

## THE RELATIONAL VIEW: COOPERATIVE STRATEGY AND SOURCES OF INTERORGANIZATIONAL COMPETITIVE ADVANTAGE

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In this article we offer a view that suggests that a firm's critical resources may span firm boundaries and may be embedded in *interfirm* resources and routines. We argue that an increasingly important unit of analysis for understanding competitive advantage is the relationship between firms and identify four potential sources of *interorganizational* competitive advantage: (1) relation-specific assets, (2) knowledge-sharing routines, (3) complementary resources/capabilities, and (4) effective governance. We examine each of these potential sources of rent in detail, identifying key subprocesses, and also discuss the isolating mechanisms that serve to preserve relational rents. Finally, we discuss how the relational view may offer normative prescriptions for firm-level strategies that contradict the prescriptions offered by those with a resource-based view or industry structure view.

Scholars in the strategy field are concerned fundamentally with explaining differential firm performance (Rumelt, Schendel, & Teece, 1991). As strategy scholars have searched for sources of competitive advantage, two prominent views have emerged regarding the sources of supernormal returns. The first—the *industry structure view*—associated with Porter (1980), suggests that supernormal returns are primarily a function of a firm's membership in an industry with favorable structural characteristics (e.g., relative bargaining power, barriers to entry, and so on). Consequently, many researchers have focused on the industry as the relevant unit of analysis. The second view—the *resource-based view* (RBV) of the firm—argues that differential firm performance is fundamentally due to firm heterogeneity rather than industry structure (Barney, 1991; Rumelt, 1984, 1991; Wernerfelt, 1984). Firms that are able to accumulate resources and capabilities that are rare, valuable, nonsubstitutable, and difficult to imitate will achieve a competitive advantage over compet-

ing firms (Barney, 1991; Dierickx & Cool, 1989; Rumelt, 1984). Thus, extant RBV theory views the firm as the primary unit of analysis.<sup>1</sup>

Although these two perspectives have contributed greatly to our understanding of how firms achieve above-normal returns, they overlook the important fact that the (dis)advantages of an individual firm are often linked to the (dis)advantages of the network of relationships in which the firm is embedded. Proponents of the RBV have emphasized that competitive advantage results from those resources and capabilities that are owned and controlled by a single firm. Consequently, the search for competitive advantage has focused on those resources that are housed *within the firm*. Competing firms purchase standardized (nonunique) inputs that cannot be sources of advantage, because these inputs (factors) are either readily available to all competing firms or the cost of acquiring them is approximately equal to the economic value they create (Barney, 1986). However, a firm's critical resources may extend beyond firm boundaries. For example, the typical manufacturing firm in the United States purchases 55 percent of the value of each product it produces (this figure is 69 percent in Japan), and many of these inputs

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<sup>1</sup> The dynamic capabilities approach (Teece, Pisano, & Shuen, 1997) also views the firm as the unit of analysis.

are highly customized by suppliers (Ministry of International Trade and Industry, 1987). Moreover, this percentage has been increasing during the past two decades (Bresnen & Fowler, 1994; Nishiguchi, 1994). Recent studies suggest that productivity gains in the value chain are possible when trading partners are willing to make relation-specific investments and combine resources in unique ways (Asanuma, 1989; Dyer, 1996a). This indicates that firms who combine resources in unique ways may realize an advantage over competing firms who are unable or unwilling to do so. Thus, *idiosyncratic interfirm linkages* may be a source of relational rents<sup>2</sup> and competitive advantage.

This analysis suggests that a firm's critical resources may span firm boundaries and may be embedded in interfirm routines and processes.<sup>3</sup> Indeed, the "explosion in alliances" during the past decade suggests that a pair or network of firms is an increasingly important unit of analysis and, therefore, deserves more study (Anderson, 1990; Gomes-Casseres, 1994; Smith, Carroll, & Ashford, 1995). Although there has recently been increased attention on interorganizational relationships in the strategic management literature, to date, no attempt has been made to integrate what we have learned and *systematically examine the interorganizational rent-generating process*. In instances where researchers have explicitly studied how firms collaborate to generate economic rents, they have tended to focus on one particular benefit associated with collaboration, such as learning, lower transaction costs, or pooling of resources (Dore, 1983; Dyer, 1996a; Hamel, 1991; Larson, 1992; Powell, Koput, & Smith-Doerr, 1996; Teece, 1987).

<sup>2</sup> We use the term *relational rent*, although, technically speaking, trading partners generate quasi-rents. Peteraf defines quasi-rents as "returns that exceed a factor's short run opportunity cost . . . [and] are an excess over the returns to a factor in its next best use" (1994: 155). The term *quasi-rents* suggests that the rents are not permanent in nature.

<sup>3</sup> The fact that a firm's valuable resources may extend beyond a firm's boundaries is increasingly recognized, even within the investment community. For example, Powell found that industry investment analysts explicitly evaluate and assess the quality of a biotechnology firm's relationships with outside partners (1996: 206). Firms with more—and higher quality—partnerships receive higher market valuations from the analysts who recognize that a biotechnology firm's critical resources extend beyond firm boundaries.

Our primary purpose in this article is to examine how relational rents are earned and preserved. We offer a *relational view* of competitive advantage that focuses on dyad/network routines and processes as an important unit of analysis for understanding competitive advantage.<sup>4</sup> This framework is valuable because it provides a theoretical basis for cumulative additions to our understanding of the sources of *interorganizational competitive advantage* (Oliver, 1990). In the following sections we identify and delineate the various sources of rents at the interfirm unit of analysis. We also examine the mechanisms that preserve the relational rents that dyads and networks jointly create. Finally, we discuss how the relational view may offer normative prescriptions for firm-level strategies that contradict the prescriptions offered by the RBV and industry structure view.

## SOURCES OF RELATIONAL RENTS

### Theoretical Discussion

By examining the relevant characteristics of arm's-length market relationships, we find clues that guide our search for relational advantages. Arm's-length market relationships are characterized by

1. nonspecific asset investments,
2. minimal information exchange (i.e., prices act as coordinating devices by signaling all relevant information to buyers and sellers),
3. separable technological and functional systems within each firm that are characterized by low levels of interdependence (i.e., the two organizations have only a sales-to-purchasing interface and do not jointly create new products through multifunctional interfaces), and
4. low transaction costs and minimal investment in governance mechanisms (Williamson, 1985).

Under these conditions it is easy for firms to switch trading partners with little penalty because other sellers offer virtually identical products. As Ghoshal notes, "Efficiency in the execution of routine tasks is the strength of markets" (1995: 16). Thus, arm's-length market relation-

<sup>4</sup> For the convenience of exposition, we use two firms, rather than multiple firms, as the unit of analysis.

ships are incapable of generating relational rents because *there is nothing idiosyncratic about the exchange relationship that enables the two parties to generate profits above and beyond what other seller-buyer combinations can generate*. The relationships are not rare or difficult to imitate. Buyers can only achieve a differential advantage if they bring greater bargaining power to the table.

