aulakh et al., 1996), the provision of timely feedback in entrepreneur-funder relations (Sapienza & Korsgaard, 1996), and co-location in the case of interfirm research and development (R&D) collaboration (Carson, Madhok, Varman, & John, 2003). For example, Sako (1998) finds that customer-service efforts lead to trust creation between buyer and supplier firms. These organizational actions all have economic costs associated with them but are not explicitly treated as such.

An important consideration in analyzing the costs of trust creation is the notion that the process of interorganizational trust creation and commitment is likely to be a sequential and gradual

one, with each following the other to higher and higher levels, rather like the creation of interpersonal trust itself (Blau, 1964). As Ring and Van de Ven (1994) argue, the development of trust is a cyclical process of recurrent bargaining, commitment, and execution events among the organizational parties. Das and Teng (1998, p. 499) note that "only if partner firms have a fairly high level of confidence in partner cooperation would they be willing to enter into a JV," which suggests that interorganizational trust may need to be in place before any formal commitments are made—a concept that is well established with respect to interpersonal trust (e.g., Lewicki & Bunker, 1996).

This provides a good starting point for further theorizing about the mechanisms for creating interorganizational trust. Because of the potentially reciprocal nature of trust, there are several paths to trust creation, which may involve differential costs. At least two approaches to trust creation may be identified in the literature. First, to demonstrate that an organization trusts another, it may take a large and clearly costly (if not reciprocated) gamble with a new or potential alliance partner—typically conceived of as a "unilateral commitment" (Gulati, Khanna, & Nohria, 1994). By obviously placing itself in a position of vulnerability (Mayer, Davis, & Schoorman, 1995) the organization invites the alliance partner to reciprocate its trust. In other words, such voluntary vulnerability may be predicated on the hope that "trust begets trust." A second path to establishing interfirm trust is to demonstrate that one is trustworthy (rather than trusting); for example, an organization might focus on scrupulously honoring commitments and making sure to commit to only what is within the firm's power to execute. It would be interesting to work through the contingencies when one or the other path to trust creation is more "optimal," although clearly other routes to trust creation exist.

This consideration of different trust creation mechanisms brings us to another reason why organizations may sometimes behave in more quasirational ways than individuals acting alone when it comes to trusting another organization: The higher level of risk associated with organizational commitment may make the costs of additional information collection both necessary and worthwhile. The costs of conducting background checks, which could be included in the overall cost of trust creation, are more easily amortized over the higher volume and value of transactions between organizations in an alliance than they would be in the simple case of lone individuals trusting each other. Again, such costs lend themselves to quantification, and further research along these lines stands to greatly enhance our understanding of interorganizational trust.

In addition to these indirect examinations of costs, an area that researchers have more directly considered recently is the relationship between contracts and trust, in the transaction cost economics (TCE) tradition. Along these lines, one study (Poppo & Zenger, 2002) links an increase in general contract complexity with increased trust. Other research indicates that specific attributes of formal contracting increase trust, such as contingency adaptability (Luo, 2002) and contract duration (Poppo, Zhou, & Zenger, 2003). If, as seems clear, greater complexity or specificity in a contract represents increased transaction costs, to the extent that these contractual attributes lead to greater trust, they represent the costs of trust creation.

In this vein, Dyer and Chu (2003) find no support for their alternative hypothesis that trust lowers ex ante contracting costs; however, they do find that trustworthiness lowers ex post contracting costs, suggesting that once trust is established, transaction costs may in fact decline (Bromiley & Cummings, 1995). This has implications for the costs of maintaining trust in an ongoing relationship, where initial costs of trust creation may be viewed as an investment the value of which can be realized over time.

These results resonate with others that, although not explicitly addressing trust, show that transaction costs are also lower in the presence of relational norms commonly associated with trust (Artz & Brush, 2000). It also appears

that the development of trust might depend upon the creation of trustworthiness or vulnerability (McEvily et al., 2003), which in turn entail their own tangible and intangible costs. In sum, whether achieved through explicit contracting provisions or through organizational attributes, the establishment of interorganizational trust can require time, effort, and resource allocations that represent real and significant economic costs to the organizations involved.

