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TRUSTWORTHINESS AS A SOURCE OF COMPETITIVE ADVANTAGE

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Three types of trust in economic exchanges are identified: weak form trust, semi-strong form trust, and strong form trust. It is shown that weak form trust can only be a source of competitive advantage when competitors invest in unnecessary and expensive governance mechanisms. Semi-strong form trust can be a source of competitive advantage when competitors have differential exchange governance skills and abilities, and when these skills and abilities are costly to imitate. The conditions under which strong form trust can be a source of competitive advantage are also identified. Implications of this analysis for theoretical and empirical work in strategic management are discussed.

Significant differences in assumption and method exist between behaviorally oriented and economically oriented organizational scholars (Donaldson, 1990; Barney, 1990). While these differences manifest themselves in a wide variety of research contexts, no where are they more obvious than in research on the role of trust in economic exchanges.

On the one hand, behaviorally oriented researchers often criticize economic models that assume exchange partners are inherently untrustworthy (Mahoney, Huff, and Huff, 1993) and constantly tempted to behave in opportunistic ways (Donaldson, 1990). These scholars are dissatisfied with economic analyses that suggest trust will only emerge in an exchange when parties to that exchange erect legal and contractual protections (called governance mechanisms) which make it in their self-interest to behave in a trustworthy manner (Williamson, 1975). This rational, calculative, economic approach to trust, many behavioral scholars argue, is empirically

incorrect (since most exchange partners are, in fact, trustworthy), socially inefficient (since it leads to an overinvestment in unnecessary governance), and morally bankrupt (Etzioni, 1988). A more reasonable approach, it is argued, would adopt the assumption that most exchange partners are trustworthy, that they behave as stewards over the resources they have under their control (Donaldson and Davis, 1991), and thus that trust in exchange relationships—even without legal and contractual governance protections—will be common.

On the other hand, more economically oriented scholars respond by observing that, at the very least, it is difficult to distinguish between exchange partners that are actually trustworthy and those that only claim to be trustworthy (Arrow, 1974; Williamson, 1985). Since one cannot reliably distinguish between these types of exchange partners, legal and contractual protections are a rational and effective means of assuring efficient exchange. Trust, many economists would argue, is in fact common in exchange relationships, precisely because of the constant threat of opportunistic behavior, linked with governance (Hill, 1990). Behavioral assertions that most

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exchange partners are inherently trustworthy and that legal or contractual governance is thus unnecessary are, at best, naive, and at worst, foolish.

These debates about the role of trust in exchange relationships are interesting, in their own right, but they are not terribly relevant for strategic management research. Much of this research focuses on understanding sources of competitive advantage for firms (Rumelt, Schendel, and Teece, 1991; Bowman, 1974). The effort to understand sources of competitive advantage leads strategy researchers to study differences between firms that enable some firms to conceive of and implement valuable strategies that other firms can either not conceive of and/or cannot implement (Barney, 1991). Debates between behavioral and economically oriented researchers about how trustworthy individuals or firms are fail to point to these kinds of differences. Moreover, while the behavioral and economic approaches suggest very different processes through which trust emerges in economic exchanges, both these approaches assert that trust in economic exchanges will be very common. Such common attributes of exchange relationships cannot be sources of competitive advantage for individual firms (Barney, 1991). To be a source of competitive advantage, trust must be available to only a few firms in their exchange relationships, not to most firms in most exchange relationships (Peteraf, 1993).

The purpose of this paper is to understand the conditions under which trust and trustworthiness in exchange relationships can, in fact, be a source of competitive advantage for firms. The paper begins by defining trust, trustworthiness, and the closely related concept of opportunism. Next, three types of trust in exchange relationships are defined and described: weak form trust, semi-strong form trust, and strong form trust.¹ Then, the conditions under which these different types of trust will, and will not, be sources of competitive advantage for firms are discussed. The paper concludes with a discussion of some of the empirical and theoretical implications of the analysis.