This analysis suggests that alliances generate competitive advantages only as they move the relationship away from the attributes of market relationships. In other words, the competitive advantages of partnerships, as documented in studies to date, seem to fall into four categories:

1. investments in relation-specific assets;
2. substantial knowledge exchange, including the exchange of knowledge that results in joint learning;
3. the combining of complementary, but scarce, resources or capabilities (typically through multiple functional interfaces), which results in the joint creation of unique new products, services, or technologies; and
4. lower transaction costs than competitor alliances, owing to more effective governance mechanisms.

We define a relational rent as a supernormal profit jointly generated in an exchange relationship that cannot be generated by either firm in isolation and can only be created through the joint idiosyncratic contributions of the specific alliance partners.

In summary, at a fundamental level, relational rents are possible when alliance partners combine, exchange, or invest in idiosyncratic assets, knowledge, and resources/capabilities, and/or they employ effective governance mechanisms that lower transaction costs or permit the realization of rents through the synergistic combination of assets, knowledge, or capabilities. In the sections that follow we examine in detail these four key sources of relational rents; in each section we develop a major proposition and a set of subpropositions, as summarized in Figure 1. After examining assets, knowledge, and resources, we examine governance, because although governance may generate relational rents by simply lowering transaction costs, governance issues cut across each of the other sources of rents (e.g., influence what relation-specific investments will be made, what

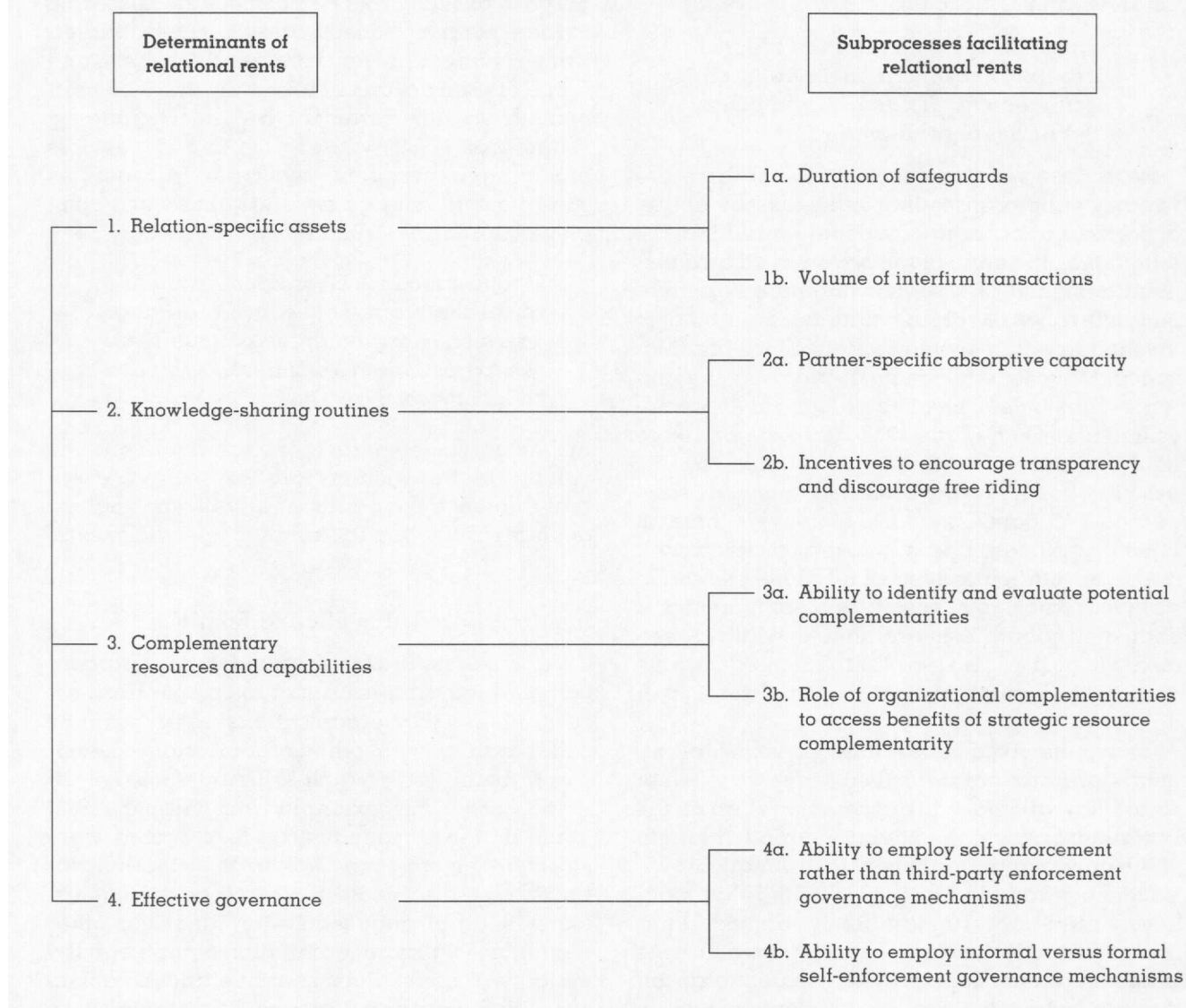
knowledge will be shared, and so on). We believe it is easier to understand how governance influences the ability to generate rents through assets, knowledge, and capabilities if we have first examined these constructs.

### Interfirm Relation-Specific Assets

Amit and Schoemaker argue that specialization of assets is "a necessary condition for rent" and "strategic assets by their very nature are specialized" (1993: 39). Thus, by definition, firms must do something specialized or unique to develop a competitive advantage. A firm may choose to seek advantages by creating assets that are *specialized in conjunction with the assets of an alliance partner* (Klein, Crawford, & Alchian, 1978; Teece, 1987). Productivity gains in the value chain are possible when firms are willing to make relation/transaction-specific investments (Perry, 1989; Williamson, 1985).

Williamson (1985) identifies three types of asset specificity: (1) site specificity, (2) physical asset specificity, and (3) human asset specificity. *Site specificity* refers to the situation whereby successive production stages that are immobile in nature are located close to one another. Previous studies suggest that site-specific investments can substantially reduce inventory and transportation costs and can lower the costs of coordinating activities (Dyer, 1996a). *Physical asset specificity* refers to transaction-specific capital investments (e.g., in customized machinery, tools, dies, and so on) that tailor processes to particular exchange partners. Physical asset specialization has been found to allow for product differentiation and may improve quality by increasing product integrity or fit (Clark & Fujimoto, 1991; Nishiguchi, 1994). *Human asset specificity* refers to transaction-specific know-how accumulated by transactors through long-standing relationships (e.g., dedicated supplier engineers who learn the systems, procedures, and the individuals idiosyncratic to the buyer). Human cospecialization increases as alliance partners develop experience working together and accumulate specialized information, language, and know-how. This allows them to communicate efficiently and effectively, which reduces communication errors, thereby enhancing quality and increasing speed to market (Asanuma, 1989; Dyer, 1996a).