Making judgments about the costs of building trust and assessing the value of trust can also be envisioned as a question of "fit" between trust and other organizational attributes such as the relationship's interdependence (Wicks et al., 1999). The greater the interdependence between two organizations, the greater the need for trust. Other scholars make a "fit" argument between trust and trustworthiness (Perrone, Zaheer, & McEvily, 2003). Essentially, these scholars argue that because the creation of trust is costly, organizations should trust only as much as is necessary. Of course, determining just how much trust is "optimal" and whether creating an advance reservoir of trust is wise, and if so how to do it, are nontrivial issues both substantively and empirically.

In addition, other researchers (Wicks & Berman, 2004) have begun to explore the role that institutional context plays in the ability of firms to create trusting relationships with other organizations; key elements of this context include formal institutions, sociocultural values, and industry norms-which may all have a direct impact on the costs of creating trust within that context. Ring (1996) suggests that the requirements—and therefore costs—of creating interorganizational trust actually depend upon whether the type of trust being created is situation-specific ("fragile") or more resilient-for which greater attention and resources may be required to create a lasting trust relationship. In conclusion, the actions that lead to trust creation have associated costs, and these costs will vary depending on the nature of the trust being created and the institutional context for the interfirm relationship.

Role of Interpersonal Trust. There is a wealth of research in the area of interpersonal trust in organizational contexts (Becerra & Gupta, 2003; Dirks & Ferrin, 2001; Kramer, 1999; Malhotra & Murnighan, 2002). Uncovering the precise relationship between interorganizational and interpersonal trust is an important line of inquiry because, although the two forms of trust are shown to be related phenomena (Zaheer et al., 1998), they are clearly not the same thing. Studies show significant differences between interpersonal trust and interorganizational trust in predicting outcomes (Hagen & Simons, 2003).

Nevertheless, interpersonal trust appears to be important in the development of interorganizational trust (Zaheer et al., 1998). In other empirical studies, the influence of interpersonal trust on interorganizational trust is not directly analyzed but rather has implied significance. In studies of interorganizational trust within the context of small entrepreneurial firms, for example, interfirm trust appears to be tightly linked to trust between individuals in those organizations (Howorth, Westhead, & Wright, 2004; Larson, 1992; Sapienza & Korsgaard, 1996). Even in the context of relations between larger organizations, stability of personnel appears to be an important factor in the development of interorganizational trust (Dyer & Chu, 2000), suggesting the importance of trust between boundaryspanners (Currall & Judge, 1995). This idea is reinforced by research showing that interpersonal trust between boundary-spanners decreases the likelihood of interfirm relationship dissolution (Seabright, Levinthal, & Fichman, 1992). John (1984) finds that boundary-spanner attitudes have a profound effect on norms of interfirm opportunism or cooperation, suggesting the importance of interpersonal trust; indeed, a multiplicity of interpersonal factors have been shown to heighten interorganizational trust (Moorman, Deshpande, & Zaltman, 1993).

In addition, there are performance implications for the relationship between interpersonal and interorganizational trust. For example, Jap and Anderson (2003) find that interpersonal trust between boundary-spanners has a positive effect on organizational performance measures, but this effect diminishes as ex post opportunism rises. Some effects of interpersonal trust are less clear, such as the inconclusive link between interpersonal trust and decreased organizational conflict (Zaheer et al., 1998). It does appear, however, that interpersonal trust at different levels of the organization has different effects; interpersonal trust among executives is a key factor in alliance formation and issue resolution, whereas interpersonal trust among midlevel managers has a greater impact on day-to-day efficiency of alliance operations (Zaheer, Lofstrom, & George, 2002).

Several studies attempt to gain more finegrained insight into the nature of the tie between interpersonal and interorganizational trust. Lui and Ngo (2004) discover a strong empirical distinction between two different dimensions of trust-goodwill trust and competence-based trust, each with different outcomes—finding that goodwill trust arises from interpersonal trust, whereas competence trust may derive from more general reputation effects. In addition, although most of these studies examine the role of interpersonal trust in creating interorganizational trust, research has also found support for interorganizational trust's mediating influence on the relationship between organizational characteristics and the interpersonal trust between boundary-spanners (Perrone et al., 2003). Overall, the relationship between interpersonal and interorganizational trust has received abundant research attention, but unanswered questions remain about the contingencies under which it influences interorganizational trust and its outcomes.