DEFINING TRUST AND TRUSTWORTHINESS

Numerous definitions of trust and trustworthiness have been presented in the literature (Bradach and Eccles, 1989; Gambetta, 1988; Lewicki and Bunker, 1994). For purposes of this discussion, Sabel's (1993: 1133) definition of trust has been adopted: trust is the mutual confidence that no party to an exchange will exploit another's vulnerabilities.

Parties to an exchange can be vulnerable in several different ways. For example, when parties to an exchange find it very costly to evaluate accurately the quality of the resources or assets others assert they will bring to an exchange, these economic actors are subject to adverse selection vulnerabilities (Akerlof, 1970). When parties to an exchange find it very costly to evaluate accurately the quality of the resources or assets others are actually offering in exchange, these economic actors are subject to moral hazard vulnerabilities (Holmstrom, 1979). Also, when parties to an exchange make large, asymmetric transaction-specific investments in an exchange, they are subject to hold-up vulnerabilities (Klein, Crawford, and Alchian, 1978). According to Sabel, when parties to an exchange trust each other, they share a mutual confidence that others will not exploit any adverse selection, moral hazard, hold-up, or any other vulnerabilities that might exist in a particular exchange.

A definition of trustworthiness follows directly from Sabel's definition of trust. As the word itself implies, an exchange partner is trustworthy when it is worthy of the trust of others. An exchange partner worthy of trust is one that will not exploit other's exchange vulnerabilities. Notice that while trust is an attribute of a relationship between exchange partners, trustworthiness is an attribute of individual exchange partners.

In many ways, opportunism is the opposite of trust. A firm's actions are opportunistic to the extent that they take advantage of another's exchange vulnerabilities. Williamson (1979) emphasizes firms exploiting hold-up vulnerabilities of exchange partners, caused by asymmetric transaction-specific investment. However, the exploitation of other exchange vulnerabilities, including adverse selection and moral hazard vulnerabilities, can also be opportunistic in nature.

¹ With apologies to Gene Fama (1970).

TYPES OF TRUST

While trust is the mutual confidence that one's vulnerabilities will not be exploited in an exchange, different types of trust can exist in different economic exchanges. These different types of trust reflect different reasons parties to an exchange can have the confidence that their vulnerabilities will not be exploited. At least three types of trust can be identified: weak form trust, semi-strong form trust, and strong form trust.

Weak form trust: Limited opportunities for opportunism

One reason that exchange partners can have the mutual confidence that others will not exploit their vulnerabilities is that they have no significant vulnerabilities, at least in a particular exchange. If there are no vulnerabilities, from adverse selection, moral hazard, hold-up, or other sources, then the trustworthiness of exchange partners will be high, and trust will be the norm in the exchange.

This type of trust can be called weak form trust because its existence does not depend on the erection of contractual or other forms of exchange governance. Nor does its existence depend on commitments by parties to an exchange to trustworthy standards of behavior. Rather, trust emerges in this type of exchange because there are limited opportunities for opportunism. Parties to an exchange, in this weak form context, will gain all the benefits of being able to trust their exchange partners without substantial governance or other costs.

Of course, weak form trust is likely to emerge in only very specific kinds of exchanges, i.e., exchanges where there are limited vulnerabilities. In general, whenever the quality of goods or services that are being exchanged can be evaluated at low cost, and whenever exchange partners do not need to make transaction-specific investments to obtain gains from an exchange, vulnerabilities in that exchange will be limited, and weak form trust will be common. Easy-to-evaluate quality effectively eliminates adverse selection and moral hazard vulnerabilities; no transaction-specific investments effectively eliminate hold-up vulnerabilities. Without vulnerabilities, opportunistic behavior is unlikely, and weak form trustworthiness will exist.