**FIGURE 1**  
**Determinants of Interorganizational Competitive Advantage**



Asanuma (1989) was among the first to document how the relation-specific skills developed between Japanese suppliers and their automakers generated surplus profits and competitive advantages for collaborating firms. Similarly, Dyer (1996a) found a positive relationship between relation-specific investments and performance in a sample of automakers and their suppliers. Additionally, Saxenian (1994) found that Hewlett Packard and other Silicon Valley firms greatly improved performance by developing long-term partnerships with physically proximate suppliers. She claims that proximity in high-technology

industries "greatly facilitates the collaboration required for fast-changing and complex technologies" (1990: 101). Indeed, several scholars have shown that physical proximity created through site-specific investments facilitates interfirm cooperation and coordination, thereby enhancing performance (Dyer, 1996a; Enright, 1995; Nishiguchi, 1994). Finally, Parkhe (1993) found that the commitment of "nonrecoverable investments" in a sample of strategic alliances was positively related to performance. These studies indicate that relational rents generated through relation-specific investments are realized through

lower total value chain costs, greater product differentiation, fewer defects, and faster product development cycles.

*Proposition 1: The greater the alliance partners' investment is in relation-specific assets, the greater the potential will be for relational rents.*

Regarding relation-specific assets, there are two key subprocesses that influence the ability of partners to generate relational rents. First, the length (i.e., in years) of the governance arrangement designed to safeguard against opportunism influences the ability of alliance partners to invest in relation-specific assets. Since relation-specific investments create appropriable quasi-rents, transactors need to safeguard those investments (Klein et al., 1978). Partners are more likely to make investments in relation-specific assets when they have crafted effective safeguards (Williamson, 1985). Moreover, there is typically a fixed, up-front cost associated with making a particular type of relation-specific investment (such as in specialized equipment or a dedicated plant). Some relation-specific investments (e.g., a dedicated plant) are more durable and costly than others (e.g., a specialized tool or jig).

Given the fixed-cost nature of some investments, alliance partners need to assess whether or not they will make the necessary return on the investment during the payback period or length of the governance agreement (e.g., length of contract). For example, Dyer (1997) found that Japanese suppliers were more likely to make durable and costly relation-specific investments because automakers provided safeguards on those investments for at least 8 years or more. In contrast, U.S. automakers offered average contracts of 2.3 years, and suppliers rationally refused to make relation-specific investments with a long payback period.

*Proposition 1a: The greater the length of the safeguard is to protect against opportunism, the greater the potential will be to generate relational rents through relation-specific assets.*

Second, the ability to substitute special-purpose assets for general-purpose assets is influenced by the total volume (scale) and breadth (scope) of transactions between the alliance partners. Just as firms that achieve production economies

of scale are able to increase productivity by substituting special-purpose assets for general-purpose assets, alliance partners are also able to increase the efficiency associated with inter-firm exchanges as they increase the volume and scope of transactions between the alliance partners. A similar argument has been made by Williamson (1985), who claims that transactors engaging in frequent, recurring transactions can afford to adopt more specialized and complex governance structures.

*Proposition 1b: The greater the volume of exchange is between the alliance partners, the greater the potential will be to generate relational rents through relation-specific assets.*

In summary, the length of the safeguard and the volume of transactions are key subprocesses that influence the ability of alliance partners to generate rents through relation-specific assets.

### Interfirm Knowledge-Sharing Routines

Various scholars have argued that interorganizational learning is critical to competitive success, noting that organizations often learn by collaborating with other organizations (Levinson & Asahi, 1996; March & Simon, 1958; Powell et al., 1996). For example, Von Hippel (1988) found that in some industries (e.g., scientific instruments) more than two-thirds of the innovations he studied could be traced back to a customer's initial suggestions or ideas. In other industries (e.g., wire termination equipment) the majority of innovations could be traced back to suppliers. Von Hippel argues that a production network with superior knowledge-transfer mechanisms among users, suppliers, and manufacturers will be able to "out innovate" production networks with less effective knowledge-sharing routines. Similarly, Powell et al. (1996) found that the locus of innovation in the biotechnology industry was the network—not the individual firm. Patents were typically filed by a large number of individuals working for a number of different organizations, including biotech firms, pharmaceutical companies, and universities. Powell et al. (1996) argue that biotech firms who are unable to create (or position themselves in) learning networks are at a competitive disadvantage.

These studies suggest that a firm's alliance partners are, in many cases, the most important source of new ideas and information that result in performance-enhancing technology and innovations. Thus, alliance partners can generate rents by developing superior interfirm knowledge-sharing routines. We define an interfirm knowledge-sharing routine as *a regular pattern of interfirm interactions that permits the transfer, recombination, or creation of specialized knowledge* (Grant, 1996). These are institutionalized interfirm processes that are purposefully designed to facilitate knowledge exchanges between alliance partners.

*Proposition 2: The greater the alliance partners' investment is in interfirm knowledge-sharing routines, the greater the potential will be for relational rents.*

Beyond simply arguing that alliance partners can generate relational rents through knowledge-sharing routines, it is important to understand how partners create knowledge-sharing routines that result in competitive advantage. Many scholars divide knowledge into two types: (1) information and (2) know-how (Grant, 1996; Kogut & Zander, 1992; Ryle, 1984). We can define information as easily codifiable knowledge that can be transmitted "without loss of integrity once the syntactical rules required for deciphering it are known. Information includes facts, axiomatic propositions, and symbols" (Kogut & Zander, 1992: 386). By comparison, know-how involves knowledge that is tacit, "sticky," complex, and difficult to codify (Kogut & Zander, 1992; Nelson & Winter, 1982; Szulanski, 1996). Since know-how is tacit, sticky, and difficult to codify, it is difficult to imitate and transfer. However, these properties also suggest that, compared to information, know-how is more likely to result in advantages that are sustainable. As a result, alliance partners that are particularly effective at transferring know-how are likely to outperform competitors who are not.

The ability to exploit outside sources of knowledge is largely a function of prior related knowledge or the "absorptive capacity" of the recipient of knowledge. Cohen and Levinthal define absorptive capacity as "the ability of a firm to recognize the value of new, external information, assimilate it, and apply it to commercial ends" (1990: 128). However, their definition

suggests that if a firm has absorptive capacity, it is equally capable of learning from all other organizations. Although Cohen and Levinthal focus on the absolute absorptive capacity of individual firms, the concept is particularly useful in thinking about how alliance partners may systematically engage in interorganizational learning. Thus, *partner-specific absorptive capacity* refers to the idea that a firm has developed the ability to recognize and assimilate valuable knowledge *from a particular alliance partner*. This capacity would entail implementing a set of interorganizational processes that allows collaborating firms to systematically identify valuable know-how and then transfer it across organizational boundaries. Partner-specific absorptive capacity is a function of (1) the extent to which partners have developed overlapping knowledge bases and (2) the extent to which partners have developed interaction routines that maximize the frequency and intensity of sociotechnical interactions. Previous work suggests that the ability of a receiver of knowledge to "unpack" and assimilate it is largely a function of whether or not the firm has overlapping knowledge bases with the source (Mowery, Oxley, & Silverman, 1996; Szulanski, 1996). Thus, this is a critical component of partner-specific absorptive capacity.

In addition, partner-specific absorptive capacity is enhanced as individuals within the alliance partners get to know each other well enough to know *who knows what* and *where critical expertise resides* within each firm. In many cases this knowledge develops informally over time through interfirm interactions. However, it may be possible to codify at least some of this knowledge. For example, Fuji and Xerox have attempted to codify this knowledge by creating a "communications matrix," which identifies a set of relevant issues (e.g., products, technologies, markets, and so on) and then identifies the individuals (by function) within Fuji-Xerox, Fuji, and Xerox who have relevant expertise on that particular issue. This matrix provides valuable information regarding where relevant expertise resides within the partnering firms.