Institutional Factors. Another area explored by empirical research is the theorized influence of location and national culture (Fukuyama, 1995) on the development of trust and its associated relational norms. Dyer and Chu (2000) study trust in buyer-supplier relationships in the automotive industry, finding that the antecedents of trust differ depending on the national setting.

For example, the length of time since the first interaction is found to influence interorganizational trust positively in Japan but not in the United States or Korea. In contrast, repeated exchange is correlated with trust in Korea and the United States but not in Japan. Other researchers have also investigated the variability of interorganizational trust across different national contexts (Husted, 1994; Lane, 1997; Lane & Bachmann, 1996), in particular finding support for the notion that trust-producing mechanisms vary according to the cultural context.

There are also indications that regional and cultural differences impact the effects and consequences of interorganizational trust. Sako (1998) examines the relationship between interorganizational trust and performance outcomes by surveying component suppliers in the automotive industry across different countries. She finds that the cultural context gives rise to differences in the effects of trust, a finding echoed by Dyer and Chu (2003). Using a transaction cost framework, Gulati and Singh (1998) study governance structures of strategic alliances and find that trust behavior and its consequences differ according to national or regional differences in alliance location, consistent with findings in the alliance literature (e.g., Parkhe, 1993). In general, as Kramer (1999) asks, to what extent are such trusting actions also influenced by social, institutional, and psychological norms? This stream of research indicates that cultural, regional, or institutional forces can have a powerful effect on the antecedents, nature, and consequences of interorganizational trust (Wicks & Berman, 2004).

Although the role of industry-level institutions in creating trust has been examined in a case study (McEvily & Zaheer, 2004), the influence of institutional context has been most extensively examined with respect to international settings and cultural influences. If the exchange partners have dissimilar cultural or national origins, the whole process of trust creation, the nature of trust itself, and the costs of trust creation are markedly different (Child & Mollering, 2003; Dyer & Chu, 2003). Nationality impacts how individuals

perceive trustworthiness (Caldwell & Clapham, 2003). Gulati (1995) finds that partners from the same country have fewer safeguards because they trust each other more. On the other hand, certain collectivist societies, such as Japan, display a strong in-group orientation (Huff & Kelley, 2003) and relate differently to in-group and out-group members. Lincoln (1990) argues that the important task for researchers is not merely to demonstrate that received theory applies differently in different cultural contexts but also to extend theory by identifying new boundary conditions within such contexts. For example, Lincoln observes that the assumptions of TCE theory may have to be modified in the Japanese context due to institutional pressures for long-term employment and supplier relationships, which suggest that trust might characterize relationships to a greater extent in Japan than elsewhere. More broadly, "cross-cultural differences constitute empirical variance to be explained and thus an opportunity for theory" (1990, p. 256).

In summary, issues around the development of interorganizational trust present numerous opportunities for scholarly inquiry. In particular, although the benefits of trust have been extensively studied, corresponding interest in the costs of trust creation, both transaction costs and actual costs, has been lacking. The prospects for research into the relationship between interorganizational and interpersonal trust are also vast as they span questions of construct validity and levels of analysis, in addition to the influence of the one on the other, as well as the contingent role of interpersonal trust in affecting the outcomes of interorganizational trust. Finally, research is also needed into the role the institutional context plays in the development of interorganizational trust.

# Role of Interorganizational Trust

Many empirical studies look at the relationship between trust and organizational governance. This stream typically draws upon the TCE framework to examine the role of interorganizational trust in choosing an organizational form, safeguarding against opportunism, or reducing transaction costs. These ideas have also expanded into a debate as to whether formal governance mechanisms serve as substitutes, complements, or alternatives to interorganizational trust.

TCE and Forms of Organizing. Research suggests that trust plays a constitutive role in the structuring of alliance relationships (Ring & Van de Ven, 1992). It is well founded that interorganizational trust arises from the need to compensate for the inherent incompleteness of contracts (e.g., Lane & Bachmann, 1998; Williamson, 1985) and implies the incorporation of relational elements into contracting (Macneil, 1980). For example, Heide and John (1992) study interfirm relationship governance structures, finding trust-related relational norms to be highly influential on those structures.