In this sense, weak form trust is clearly endogenous; i.e., it emerges out of a very specific exchange structure. Of course, this exchange structure can change and evolve over time. If an exchange evolves such that the cost of evaluating the quality of the goods or services in an exchange increases, then adverse selection and/or moral hazard vulnerabilities may emerge, making weak form trust no longer possible. Also, if transaction-specific investments develop over time in an exchange, then hold-up vulnerabilities may emerge, and weak form trust will no longer exist.

Given this analysis, an important question becomes: how often will weak form trustworthiness exist? While, ultimately, this is an empirical question, it seems likely that weak form trust will be the norm in highly competitive commodity markets (Williamson, 1975). Examples of such markets include the market for crude oil and the market for soy beans. In all these markets, it is relatively easy for buyers and sellers to evaluate the quality of the goods or services they are receiving (limited adverse selection and moral hazard vulnerabilities). Moreover, in all these markets, there are large numbers of equally qualified buyers and sellers. Thus, firms do not have to make transaction-specific investments to trade with any one firm. Since parties to exchanges in these kinds of markets are not subject to significant exchange vulnerabilities, weak form trustworthiness is usually the norm.

Of course, that a market was once a highly competitive commodity market does not mean that it will always be a highly competitive commodity market. The cost of evaluating the quality of goods or services can increase, the number of buyers or suppliers can fall, and significant exchange vulnerabilities can develop. In this new exchange context, exchange partners cannot rely on the emergence of weak form trust, although other types of trust may develop.

Semi-strong form trust: Trust through governance

When significant exchange vulnerabilities exist (due to adverse selection, moral hazard, hold-up, or other sources), trust can still emerge, if parties to an exchange are protected through various governance devices. Governance devices impose costs of various kinds on parties to an

exchange that behave opportunistically. If the appropriate governance devices are in place, the cost of opportunistic behavior will be greater than its benefit, and it will be in the rational self-interest of exchange partners to behave in a trustworthy way (Hill, 1990). In this context, parties to an exchange will have the mutual confidence that their vulnerabilities will not be exploited because it would be irrational to do so. This type of trust can be called semi-strong form trust, and is the type of trust emphasized in most economic models of exchange (Hill, 1990).

A wide range of governance devices have been described in the literature. Economists have tended to focus on market-based and contractual governance devices. One market-based governance device is the market for reputations (Klein *et al.*, 1978). Firms or individuals that develop a reputation for behaving opportunistically will often be excluded from future economic exchanges where exchange vulnerabilities are significant. The cost of these opportunities foregone can be substantial, and the avoidance of these costs can lead exchange partners to be trustworthy in current exchanges, albeit in a semi-strong way. Examples of more contractual forms of governance include complete contingent claims contracts, sequential contracting, strategic alliances, and hierarchical governance (Williamson, 1985; Hennart, 1988; Kogut, 1988). Contractual governance devices explicitly define what constitutes opportunistic behavior in a particular exchange, and specify the economic costs that will be imposed on offending parties (Williamson, 1979).

Recently, this economic focus on market-based and contractual governance devices has been criticized as being badly under socialized (Granovetter, 1985). Several authors have suggested that a variety of social costs can also be imposed on exchange partners that behave in opportunistic ways. For example, a firm that gains a reputation as a 'cheater' may bear substantial economic opportunity costs (Klein *et al.*, 1978), but it may also lose its social legitimacy (DiMaggio and Powell, 1983). Also, Granovetter (1985) has argued that exchange partners, be they individuals or firms, that are deeply embedded in social networks put those networks of relations at risk when they engage in opportunistic behavior. The imposition of these social costs

also acts to reduce the threat of opportunistic behavior.