This example illustrates that alliance partners can increase partner-specific absorptive capacity by designing interfirm routines that facilitate information-sharing and increase sociotechnical interactions. These types of routines are particularly important since know-how

transfers typically involve an iterative process of exchange, and the success of such transfers depends on whether personnel from the two firms have direct, intimate, and extensive face-to-face interactions (Arrow, 1974; Badaraco, 1991; Daft & Lengel, 1986; Marsden, 1990).

*Proposition 2a: The greater the partner-specific absorptive capacity is, the greater the potential will be to generate relational rents through knowledge sharing.*

Finally, the ability of alliance partners to generate rents through knowledge sharing is dependent on an alignment of incentives that encourages the partners to be transparent, to transfer knowledge, and not to free ride on the knowledge acquired from the partner. In particular, the transferring firm must have an incentive to devote the resources required to transfer the know-how since it typically incurs significant costs during the transfer—costs comparable to those incurred by the receiving firm (Szulanski, 1996). Thus, the mechanisms employed to govern the alliance relationship must create appropriate incentives for knowledge sharing. These may be formal financial incentives (e.g., equity arrangements) or informal norms of reciprocity. In various studies scholars have found that equity arrangements are particularly effective at aligning partner incentives and, therefore, promote greater interfirm knowledge transfers than contractual arrangements (Kogut, 1988; Mowery et al., 1996).

*Proposition 2b: The greater the alignment of incentives by alliance partners is to encourage transparency and reciprocity and to discourage free riding, the greater the potential will be to generate relational rents through knowledge sharing.*

A comparison of Toyota's and GM's production networks illustrates how knowledge-sharing routines can create interorganizational competitive advantage. Toyota has developed a number of practices that facilitate knowledge transfers to—and among—suppliers. For example, Toyota may transfer knowledge directly to suppliers, through its "operations management consulting division" consultants, who will reside at the supplier for days, weeks, or even months to see that the transfer takes place

(Nishiguchi, 1994; Womack, Jones, & Roos, 1990). Toyota also transfers its personnel to the supplier (on a temporary or permanent basis) to increase the supplier's ability to assimilate and apply the new knowledge. These transfers result in dense interfirm social networks that increase partner-specific absorptive capacity. Consequently, Toyota personnel know what knowledge will be useful to the supplier, whom to contact at the supplier, and where the absorptive capacity resides at the supplier.

In contrast, GM and its suppliers have a history of keeping innovations proprietary. This strategy is viewed, according to the RBV, as the best way for an individual firm to generate rents from a particular innovation. Of course, the decision not to share knowledge is the only rational one for suppliers, since GM has not cultivated a stable network of supplier companies that have developed overlapping knowledge bases, dense social interactions, or a norm of reciprocity for knowledge sharing. GM does not have a supplier association to facilitate knowledge sharing, nor does GM transfer or lend personnel to suppliers to facilitate interfirm knowledge sharing. Consequently, suppliers rationally refuse to engage in costly knowledge-sharing activities since they do not expect to receive some benefit (i.e., knowledge) in return. It is not surprising then that there is significantly greater knowledge sharing between Toyota and its suppliers than between GM and its suppliers (Dyer, 1997).

### Complementary Resource Endowments

Another way firms can generate relational rents is by leveraging the complementary resource endowments of an alliance partner. In some instances a firm's ability to generate rents from its resources may require that these resources be utilized in conjunction with the complementary resources of another firm. Complementary resource endowments have been the focus of much prior discussion on the formation and management of alliances and have been discussed widely as a key factor driving returns from alliances (Hamel, 1991; Harrigan, 1985; Hill & Hellriegel, 1994; Shan, Walker, & Kogut, 1994; Teece, 1987). We define complementary resource endowments as *distinctive resources of alliance partners that collectively generate greater rents than the sum of those obtained from the individ-*

ual endowments of each partner. For these resources to generate rents through an alliance, it is necessarily the case that neither firm in the partnership can purchase the relevant resources in a secondary market. Also, these resources must be indivisible, thereby creating an incentive for each firm to form an alliance in order to access the complementary resources. As Oliver observes, "Strategic alliances allow firms to procure assets, competencies, or capabilities not readily available in competitive factor markets, particularly specialized expertise and intangible assets, such as reputation" (1997: 707).

The cooperative relationship between Nestle and Coca-Cola to distribute hot canned drinks through vending machines (a business largely unknown outside of Japan) is an example of an alliance in which complementary resource endowments are a source of relational rents. This alliance combines Nestle's brand names (Nescafe and Nestea) and competence in developing and producing soluble coffee and tea products with Coca-Cola's powerful international distribution and vending machine network (Hamel & Prahalad, 1994: 187). The alliance creates advantages over Japanese competitors (e.g., Suntory), who are better than Coca-Cola at soluble coffee and tea and have a larger distribution and vending machine network than Nestle, but cannot match the Coca-Cola-Nestle combination of capabilities.

Shan and Hamilton (1991) offer another illustration. They found that complementarity of both firm- and country-specific resources between domestic and foreign firms was a key factor in the formation of cross-border strategic alliances in biotechnology. The complementarity in the cases they studied consisted of linkages between the strong basic research capabilities of U.S. firms with the unique local knowledge and distribution capabilities of their partners in overseas markets.

In the cases described above, the alliance partners brought distinctive resources to the alliance, which, when combined with the resources of the partner, resulted in a synergistic effect whereby *the combined resource endowments were more valuable, rare, and difficult to imitate than they had been before they were combined*. Consequently, these alliances produced stronger competitive positions than those achievable by the firms operating individually. It is important to note, however, that not all of

the resources of a potential alliance partner will be complementary. In assessing the extent to which alliance partners can generate relational rents by combining complementary resources, it is worthwhile to think about the proportion of the potential partner's strategic resources that is synergy sensitive with the firm's resources. As the proportion of synergy-sensitive resources in the potential partners increases, so does the potential for earning relational rents by combining the complementary resources.

*Proposition 3: The greater the proportion is of synergy-sensitive resources owned by alliance partners that, when combined; increase the degree to which the resources are valuable, rare, and difficult to imitate, the greater the potential will be to generate relational rents.*

There are several challenges faced by firms attempting to generate relational rents with complementary resources. In particular, they must find each other and recognize the potential value of combining resources. If potential alliance partners possessed perfect information, they could easily calculate the value of different partner combinations and then rationally ally with the partner(s) who would generate the greatest combined value. However, it is often very costly and difficult (if not impossible) to place a value on the complementary resources of potential partners. In fact, firms vary in their ability to identify potential partners and value their complementary resources for three primary reasons: (1) differences in prior alliance experience, (2) differences in internal search and evaluation capability, and (3) differences in their ability to acquire information about potential partners owing to different positions in their social/economic network(s).

First, firms with higher levels of experience in alliance management may have a more precise view on the kinds of partner/resource combinations that allow them to generate supernormal returns. Previous research suggests that prior alliance experience results in more opportunities to enter into future alliances, presumably because of the development of alliance capabilities and reputation (Gulati, 1995a; Mitchell & Singh, 1996; Walker, Kogut, & Shan, 1997).