In particular the relationship between trust and transaction-specific assets has been the subject of considerable research, although the link is a complex one. Trust can easily be viewed as a safeguard and a substitute for hierarchy which would imply that trust and asset specificity have a positive relationship because higher asset specificity requires higher safeguarding and trust would complement asset specificity (Zaheer & Venkatraman, 1995). However, trust may also serve other roles. One such role may be that of trust as a hostage, or signal of commitment to the relationship, in which case trust may demonstrate a negative relationship with asset specificity because it would serve as a substitute for it. The exact nature of the relationship between trust and governance is the subject of mixed results; whereas Anderson and Narus (1990) find support for cooperative action leading to interorganizational trust, other research indicates that trust acts as a mediator between concrete financial costs and cooperative outcomes (Morgan & Hunt, 1994).

Several empirical studies examine the role trust plays in the formation of interorganizational structure. For instance, Gulati and Singh (1998) directly address the impact of interorganizational trust on organization structure, finding that trust (measured via repeated ties) is related to hierarchical alliances. Zaheer and Venkatraman (1995) find interfirm trust to be positively correlated to asset specificity, suggesting that such investments are a signal of good faith in the relationship. Some scholars find support for the idea that economic hostages lead to trust (Young-Ybarra & Wiersema, 1999), whereas others find no support for such a connection (Dyer & Chu, 2000). These findings illustrate the possibility that trust may play an important role in how interorganizational relationships are structured, although research in this area has produced conflicting results.

Other research focuses specifically on the impact of interorganizational trust on the nature of the relational contracts themselves, finding a positive link between interorganizational trust and contract complexity (Poppo & Zenger, 2002). Although some scholars have searched fruitlessly for a positive relationship between exchange hazard levels and increased interfirm trust (Poppo et al., 2003), others have found evidence of a more complex relationship. For example, Mellewigt, Madhok, and Weibel (2004) find a moderating role of trust—that the effect of exchange hazard level on contract complexity is weakened by interorganizational trust, whereas trust boosts the effect of strategic importance on contract complexity. On the other hand, because Dyer and Chu (2003) find that interorganizational trust increases dyadic information sharing in addition to significantly lowering transaction costs, they argue that trust is a unique governance mechanism in its ability to create value beyond transaction cost minimization. This idea is supported by their finding that trustworthiness correlates with several different performance measures, building upon previous work that initially conceived of trust as a self-reinforcing safeguard (Dyer, 1997). The impact of trust on contracting appears to have effects far beyond simple minimization of contracting costs.

Substitute or Complement? The discussion about trust and contracting leads to generalized questions regarding their relationship in an attempt to determine whether formal relationship governance mechanisms are complements to or substitutes for interfirm trust. Early theorizing envisioned trust as a substitute for control, an argument that has in various settings proven inconclusive (Van de Ven & Walker, 1984), shown mixed results (Sako, 1998), and found strong empirical support (Dyer & Chu, 2003). On the other hand, some initial trust research supporting a complementary view of trust and contracting (Zaheer & Venkatraman, 1995) has been repeatedly reinforced (Fryxell, Dooley, & Vryza, 2002; Luo, 2002; Mayer & Argyres, 2004; Poppo & Zenger, 2002). The question remains: Are interfirm trust and contracting mechanisms substitutes or complements?

One way researchers have begun to reconcile these conflicting views is through the use of a contingency framework, as shown in recent empirical studies. This contingency view indicates a more finely parsed relationship between contract safeguards and interorganizational trust than that of generalized concepts of substitutability or complementarity. One empirical study (Lui & Ngo, 2004) bifurcates interfirm trust into its goodwill-and competence-based aspects, showing that these different types of trust have different effects on the relationship between safeguards and performance, suggesting that trust and contracts can serve as substitutes *or* complements, depending upon other contingent factors.

More specifically, there are at least two contingencies on which the relationship between trust and contracting might depend: the stage of the relationship and the complexity of the contract. In the early stages of the relationship, for example, contracts may substitute for trust and regulate behavior to the extent that such substitution is possible, given the difficulty of writing completely contingent contracts. In later stages of an interorganizational relationship, as trust develops, contracts may merely serve to specify the outer bounds of relational governance,

complementing the trust that has since developed. These potential effects of the dynamic nature of relationship formation and development may also be influenced by contract complexity (Sampson, 2000). The greater the contract complexity, and the more the contract represents and reflects actual working conditions, the greater the ability of the contract to substitute for trust. A consideration of these contingencies, illuminating the potential substitutability of other governance mechanisms for trust, leads us to a fuller theoretical discussion of alternatives to interorganizational trust.