One implication of including governance devices that impose social costs on opportunistic exchange partners, instead of just economic costs, is the expectation that opportunistic behavior will be unusual, even in settings where few market-based or contractual governance devices are in place, as long as these more social forms of governance exist (Granovetter, 1985). Even some economists are beginning to recognize the importance of these more socially oriented forms of governance (Williamson, 1991). However, while this more social approach to governance broadens the range of governance devices that should be studied, the trust that emerges among parties to an exchange with these social governance mechanisms in place is of the same type as the trust that emerges with only economic governance devices in place. In both cases, trust emerges because rational actors find it in their self-interest, for both economic and social reasons, not to behave opportunistically. Put another way, neither economic nor behavioral scholars would generally predict the emergence of trust in exchanges where significant vulnerabilities exist, and in which there are no market-based, contractual, or social forms of governance.² With governance in place, however, trust—of the semi-strong variety—may emerge, despite the existence of significant exchange vulnerabilities.

Like weak form trust, semi-strong form trust is endogenous; i.e., it emerges out of the structure of a particular exchange. However, unlike weak form trust, the structure of that exchange is modified, in the semi-strong case, through the use of governance devices of various types. If parties to an exchange create and/or exploit the correct governance devices, then opportunistic behavior in that exchange will be unlikely, and trust—albeit of the semi-strong variety—will exist.

Of course, the creation and exploitation of different forms of governance is not costless. The costs of market-based and contractual forms

² Granovetter (1985) would probably argue that relatively few economic exchanges are not embedded in some broader network of social relations. This, of course, is ultimately an empirical question. However, Granovetter's theory suggests that without some mechanism to impose social costs on those that behave opportunistically, social governance will not generate trust in a relationship.

of governance are well documented (Williamson, 1985). While social forms of governance have fewer direct costs associated with them, they are nevertheless costly, in the sense that the use of these forms of governance requires one only to engage in exchanges where potential partners are embedded in specific broader social networks of relations. This limitation on potential exchange partners is an opportunity cost of using social forms of governance.

Traditional transactions cost logic suggests that rational economic actors will insist on just that level of governance necessary to ensure the semi-strong trustworthiness of exchange partners. If existing social forms of governance cannot assure the emergence of semi-strong trustworthiness, then additional, and costly, legalistic and contractual forms of governance (including, perhaps, complete contingent claims contracts and sequential contracting) will need to be created. If this level of governance is not sufficient, more elaborate and costly intermediate market forms may be erected (e.g., strategic alliances). If even this level of governance is not sufficient, then even more costly hierarchical forms of governance may be erected (Williamson, 1975, 1979). There may even be some exchanges where hierarchical governance is not sufficient to create semi-strong form trust (Grossman and Hart, 1986).

One implication of this analysis is that there may be some potentially valuable exchanges that cannot be pursued. Whenever the cost of governance needed to generate semi-strong form trust is greater than the expected gains from trade, and exchange with semi-strong trustworthy partners will not be pursued. This can happen in at least two ways. First, the expected gains from trade may be relatively small, in which case even modest investments in governance mechanisms may not pay off. Second, the expected gains from trade may be very large, but so may be the exchange vulnerabilities in that trade. In this type of exchange, the high cost of governance may still be greater than the expected value of exchange, even if that expected value is large. Indeed, as Grossman and Hart (1986) suggest, there may be some exchanges where no governance devices will create semi-strong form trust (i.e., where the cost of governance is infinitely high). If the only types of trust that can exist in economic exchanges are of the weak and semi-strong types, then these

valuable, but costly to govern, exchanges may have to remain unexploited.

Strong form trust: Hard-core trustworthiness

In weak form trust, trust is possible because exchange vulnerabilities do not exist. In the semi-strong case, trust is possible, despite exchange vulnerabilities, because of the significant social and economic costs imposed by governance mechanisms on the opportunistic behavior of exchange partners. In strong form trust, trust emerges in the face of significant exchange vulnerabilities, independent of whether or not elaborate social and economic governance mechanisms exist, because opportunistic behavior would violate values, principles, and standards of behavior that have been internalized by parties to an exchange.