Second, many organizations are developing ways to accumulate knowledge on screening

potential partners by creating a "strategic alliance" function. For example, firms such as Hewlett Packard, Xerox, and Microsoft have appointed a Director of Strategic Alliances, with his or her own staff and resources. The role of these individuals is to identify and evaluate potential alliance partners as well as to monitor and coordinate their firm's current alliances. The creation of these roles ensures some accountability for the selection and ongoing management of alliance partners and also ensures that knowledge on successful partner combinations and on effective alliance management practices will be accumulated. An opportunity exists to codify some of this knowledge, as illustrated by the fact that some firms, such as Hewlett Packard, have created manuals that attempt to codify alliance-specific knowledge (Hewlett Packard's manual has more than 300 pages). Research on acquisitions suggests that codification of knowledge is predictive of success in post-acquisition contexts (Singh & Zollo, 1997). Although alliances are a different context than acquisitions, a parallel argument can be applied to the management of alliances.

Third, the ability of a firm to identify and evaluate partners with complementary resources depends on the extent to which the firm has access to accurate and timely information on potential partners. An investment in an internal alliance function likely will facilitate the acquisition of this information, but it also depends on the extent to which the firm occupies an information-rich position within social/economic networks. Previous research suggests that firms occupying central network positions with greater network ties have superior access to information and, thus, are more likely to increase the number of their alliances in the future (Gulati, 1995a; Mitchell & Singh, 1996; Walker et al., 1997). When a firm is well positioned in networks, the firm has access to more reliable information about potential partners because of trusted informants within the network who may have direct experience with the potential partner (Burt, 1992; Chung, Singh, & Lee, in press; Granovetter, 1985; Nohria, 1992). An information-rich position within a network, therefore, provides a firm with additional information about the nature and degree of accessibility of the complementary resources of potential partners.

*Proposition 3a: The ability of firms to generate relational rents by combining complementary resources increases with the firm's (1) prior alliance experience, (2) investment in internal search and evaluation capability, and (3) ability to occupy an information-rich position in its social/economic networks.*

Thus far, our discussion has focused on the benefits associated with combining resources with *strategic complementarity*. However, once a firm has identified a potential partner with the requisite complementary strategic resources, another challenge is developing *organizational complementarity*—the organizational mechanisms necessary to access the benefits from complementary strategic resources. The ability of alliance partners to realize the benefits from complementary strategic resources is conditioned on compatibility in decision processes, information and control systems, and culture (Doz, 1996; Kanter, 1994). Although complementarity of strategic resources creates the *potential* for relational rents, the rents can only be realized if the firms have systems and cultures that are compatible enough to facilitate coordinated action. Previous research suggests that a primary reason for failure of both acquisitions and alliances is not that the two firms do not possess strategic complementarity of resources, but rather because they do not have compatible operating systems, decision-making processes, and cultures (Buono & Bowditch, 1989). Doz (1996), therefore, distinguishes between initial complementarity (strategic complementarity), based on potential combinations of resources, and revealed complementarities (organizational complementarity), based on the realized results of cooperation between the firms involved in the partnership.

*Proposition 3b: The ability of alliance partners to generate relational rents from complementary strategic resources increases with the degree of compatibility in their organizational systems, processes, and cultures (organizational complementarity).*

In summary, both strategic and organizational complementarity are critical for realizing the po-

tential benefits of combining complementary strategic resources.

### Effective Governance

Governance plays a key role in the creation of relational rents because it influences transaction costs, as well as the willingness of alliance partners to engage in value-creation initiatives. For example, although alliance partners can generate relational rents through investments in relation-specific assets, their incentive to make specialized investments is tempered by the fact that the more specialized a resource becomes, the lower its value is in alternative uses. The contingent value of a specialized resource exposes its owner to a greater risk of opportunism than does a generalized resource (Klein et al., 1978). An important objective for transactors is to choose a governance structure (safeguard) that minimizes transaction costs, thereby enhancing efficiency (North, 1990; Williamson, 1985).

We distinguish between two classes of governance used by alliance partners: the first relies on *third-party enforcement* of agreements (e.g., legal contracts), whereas the second relies on *self-enforcing agreements*, in which "no third party intervenes to determine whether a violation has taken place" (Telser, 1980: 27). The transaction cost economics perspective falls primarily within the first class, suggesting that dispute resolution requires access to a third-party enforcer, whether it be the state (i.e., through contracts) or a legitimate organization authority (Williamson, 1991b). In contrast, self-enforcing agreements (sometimes called "private ordering" in the economics literature or "trust/embeddedness" in the sociology literature) involve safeguards that allow for self-enforcement. Within the self-enforcement class of governance mechanisms, we further distinguish between "formal" safeguards, such as *financial and investment hostages* (Klein, 1980; Williamson, 1983), and "informal" safeguards, such as *goodwill trust or embeddedness* (Gulati, 1995b; Powell, 1990; Sako, 1991; Uzzi, 1997) and *reputation* (Larson, 1992; Weigelt & Camerer, 1988).

*Formal self-enforcing safeguards* are economic hostages created intentionally to control opportunism by aligning the economic incentives of the transactors (Klein, 1980; Williamson,

1983). These hostages may be financial (e.g., equity) or symmetric investments in specialized or cospecialized assets, which constitute a visible collateral bond that aligns the economic incentives of exchange partners. The fact that the value of the economic hostage will decrease in value if a party is opportunistic provides an incentive for trading partners to behave in a more trustworthy fashion (Dyer & Ouchi, 1993; Pisano, 1989). Further, since these investments may increase in value if the alliance partners cooperate, there is an incentive for the alliance partners to engage in value-creation initiatives.

Sociologists, anthropologists, and law and society scholars long have argued that informal social controls supplement—and often supplant—formal controls (Black, 1976; Ellickson, 1991; Granovetter, 1985; Macaulay, 1963). Thus, informal self-enforcing agreements may rely on personal trust relations (direct experience) or reputation (indirect experience) as governance mechanisms. A number of scholars have suggested that informal safeguards (e.g., goodwill trust) are the most effective and least costly means of safeguarding specialized investments and facilitating complex exchange (Hill, 1995; Sako, 1991; Uzzi, 1997). For example, some scholars have argued that goodwill trust reduces transaction costs related to bargaining and monitoring, thereby enhancing performance (Barney & Hansen, 1994; Sako, 1991).<sup>5</sup> Thus, self-enforcing safeguards result in transaction costs that are lower than they are in situations where transactors must erect more elaborate governance structures (e.g., contracts), which are costly to write, monitor, and enforce.

The ability of exchange partners to match governance structures with exchange attributes is viewed as critical to realizing "economizing advantages."<sup>6</sup> Williamson states, "The main hy-

<sup>5</sup> Goodwill trust is defined as one party's confidence that the other party in the exchange relationship will not exploit its vulnerabilities (Ring & Van de Ven, 1992; Sako, 1991). Goodwill trust at the interfirm level refers to the extent to which there is a collectively held trust orientation by organizational members toward a partner firm (Zaheer, McEvily, & Perrone, 1998).