Alternatives to Trust. One of the basic theoretical issues about the nature of trust is whether calculativeness in fact plays a role in trust or if it is an alternative, substitute mechanism. As such, a key part of TCE-oriented work in interorganizational trust is the scholarly debate regarding whether or not trust is calculative in nature (Craswell, 1993; Williamson, 1993). Is trust subsumed by calculativeness, or is calculativeness a sometimes closely related but distinct idea? Recent empirical work by Saparito et al. (2004) draws a clear distinction between goodwill-oriented "relational trust" and calculative trust, finding that relational trust mediates the relationship between supplier-firm customer service and customer-firm loyalty, even after calculative assumptions are controlled for. Interorganizational trust, then, appears to be a powerful mechanism in interorganizational relationships even when it does not derive from calculative motivations; such trust can lead to a variety of desirable outcomes and have a significant influence on the very nature and structure of the interorganizational relationship.

This supports the argument that organizational trust is indeed distinct from calculativeness (Bromiley & Harris, 2005). In this sense, teasing out calculativeness from trust involves attending to the concept of opportunism itself; John (1984) explores the antecedents of opportunism, and Wathne and Heide (2000) examine its complexity, resulting in a more fine-grained parsing of the concept of opportunism and its outcomes.

Although it may be considered unrealistic to expect organizations or the people in them to act against their own self-interest (Dasgupta, 1988; Hardin, 1991), research has begun to show clearly that trust explains a variety of interorganizational actions much more plausibly than calculative self-interest does. More research is required to better understand the difference between trust and calculativeness as distinct and alternative mechanisms for organizational action.

There is also some discussion in the literature about the role of routines in managing interorganizational relations and the degree to which such routines can serve as alternative mechanisms to trust. The extent to which expectations, behaviors, actions, and outcomes at the interorganizational interface are influenced or determined by trust rather than merely by interorganizational routines is important both theoretically and empirically for understanding the nature and role of interorganizational trust. In essence, the question is whether interorganizational trust exists independent of interorganizational routines, and if not, how the two are related. For example, theorists have raised important theoretical questions about the relationship between trust and organizational routines, envisioning trust as routines (Zollo, Reuer, & Singh, 2002).

Clearly, routines significantly influence interorganizational workings, behaviors, relations, and governance—and in fact in many cases are likely to be the very means by which trust and trustworthiness are manifested. However, much like calculativeness, we also view routines as being distinct from trust and believe that drawing out the differences between them and clarifying their relationship is key. To begin with, interorganizational trust is an expectation in a partner organization's reliability, predictability, and fairness. Interorganizational routines, on the other hand, are institutionalized, regularized, formal or informal processes that govern interactions between the two organizations. These routines can arise from trusting expectations, certainly, but may also arise from other behavioral expectations that have very little to do with trust or trustworthiness. The existence of routines does not eliminate the fundamental need to uncover and understand interorganizational trust as a mechanism that potentially influences those routines and vice versa. As such, we see several ways in which trust and routines may be interrelated: routines as an antecedent to trust, routines as a consequence of trust, and routines as a moderator of trust relationships.

Empirical work has only very slightly addressed the tie between trust and routines; Dyer and Chu (2000) find that consistency and routines are highly correlated with interorganizational trust, and other research indicates that trust arises in part from norms of procedural justice—which could be envisioned as routinized processes (Hagen & Simons, 2003; Sapienza & Korsgaard, 1996). Trust and routines have been examined together only in these few studies, leaving many unanswered questions about the relationship between trust and routines.

Overall, the role that trust plays in governance of interfirm relationships is centrally tied to issues about the extent to which it serves as a substitute for or a complement to elements such as asset specificity, contracts, calculativeness, and routines. The many different roles that trust can play and the many conflicting findings in this area create numerous avenues for theoretical and empirical resolution.