Strong form trust could also be called principled trust, since trustworthy behavior emerges in response to sets of principles and standards that guide the behavior of exchange partners. Frank (1988) might call strong form trust 'hard-core trust'. Hard-core trustworthy exchange partners are trustworthy, independent of whether or not exchange vulnerabilities exist and independent of whether or not governance mechanisms exist. Rather, hard-core trustworthy exchange partners are trustworthy because that is who, or what, they are. This type of trust is, perhaps, closest to the type of trust emphasized by more behavioral scholars (Mahoney *et al.*, 1993).³

In this sense, strong form trustworthiness is clearly exogenous to a particular exchange structure. Strong form trust does not emerge from the structure of an exchange, but rather, reflects the values, principles, and standards that partners bring to an exchange. Those values, principles, and standards may reflect an exchange partner's unique history, its culture, or the personal beliefs and values of critical individuals associated with it (Arthur, 1989; Barney, 1986; Dierckx and Cool, 1989).

³ In principle, some level of compensation will always exist where strong form trustworthy exchange partners will abandon their values, principles, and standards of behavior, and act in opportunistic ways. This level of compensation might be called the 'Faustian' price. However, this level of compensation is *much* higher for a strong form trustworthy exchange partner, compared to a semi-strong form trustworthy exchange partner.

The strong form trustworthiness of individuals

While the existence of strong form trustworthiness is, ultimately, an empirical question, research from a variety of disciplines can be helpful in answering the existence question. If exchange partners are individuals, then research in developmental psychology suggests that strong form trustworthiness can exist in at least some people.

Developmental psychologists have studied the stages of moral development in children and young adults (Kohlberg, 1969, 1971). These stages are summarized in Table 1.⁴ When children are very young (small babies), they are able to make very few, if any, moral choices. In this stage, decision making and behavior are essentially amoral. However, as children mature, they often have to decide whether or not to conform their choices and behaviors to a set of values, principles, and standards.⁵ In the conventional morality stage (Kohlberg, 1969), children conform their choices and behaviors to a set of values, principles, and standards in order to avoid the costs imposed on them by others for failing to do so. In this stage, children are moral because the costs of being caught violating principles and standards (i.e., punishment) are too high. In the post conventional morality stage, choices and behaviors conform to a set of values, principles, and standards because they are internalized by individuals. While external costs could still be imposed on choices and behaviors that do not conform to these principles and standards, avoiding these costs is not the primary motivation for moral behavior. Rather, the primary motivation for such behavior is to avoid internally imposed costs, including a sense of personal failure, guilt, and so forth.

Some obvious parallels exist between the types of trust and trustworthiness identified here, and the stages of moral development identified in developmental psychology. These parallels are identified in Table 1. The amoral stage in the moral development literature is analogous to weak form trustworthiness. Just as young children cannot violate moral standards when they are

unable to make moral choices, individuals in exchange relationships cannot act opportunistically when there are no opportunities to do so. Conventional morality is analogous to semi-strong form trustworthiness. In conventional morality, individuals make choices to conform their behavior to a set of principles and standards in order to avoid the cost of failing to do so; in semi-strong form trust, opportunistic behavior is avoided because of the economic and social costs imposed on such behavior by governance mechanisms. Finally, post conventional morality is analogous to strong form trustworthiness. In both cases, choices and behavior conform to a set of principles and standards because those principles and standards have been internalized. While external costs may be imposed on individuals that violate these principles and standards, avoiding these external costs is not the primary reason choices and behavior conform to them. Rather, the avoidance of internally imposed costs—including a sense of personal failure and guilt—provide the primary motivation for this type of principled behavior.

Psychologists have shown that postconventional morality is not uncommon (Kohlberg, 1971). While some people never mature beyond the amoral or conventional morality stages, many have sets of values, principles, and standards that they use to guide their choices and behaviors. In order for postconventional morality to lead to strong form trustworthiness, all that is additionally required is that some of these values, principles, and standards suggest that exploiting an exchange partners vulnerabilities is inappropriate.