<sup>6</sup> Although the literature on choice of governance mechanisms has focused primarily on transaction costs, Gulati and Singh (in press) show that coordination costs stemming from the nature of the interdependence between partners (pooled, reciprocal, or sequential) are very important determinants of alliance governance structures.

pothesis out of which transaction cost economics works is this: *align transactions, which differ in their attributes, with governance structures, which differ in their costs and competencies, in a discriminating (mainly transaction cost minimizing) way*" (1991a: 79; emphasis in original). Williamson (1991a) argues that misalignments occur frequently because of bounded rationality and uncertainty. Thus, transactors who are effective at aligning transactions with governance structures will have an advantage over competing transactors who do not employ efficient governance mechanisms.

*Proposition 4: The greater the alliance partners' ability is to align transactions with governance structures in a discriminating (transaction cost minimizing and value maximizing) way, the greater the potential will be for relational rents.*

We should emphasize that, although the discussion thus far has followed a transaction cost logic with an emphasis on efficiency, we use the term *effective governance* to suggest that governance mechanisms play an important role in generating relational rents that extends beyond efficiency arguments. More specifically, a small but growing body of literature on transaction value is emphasizing the influence of governance on the value-creation initiatives of alliance partners (Dyer, 1997; Hansen, Hoskisson, & Barney, 1997; Madhok, 1997; Ring & Van de Ven, 1992; Zajac & Olsen, 1993). Effective governance can generate relational rents by either (1) lowering transaction costs or (2) providing incentives for value-creation initiatives, such as investing in relation-specific assets, sharing knowledge, or combining complementary strategic resources.

In the first case transactors achieve an advantage by incurring lower transaction costs than competitors to achieve a given level of investment in specialized assets. In the second case effective governance (e.g., trust) may allow transactors to make greater investments in specialized assets than competing transactors, who refuse to make the relation-specific investments because of the high cost of safeguarding them. Similarly, alliance partners may be unwilling to share valuable, proprietary knowledge with trading partners if they are not credibly assured that this knowledge will not be readily shared

with competitors. The willingness of firms to combine complementary strategic resources may also hinge upon credible assurances that the trading partner will not attempt to duplicate those same resources, thereby becoming a future competitor. Thus, effective governance mechanisms may generate rents by either lowering transaction costs or by providing incentives for partners to engage in value-creation initiatives.

In general, *self-enforcing mechanisms are more effective than third-party enforcement mechanisms at both minimizing transaction costs and maximizing value-creation initiatives*. Transaction costs are lower under self-enforcing agreements for four primary reasons.

First, contracting costs are avoided because the exchange partners trust that payoffs will be divided fairly. Consequently, exchange partners do not have to bear the cost—or time—of specifying every detail of the agreement in a contract. Further, contracts are likely to be less effective than self-enforcing agreements at controlling opportunism because they fail to anticipate all forms of cheating that may occur. Second, monitoring costs are lower because self-enforcement relies on self-monitoring rather than external or third-party monitoring. Exchange partners do not need to invest in costly monitoring mechanisms to ensure contract fulfillment and to document infractions to the satisfaction of a third party (e.g., court). Third, self-enforcing agreements lower the costs associated with complex adaptation, thereby allowing exchange partners to adjust the agreement "on the fly" to respond to unforeseen market changes (Uzzi, 1997: 48). Fourth, self-enforcing agreements are superior to contracts at minimizing transaction costs over the long run because they are not subject to the time limitations of contracts. Contracts are typically written for a fixed duration and, in effect, *depreciate* because they only provide protection during the designated length of the agreement. At the end of the contract duration, the alliance partners need to write a new contract (or employ a different safeguard). Exchange partners can avoid the costs of "recontracting" by employing self-enforcing agreements, which, over time, may in fact *appreciate* in the sense that trust or embeddedness increases with increased familiarity and interaction (Gulati, 1995b; Larson, 1992).

Self-enforcing agreements also call forth greater value-creation initiatives on the part of the exchange partners. For example, it is difficult (if not impossible) to explicitly contract for value-creation initiatives, such as sharing fine-grained tacit knowledge, exchanging resources that are difficult to price, or offering innovations or responsiveness not explicitly called for in the contract. Under self-enforcing agreements, exchange partners are more likely to engage in these activities because they have credible assurances that they will be rewarded for them. Finally, contractual agreements are relatively easy to imitate as a form of governance and, therefore, are unlikely to create sustainable advantages. Competing firms are likely to have equal access to lawyers (to write the agreements) and the state (to enforce the agreements).

*Proposition 4a: The greater the alliance partners' ability is to employ self-enforcing safeguards (e.g., trust or hostages) rather than third-party safeguards (e.g., legal contracts), the greater the potential will be for relational rents, owing to (1) lower contracting costs, (2) lower monitoring costs, (3) lower adaptation costs, (4) lower recontracting costs, and (5) superior incentives for value-creation initiatives.*

Likewise, within the self-enforcement mechanism category, informal safeguards are more likely to generate relational rents than are formal safeguards, for two primary reasons. First, the marginal cost associated with formal hostages typically is higher than for informal safeguards because formal hostages involve capital outlays for equity or other types of collateral bonds. Furthermore, formal safeguards are much easier for competitors to imitate. If the key to minimizing transaction costs and encouraging value-creation initiatives by partners is simply swapping stock, creating a joint venture, or having a partner (e.g., franchisee) post a bond, then competitors can imitate this governance mechanism with relative ease. Informal safeguards (goodwill trust or reputation) are much more difficult to imitate because they are socially complex and idiosyncratic to the exchange relationship.

*Proposition 4b: The greater the alliance partners' ability is to employ informal self-enforcing safeguards (e.g., trust) rather than formal self-enforcing safeguards (e.g., financial hostages), the greater the potential will be for relational rent, owing to (1) lower marginal costs and (2) difficulty of imitation.*

Although informal safeguards have the greatest potential to generate relational rents, they are subject to two key liabilities: (1) they require substantial time to develop, because they require a history of interactions and personal ties, and (2) they are subject to the "paradox of trust," which means that although trust establishes norms and expectations about appropriate behavior, lowering the perception of risk in the exchange, it provides the opportunity for abuse through opportunism (Granovetter, 1985). In practice, it appears that many effective alliances use multiple governance mechanisms simultaneously (Borch, 1994). Many alliances begin with the use of formal mechanisms and then, over time, employ more informal ones (Gulati, 1995b).

Recent empirical studies support the argument that effective governance, in the form of lower transaction costs, may be a source of relational rents. For example, Dyer (1997) found that General Motors' procurement (transaction) costs were more than twice those of Chrysler's and six times higher than Toyota's. GM's transaction costs are persistently higher than Toyota's and Chrysler's primarily because suppliers view GM as a much less trustworthy organization. Similarly, Zaheer et al. (1998) found that, in the electrical equipment industry, interorganizational trust reduced negotiation costs and conflict and had a positive effect on performance.