# Outcomes of Interorganizational Trust

A great deal of research interest exists regarding whether interorganizational trust leads to desirable business outcomes, and if so, what those are. Although in some instances evidence of a relationship between interorganizational trust and performance has proven inconclusive (e.g., Aulakh et al., 1996), a variety of studies focus on this connection with interesting results. Although some research emphasizes direct outcomes, other work examines more complex, indirect effects. Most of the research, however, focuses on only the positive outcomes of interorganizational trust.

Direct Economic Outcomes. Interorganizational trust has been shown to positively influence a number of recognizable economic outcomes, such as lowered transaction costs (Dyer & Chu, 2003), increased sales (Mohr & Spekman, 1994), and increased return on investment (ROI) (Luo, 2002). In addition, interfirm trust has a positive effect on project management measures, such as task performance (Carson et al., 2003), and operational measures, such as continuous improvement and just-in-time delivery (Sako, 1998). In general, this evidence indicates that interorganizational trust can help achieve advantageous economic performance outcomes.

Intermediate Relational Outcomes. Research on interorganizational trust suggests that it also leads to a variety of outcomes that are less directly economic but are nevertheless desirable outcomes for the relationship. At one extreme, a loss of trust can lead to the dissolution of the relationship entirely (Seabright et al., 1992); in fact, it appears that undesirable performance outcomes and loss of trust can escalate into a self-reinforcing downward spiral (Zaheer et al., 2002). On the other hand, increasing interfirm trust can lead to increased strategic flexibility (Young-Ybarra & Wiersema, 1999), greater information-sharing (Dyer & Chu, 2003), lowered perceptions of relational risk (Nooteboom, Berger, & Noorderhaven, 1997), heightened contingency adaptability (Luo, 2002), and improved knowledge transfer (Szulanski, Cappetta, & Jensen, 2004). Several studies also indicate that trust strongly increases satisfaction with various aspects of the interfirm relationship, including joint goal fulfillment (Hagen & Simons, 2003; Zaheer et al., 1998), expectation of relationship continuation (Jap & Anderson, 2003), and positive perceptions of exchange success (Mohr & Spekman, 1994; Poppo & Zenger, 2002).

Several studies focus on the performance outcomes that are of particular importance to buyer-supplier relationships, suggesting both that trust plays a key role in determining the long-term orientation of both organizations (Ganesan, 1994) and also that trust in a supplier greatly impacts the actual product utilization of the buyer

(Moorman, Zaltman, & Deshpande, 1992). In addition, Wathne and Heide (2004) find that interfirm flexibility—a relational norm often associated with trust—has the potential to affect relational norms beyond the dyad in other parts of the supply chain.

Indirect Effects. In addition to these direct effects, scholars are starting to investigate more complex relationships between interorganizational trust and performance, including interaction effects and mediation models. Fryxell et al. (2002) discover that the presence of interfirm trust affects the influence of social-control mechanisms on performance; in the presence of trust, social controls positively influence performance, but without trust, social controls have the opposite effect. High interorganizational trust tends to mitigate the detrimental effect of historical social contact on exchange performance (Poppo et al., 2003), and different types of trust moderate the relationship between contractual safeguards and performance in different ways (Lui & Ngo, 2004). Whereas Jap and Anderson (2003) find that rising ex-post opportunism decreases the positive effects of interorganizational trust on performance, Saparito et al. (2004) discover that interfirm trust can help minimize the negative effects of opportunism.

Overall, research on interorganizational trust has revealed a wide range of positive outcomes for interfirm relationships such as alliances and buyer-supplier relationships. These include a variety of direct effects on performance, such as lowered transaction costs and increased ROI, but also a large set of indirect benefits through the mediating or moderating roles of interorganizational trust.

#### **Directions for Future Research**

Building upon the rich foundation of the empirical findings described and the theoretical discussion and extension of the themes we have surfaced—from questions about what trust is, to an examination of what it leads to—we now turn

to the issues that merit further discussion and hold the most promise for future research. Some of these areas of potential research arise directly from the research streams we have discussed, although others are notable primarily due to the lack of research attention paid to them, in particular trust repair and the downside of trust. After considering these promising areas arising from theoretical considerations, we consider some methodological issues, because it is difficult to discuss theory development without also considering the corresponding methodological implications and challenges.