The strong form trustworthiness of firms

At the individual level, the existence of strong form trustworthiness in at least some people seems plausible. However, that individuals—as exchange partners—can be strong form trustworthy does not necessarily imply that firms—as exchange partners—can be strong form trustworthy. Firms, as exchange partners, can be strong form trustworthy for at least two reasons. Either a firm may possess a culture and associated control systems that reward strong form trustworthy behavior, or the specific individuals involved in a particular exchange may, themselves, be strong form trustworthy.

Zucker (1987) has shown that firm founders

⁴ This is a simplification of the actual typology developed by Kohlberg (1969, 1971). However, it is consistent with Kohlberg's findings.

⁵ These values, standards, and principles are normally taken from a child's parents or other caregivers (Kohlberg, 1969).

Table 1. Parallels between stages of moral development and types of trust

Stages in moral development	Types of trust and trustworthiness
<i>Amoral stage</i> When there are no moral choices to be made	<i>Weak form trust</i> Limited opportunities for opportunism
<i>Conventional morality</i> Decisions and behaviors conform to standards in order to avoid the cost of being caught violating standards	<i>Semi-strong form trust</i> Trust emerges in response to social and economic governance mechanisms that impose costs on opportunistic behavior
<i>Postconventional morality</i> Decisions and behaviors conform to standards because they have been internalized as principles and values	<i>Strong form trust</i> An exchange partner behaves in a trustworthy manner because to do otherwise would be to violate values, standards, and principles of behavior

can have a very strong impact on the culture and other institutional attributes of firms. This impact can continue, even if these individuals have been dead for many years. Others, besides founders, can also have these strong cultural and institutional effects. For example, transformational leaders (Tichy and Devanna, 1986) can have the effect of re-creating a firm's culture and fundamentally changing other of its institutional attributes.

If these influential individuals were themselves strong form trustworthy, they may have created an organizational culture characterized by strong form trustworthy values and beliefs. These strong form trustworthy values and beliefs may also be supported and reinforced by internal reward and compensation systems, together with decision-making mechanisms that reflect strong form trustworthy standards. A firm with these cultural and institutional mechanisms in place will often behave in a strong form trustworthy manner in exchange relationships.

Notice that, if a firm has a strong form trustworthy culture and associated control mechanisms, it is not necessary for each individual in a firm to be strong form trustworthy. Rather, all that is required is that individuals in a firm be at least self-interested in their behavior. In this situation, individuals in a firm will find it in their self-interest to behave in a strong form trustworthy way, when representing the firm, for failure to do so would lead them to be subject to a variety of social and economic sanctions. Individuals who are unable to conform themselves

to a firm's strong form trustworthy standards have several options, including, for example, finding positions in the firm where trustworthiness issues are not likely to arise, or changing firms.

Of course, that a firm once had a culture, and associated internal control mechanisms, that encouraged strong form trustworthiness does not mean that it will always have these attributes. Cultures can evolve, control mechanisms can change, and a firm may no longer have the attributes to qualify as strong form trustworthy. However, even when firms do not have strong form trustworthiness cultures, it still may be possible for some of the exchanges in which a firm engages to be characterized by strong form trust.

Exchanges between firms are, more often than not, actually exchanges between small groups of individuals in different firms. For example, when an automobile company signs a supply agreement with a supplier, the two groups of individuals most directly involved in this agreement are the purchasing people, in the automobile company, and the sales people, in the supply company. When two firms agree to form an equity joint venture, several groups of people are directly involved, including those in each parent firm that are assigned the responsibility to interact with the joint venture, and those that work in the joint venture itself.

While the firms in these exchanges may not have strong form trustworthy cultures, the specific individuals that are most directly involved in these exchanges may, themselves, be strong form

trustworthy. Exchanges between strong form trustworthy individuals in different firms can lead to strong form trust, even though the firms, themselves, may not be strong form trustworthy.⁶

TRUST AND COMPETITIVE ADVANTAGE

Trust can emerge in economic exchanges in any of the three ways discussed. However, these three types of trust are not equally likely to be sources of competitive advantage. A strategic analysis of trust and trustworthiness focuses attention on the conditions under which a particular type of trust will be a source of competitive advantage.