#### MECHANISMS THAT PRESERVE RELATIONAL RENTS

An explanation of how firms generate relational rents necessarily requires an explanation of why competing firms do not simply imitate the partnering behavior, thereby eliminating any competitive advantages that might be gained through collaboration. There are a variety of isolating mechanisms that preserve the rents generated by alliance partners. First, it is

important to recognize that some of the mechanisms already described in the literature on the sustainability of rents within the RBV of the firm apply at the dyadic level. These include *causal ambiguity* and *time compression diseconomies* (see Barney, 1991; Dierickx & Cool, 1989; Lippman & Rumelt, 1982; Reed & DeFillippi, 1990). For example, the development of goodwill trust is subject to considerable causal ambiguity because it is a highly complex and situation-specific process (Butler, 1991; Larzelere & Huston, 1980). Moreover, the development of trust or partner-specific absorptive capacity is subject to time compression diseconomies because it cannot be developed quickly, nor can it be bought or sold in the marketplace (Arrow, 1974; Sako, 1991).

However, in addition to these mechanisms, relational rents may be preserved through *interorganizational asset interconnectedness*; *partner scarcity (rarity)*; *resource indivisibility* (coevolution of capabilities); or a socially complex, and therefore difficult to imitate, *institutional environment* (e.g., country specific). We do not discuss causal ambiguity and time compression diseconomies, since these rent-preservation mechanisms have been discussed in detail elsewhere.

### Interorganizational Asset Interconnectedness

Our concept of relational advantage takes the idea of asset interconnectedness across organizational boundaries. We submit that interorganizational asset interconnectedness will occur in cumulative increments on an existing stock of assets held by a firm or its alliance partner. To illustrate, a Nissan seat supplier built its plant on the property adjacent to a Nissan assembly plant. The supplier was willing to make this site-specific investment because Nissan had a minority equity position in the supplier and because the two parties had developed a high level of trust. Once this site-specific investment was made, the two parties discovered that rather than transport the seats by truck (a general-purpose asset), it would be more economical to build a conveyor belt (a highly specialized asset). Consequently, they jointly invested in building the conveyor belt.

This example demonstrates how initial relation-specific investments (i.e., a site-specific plant) create conditions that make subsequent

specialized investments (i.e., customized equipment) economically viable. Thus, there is a cumulative (snowball) effect that is due to the interconnectedness of current relation-specific investments with previous relation-specific investments. In contrast, GM's suppliers have not made the initial site-specific investment; therefore, it is not economically feasible for them to make other subsequent specialized investments. The key strategic implication of this isolating mechanism is that alliance partners may need to make "bundles" of related relation-specific investments in order to realize the full potential of those investments in an alliance relationship.

### Partner Scarcity

The creation of relational rents is often contingent on a firm's ability to find a partner with (1) complementary strategic resources and (2) a relational capability (i.e., a firm's willingness and ability to partner). In some cases a latecomer to the partner scene may find that all potential partners with the necessary complementary strategic resources have already entered into alliances with other firms. This is a particular problem for late movers into foreign markets, where there may be few local firms with the local market knowledge, contacts, and distribution network needed to facilitate market entry. In other instances potential partners may simply lack the relational capability or the relation-building skills and process skills necessary to employ effective governance mechanisms, make relation-specific investments, or develop knowledge-sharing routines (Eisenhardt & Schoonhoven, 1996; Larson, 1992). Firms with collaboration experience have been found to be more desirable as partners and more likely to generate value through partnerships (Gulati, 1995a; Mitchell & Singh, 1996).

To illustrate the importance of relational capability, Koichiro Noguchi, Toyota's International Purchasing Chief, told the first author that one of the difficulties Toyota faced in entering the U.S. market was finding U.S. suppliers who were willing to work in partnership fashion. Stated Noguchi:

Many U.S. suppliers do not understand our way of doing business. They do not want us to visit their plants and they are unwilling to share the information we require. This makes it very difficult for

us to work with them effectively; we also can't help them to improve (author interview, July 22, 1992).

Thus, even though Toyota had developed a relational capability and was effective at partnering, it found that it was unable to effectively generate relational rents with U.S. suppliers who had not developed a relational capability. Thus, relational rents may be difficult to imitate because potential alliance partners with the necessary complementary resources and relational capability are rare. The key strategic implication of this isolating mechanism is that there are strong first mover advantages for those firms that develop a capability of quickly identifying and allying with partners possessing complementary strategic resources and/or a relational capability.

### Resource Indivisibility

Partners may combine resources or jointly develop capabilities in such a way that the resulting resources are both idiosyncratic and indivisible. The VISA organization is an example of alliance partners (23,000 banks) jointly creating indivisible assets that help generate returns for the alliance partners. In particular, the VISA brand name and distribution network are idiosyncratic and indivisible assets that are collectively owned by the participating banks in a large multifirm alliance. Individual banks can only access the brand name and distribution network through the alliance.

In other settings, such as with Fuji and Xerox, alliance partners combine resources and capabilities, which then coevolve over time. Under these conditions the mutual coevolution of capabilities of the partner firms can serve as a preserver of rents from the partnership. As the partners engage in a long-term relationship, they develop dedicated linkages that enhance the benefits from engaging in the joint relationship. Over time, these coevolved capabilities are increasingly difficult to imitate, owing to path dependence and resource indivisibility.

A key strategic implication is that the partners' resources and capabilities may coevolve and change over time, thereby restricting each firm's ability to control and redeploy the resources. Although value may be generated through the partnership, there is the potential

for a loss of flexibility, which should be considered at the outset.

### Institutional Environment

An institutional environment that encourages or fosters trust among trading partners (i.e., has effective institutional "rules" or social controls for enforcing agreements) may facilitate the creation of relational rents (North, 1990). Indeed, at a broader level, arguments regarding relational advantage can be extended to consider the issue of national or country advantage (Casson, 1991; Fukuyama, 1995; Hill, 1995). For example, numerous scholars suggest that Japanese transactors incur lower transaction costs than U.S. transactors, thereby generating relational rents (Dore, 1983; Dyer, 1996b; Hill, 1995; Sako, 1991; Smitka, 1991). Japanese firms appear to have been successful at generating relational rents in part because of a country-specific institutional environment that fosters goodwill trust and cooperation (Dore, 1983; Hill, 1995; Sako, 1991; Smitka, 1991).

Borys and Jemison (1989) refer to these types of environmentally embedded mechanisms that control opportunism as "extrahybrid institutions." Collaborating firms in other countries (e.g., the United States and Russia) may not be able to replicate the low transaction costs of Japanese alliance partners because of an inability to replicate the socially complex extrahybrid institutions embedded in the Japanese institutional environment. Thus, following North (1990), one can argue that the institutional environment can either raise or lower the transaction costs that must be borne to achieve a given level of specialization and cooperation. The strategic implication of this isolating mechanism is that firms may need to locate operations in particular institutional environments in order to realize the benefits associated with extrahybrid institutions.

In summary, the relational rents generated by alliance partners are preserved because competing firms

1. cannot ascertain what generates the returns because of causal ambiguity;
2. can figure out what generates the returns but cannot quickly replicate the resources because of time compression diseconomies;
3. cannot imitate practices or investments because of asset stock interconnectedness

(they have not made the previous investments that make subsequent investments economically viable) and because the costs associated with making the previous investments are prohibitive;

4. cannot find a partner with the requisite complementary strategic resources or relational capability;
5. cannot access the capabilities of a potential partner because these capabilities are indivisible, perhaps having coevolved with another firm; and
6. cannot replicate a distinctive, socially complex institutional environment that has the necessary formal rules (legal controls) or informal rules (social controls) controlling opportunism/encourage cooperative behavior.