#### **Theoretical Directions**

Costs of Creating Trust. Extant trust research has tended to adopt an optimistic, even Panglossian perspective on trust, focusing almost exclusively on the benefits trust provides rather than the costs of producing those benefits via the creation of trust. Yet, as we have discussed, further research into the costs of trust creation holds great potential for advancing our knowledge about trust. Costs in this regard extend beyond transaction costs to actual resource and time costs. Even though existing research largely stops short of quantifying trust creation costs, such quantification seems eminently possible and is necessary to advance work in the domain, particularly because the field is otherwise open to the charge of taking a one-sided and incomplete view of the phenomenon.

Trust, Calculativeness, and Opportunism. Another potential opportunity for trust researchers is to explore further the relationship between trust, calculativeness, and opportunism. Although we assert that trust and calculativeness are indeed distinct concepts (Bromiley & Harris, 2005), more research along these lines is necessary to establish the distinction. Further, interesting questions arise, such as: To what extent does calculativeness encourage trustworthy behavior on the part of the exchange partner, ultimately helping to create trust? Moreover, even in situations

where opportunistic motives are inconsequential to a particular organization's pursuit of trust and trustworthiness, calculativeness may still have a part to play in deciding what resources to commit to trust creation.

Role of Time Horizon. Research linking time horizons with trust will help answer questions about whether organizations with longer time horizons and a lower rate of time discount tend to be more trusting and trustworthy. What sorts of organizations will have low rates of time discount? Perhaps organizations that have had a long history, are more stable, and have low employee turnover. Although time horizon in an interorganizational relationship appears to have the potential to influence trust in that relationship, does trust have the reciprocal ability to influence the perceptions of the time horizon within the relationship? If time horizon is short, is there a heightened need for reliance on institutional trust rather than relational trust?

Role of Interpersonal Trust. In addressing the question of how interorganizational trust is formed, the importance of interpersonal trust appears to be obvious, but are there situations in which it matters less or more? In other words, can interorganizational trust form in a way that precludes or enhances the need for interpersonal trust between specific boundary-spanning individuals? From a contingency perspective, how might context affect the need for interpersonal trust and its role in interorganizational trust formation?

Institutional Factors. As we noted earlier, empirical work has established that there are differences in norms of interorganizational trust across national and cultural contexts. However, future research not only needs more systematic examination of the differences across such contexts, it needs to explain the theoretical underpinnings of such differences and subsequently to extend our theoretical understanding (Lincoln, 1990). In addition, greater attention could be paid to contextual factors arising not only from national or cultural influences but also from formal

institutions (North, 1990) or industry norms (Wicks & Berman, 2004), from regulatory entities and quasigovernmental organizations to industry norms and tacit practices of interfirm interaction that may be idiosyncratic to particular geographies or economic segments. What happens to interorganizational trust when firm alliances cross these boundaries?

Interorganizational Trust and Governance. Aside from the basic question of whether trust serves to substitute or complement the contract, scholars have begun to examine more nuanced relationships between trust and governance. One direction that may be worthwhile in this regard is to continue to split trust into different dimensions or forms, such as goodwill-based and competence-based trust. Each of these forms of trust may play quite different roles in governance and in influencing relationship outcomes. Another potential direction is to expand the inquiry into more complex mediating or moderating relationships between trust and contracting by including factors such as organizational context, structure, transparency, knowledge characteristics of the alliance and the alliance partners, and the past history of the alliance, including its performance. Further, the conflicting findings regarding the relationship between trust and asset specificity represent an avenue ripe for empirical resolution. Finally, because governance can play a role in minimizing corporate misconduct, the role of interfirm trust in facilitating or discouraging such misconduct needs to be examined.

Interorganizational Trust and Networks. Given that the network implications for trust research have been little explored, a basic question that arises is how the antecedents, concomitants, and consequences of trust change when trust is no longer simply dyadic but is network-based. How might network trust affect the dyadic interorganizational relationship? Moreover, other mechanisms besides trust also operate in networks, such as sanctioning and reputation effects, and disaggregating those from trust-based explanations of outcomes would be important.