### COMPARING THE RELATIONAL, RBV, AND INDUSTRY STRUCTURE VIEWS

Although an individual firm's ability to work effectively with other firms may be classified as a firm-specific capability (which may generate relational rents), there is value in distinguishing a relational view, which offers a distinct, but

complementary, view on how firms generate rents. A relational view considers the dyad/network as the unit of analysis and the rents that are generated to be associated with the dyad/network. Although complementary to the RBV, this view differs somewhat in terms of unit of analysis and sources of rent, as well as control and ownership of the rent-generating resources (see Table 1).

To illustrate, a Toyota supplier may generate rents by actively participating in the knowledge-sharing processes in Toyota's supplier association. However, the supplier will be unable to generate the knowledge rents if the other members decide to exclude it from the network. Similarly, the 23,000 member banks of the VISA organization have achieved an advantage over American Express and Discover by pooling their enormous distribution power, which allows for use of the card at more locations than its competitors. Individual banks generate profits with VISA, owing to the jointly created brand name and distribution network. In both of these cases, the resources that create the relational rents are

**TABLE 1**  
Comparing the Industry Structure, Resource-Based, and Relational Views of Competitive Advantage

Dimensions	Industry Structure View	Resource-Based View	Relational View
Unit of analysis	Industry	Firm	Pair or network of firms
Primary sources of supernormal profit returns	Relative bargaining power	Scarce physical resources (e.g., land, raw material inputs)	Relation-specific investments
	Collusion	Human resources/know-how (e.g., managerial talent) Technological resources (e.g., process technology) Financial resources Intangible resources (e.g., reputation)	Interfirm knowledge-sharing routines Complementary resource endowments Effective governance
Mechanisms that preserve profits	Industry barriers to entry	Firm-level barriers to imitation	Dyadic/network barriers to imitation
	<ul style="list-style-type: none"> <li>● Government regulations</li> <li>● Production economies/sunk costs</li> </ul>	<ul style="list-style-type: none"> <li>● Resource scarcity/property rights</li> <li>● Causal ambiguity</li> <li>● Time compression diseconomies</li> <li>● Asset stock interconnectedness</li> </ul>	<ul style="list-style-type: none"> <li>● Causal ambiguity</li> <li>● Time compression diseconomies</li> <li>● Interorganizational asset stock interconnectedness</li> <li>● Partner scarcity</li> <li>● Resource indivisibility</li> <li>● Institutional environment</li> </ul>
Ownership/control of rent-generating process/resources	Collective (with competitors)	Individual firm	Collective (with trading partners)

essentially beyond the control of the individual firm.

In summary, the RBV focuses on how individual firms generate supernormal returns based upon resources, assets, and capabilities that are housed within the firm. However, according to a relational perspective, rents are jointly generated and owned by partnering firms.<sup>7</sup> Thus, relational rents are a property of the dyad or network. A firm in isolation, irrespective of its capabilities or resources, cannot enjoy these rents. Thus, *a relational capability is not a sufficient condition for realizing relational rents*. As Zajac and Olsen argue, "[B]oth parties use the interorganizational strategy to establish an ongoing relationship that can create value that could otherwise not be created by either firm independently" (1993: 137).

A relational view may offer different normative implications for the strategies firms should use to achieve high profits. For example, according to the RBV, an individual firm should attempt to protect, rather than share, valuable proprietary know-how to prevent knowledge spillovers, which could erode or eliminate its competitive advantage. However, an effective strategy from a relational view may be for firms to systematically share valuable know-how with alliance partners (and willingly accept some spillover to competitors) in return for access to the stock of valuable knowledge residing within its alliance partners. Of course, this strategy makes sense only when the expected value of the combined inflows of knowledge from partners exceeds the expected loss/erosion of advantages due to knowledge spillovers to competitors.

Similarly, the relational view and industry structure view may offer different prescriptions for firm-level strategies. For example, according

to the industry structure view, firms should be eager to increase the number of their suppliers, thereby maximizing bargaining power and profits. Porter states, "In purchasing, then, the goal is to find mechanisms to offset or surmount these sources of suppliers' power. . . . Purchases of an item can be spread among alternate suppliers in such a way as to improve the firm's bargaining power" (1980: 123).

This strategy is in direct contrast to a relational perspective, which holds that firms can increase profits by *increasing* their dependence on a smaller number of suppliers, thereby increasing the incentives of suppliers to share knowledge and make performance-enhancing investments in relation-specific assets. State Barks and Brynjolfsson:

By committing to a small number of suppliers, the buyer firm can guarantee them greater ex post bargaining power and therefore greater ex ante incentives to make noncontractible investments, such as investments in innovation, responsiveness, and information sharing; the buyer ends up being better off by keeping a smaller piece of a bigger pie (1993: 43).

Thus, a relational view may differ from existing views in the normative prescriptions offered to practicing managers. The fact that there are clear contradictions between these views suggests that existing theories of advantage are not adequate to explain interorganizational competitive advantage.

## CONCLUSION

The central thesis of this article is that a pair or network of firms can develop relationships that result in sustained competitive advantage. Competition between single firms, while perhaps still the rule, is becoming less universal, as pairs and networks of allied firms have begun to compete against each other. Our analysis suggests that although looking for competitive advantage within firms and industries has been (and is still) important, a singular focus on these units of analysis may limit the explanatory power of the models we develop to explain firm-level profitability.

The view we offer here extends the existing literature on alliances and networks in a number of ways. First, we have attempted to integrate what is known regarding the benefits of collaboration by examining the interorganiza-

<sup>7</sup> We expect the distribution of the relational rents to be consistent with a resource-dependency perspective (Pfeffer & Salancik, 1978). Partners that bring the more critical (i.e., scarce) resources to the relationship will be able to appropriate a higher percentage of the rents (see Asanuma, 1989, and Dyer, 1996a). For example, Toyota made higher profits (return on assets [ROA] = 13.0 percent) than its suppliers (average ROA = 7.1 percent) from 1982–1992, owing to its greater relative bargaining power and control over more critical resources. However, some suppliers, like Denso—a supplier of key electronic components, which brings critical and scarce resources to the relationship—made profit returns (ROA = 12.8 percent) similar to those of Toyota.

tional rent-generating process. We have argued that collaborating firms can generate relational rents through relation-specific assets, knowledge-sharing routines, complementary resource endowments, and "effective governance." Second, we have identified the isolating mechanisms that preserve the relational rents generated through effective interfirm collaboration. Moreover, we have introduced mechanisms not discussed previously in the literature on sustainability of rents: interorganizational asset connectedness, partner scarcity, resource indivisibility (coevolution of capabilities), and the institutional environment. Third, we have argued that a relational perspective may offer normative prescriptions for practicing managers that contradict the prescriptions offered by the RBV and industry structure view.

In future research scholars might explicitly examine these differences in greater detail. Another important avenue for future research would be to examine how relational rents are distributed among alliance partners. Finally, given the poor track record of many alliances, researchers might examine, in detail, the factors that impede the realization of relational rents.

In conclusion, we reemphasize the primary objective of this article, which is to propose that relationships between firms are an increasingly important unit of analysis for explaining supernormal profit returns. The relational view offers a useful theoretical lens through which researchers can examine and explore value-creating linkages between organizations.

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