Asymmetry of Trust. As discussed earlier, an implicit assumption in the literature is that trust between the alliance partners is essentially symmetric. However, research has not examined the empirical validity of this assumption nor the antecedents and the outcomes of asymmetric trust in interorganizational relationships. Moreover, there may be performance implications of trust symmetry and asymmetry, and furthermore, the implications may vary by the directionality of the asymmetry (i.e., which partner trusts more).

Rebuilding Interorganizational Trust. The topic of trust repair is notably absent from the empirical research on interorganizational trust. Although trust scholars have declared a theoretical interest in the problem of rebuilding relationships of trust, discussion of trust repair has been isolated mainly to the interpersonal level of analysis; there has been virtually no formalized research investigating the topic of trust repair at the interorganizational level.

Downside of Trust. Another theoretical area that is notably absent in our empirical survey is research on the downside of interorganizational trust, which could include at least two primary areas of inquiry. First, theorists have pointed to the importance of studying the negative consequences of trust, including the lockin from unproductive high-trust relationships (Gargiulo & Benassi, 2000). Second, scholars have pointed out that situations of high trust inherently contain the conditions for trust's abuse or betrayal (Granovetter, 1985; Shapiro, 1987). Studying the costs of misplaced trust may involve examining whether greater fraud takes place between exchange partners in hightrust alliance relationships. Relatedly, research may investigate whether high interorganizational trust leads to collusion; as Baier (1986, p. 253) points out, a trust-tied community "without justice" may be little more than a "group of mutual blackmailers and exploiters." Interorganizational trust, then, may indeed possess a dark side for the community at large and

may need to be pursued with caution (Husted, 1998).

#### **Methodological Research Issues**

In addition to theoretical directions for future research, several methodological issues emerge from an examination of the empirical work on interorganizational trust. As such, we identify three key methodological challenges that face trust researchers: decoupling interorganizational trust from interpersonal trust, observing and measuring trust, and accounting for endogenous choice with respect to trust.

Decoupling Interpersonal and Interorganizational Trust. In considering the connection between interorganizational and interpersonal trust, one is led to questions of unit of analysis, which in turn are inextricably tied to the construct definition itself. At what point does interpersonal trust between boundary-spanners become interorganizational trust? Under what circumstances does one moderate the effects of the other? How might this differ when the referent interpersonal trust exists at different organizational levels? Does trust between organizational subunits constitute trust between entire organizations? It is important to consider when it would matter to illuminate such a distinction and how such research might avoid the "cross-level fallacy" identified by Rousseau (1985).

Observing Interorganizational Trust. How is interorganizational trust defined and therefore observed? What are the relative advantages or disadvantages of using secondary data versus primary data? For instance, if secondary data is to be used in operationalizing interorganizational trust, it might be done by envisioning repeated interaction between organizations as some indication of trust—but what are the implications of using proxies such as this? Research, for example, has employed various proxies for trust, but research has also shown that these commonly accepted proxies may not

necessarily correlate with trust (Lui & Ngo, 2004). Furthermore, trust is a dynamic and continuous variable, not an either/or phenomenon (Flores & Solomon, 1998), providing an additional challenge to analyses that attempt to place interorganizational trust in a two-by-two framework.

Trust and Endogenous Choice. One of the aspects of interorganizational trust that researchers are keenly interested in is the relationship between trust and organizational (or alliance) performance. One of the challenges of studying such a connection, however, is the possibility of endogeneity—performance may affect trust, too. In such cases models that account for endogeneity, such as Two Stage Least Squares, would be important to consider. As well, unobserved factors might be driving performance measures rather than the interorganizational trust itself. Because organizations are typically large complex entities, making attributions of interorganizational-trust causes and organizational-performance effects is a much more difficult undertaking than drawing inferences between trust and behavior at the individual level. Researchers may also consider using multiple methods to more convincingly establish the causal chains through methodological triangulation.

#### **Conclusion**

The objective of this chapter is to consolidate, synthesize, and integrate the wide stream of empirical work on interorganizational trust. Four major themes emerge from our survey: the nature of interorganizational trust, its development, its role, and the outcomes of trust. For each theme we explore the relevant theoretical issues, leading to the identification of a promising research agenda for scholars of interorganizational trust. This agenda includes ten central theoretical avenues—as well as three key methodological challenges—that hold high potential for scholarly inquiry into this important phenomenon.

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