Weak form trust and competitive advantage

The exchange attributes that make weak form trust possible suggest that weak form trust will usually not be a source of competitive advantage. As suggested earlier, weak form trust is most likely to emerge in highly competitive commodity markets. It is well known that exchange partners in highly competitive commodity markets can expect to gain few, if any, competitive advantages (Porter, 1980). In particular, while those participating in these markets will be able to rely on the existence of weak form trust in their exchange relationships, the advantages of weak form trust will accrue to all exchange partners in these markets equally, thereby giving no one of them a competitive advantage.

Indeed, one of the few ways those trading in these markets can expect to gain advantages from weak form trust is if some competitors fail to rely on weak form trust and, indeed, invest in unnecessary and costly governance devices to create semi-strong form trust. Both those that rely on weak form and semi-strong form trust, in these highly competitive commodity markets,

can expect trust to exist in their exchange relationships. However, those that invest in governance to generate semi-strong form trust will have higher costs, compared to those that rely on weak form trust. Over time, those that have invested in unnecessary (and costly) governance will either abandon those governance devices or suffer from competitive disadvantages.

Put differently, the cost advantage of those that rely on weak form trust over those that rely on semi-strong form trust, in these highly competitive conditions, is a measure of the economic value of weak form trust. However, if numerous competitors are all able to obtain this value at the same low cost, then it will not be a source of competitive advantage to any one of them (Barney, 1991).

Semi-strong form trust and competitive advantage

Semi-strong form trust in exchange relationships is economically valuable, in the sense that its creation assures parties to an exchange that their vulnerabilities will not be exploited. However, the ability to create semi-strong form trust in economic exchanges depends on several important governance skills and abilities that parties to an exchange must possess. For example, for semi-strong form trust to emerge, exchange partners must be able accurately to anticipate sources and levels of opportunistic threat in the exchanges in which they may participate. Also, to create semi-strong form trust, exchange partners must be able to rely on existing social governance mechanisms and/or to conceive of, implement, and manage the appropriate market-based and contractual governance mechanisms. Only if exchange partners can accomplish these tasks will the 'right' types of governance be chosen to create semi-strong form trust, and will the value of semi-strong form trust be realized.

However, for semi-strong form trust to be a source of competitive advantage, there must be heterogeneity in the exchange governance skills and abilities of competing firms (Barney, 1991). If most competing firms or individuals have similar governance skills and abilities, they will all be equally able to create the conditions under which semi-strong form trust will emerge in their exchange relationships. Moreover, the cost of creating semi-strong form trust will also not

⁶ Conflicts between individual and firm values, in this context, act as a constraint on the ability of strong form trustworthy individuals to engage in strong form trust exchanges. However, strong form trustworthy individuals can be expected to engage in a variety of activities to neutralize the non-strong form trustworthy effects of the firm within which they operate. Moreover, the firm has strong incentives to let the strong form trustworthy individuals continue in strong form trust exchanges, since it gains all the advantages of these exchanges.

vary dramatically across these equally skilled competitors. Since these competitors do not vary in their exchange governance skills, no one of them will be able to gain a competitive advantage based on the semi-strong form trust that they are able to create with these skills.⁷

Of course, there is no reason to believe, *a priori*, that competing exchange partners will be equally skilled or able in creating the conditions necessary for semi-strong form trust. For example, some exchange partners may have developed a high degree of skill in managing, say, intermediate market forms of governance (e.g., equity joint ventures). These highly skilled actors may be able to create semi-strong form trust using these intermediate market forms of governance in economic exchanges where less skilled actors may be forced to use hierarchical forms of governance. If intermediate market forms of governance are, in fact, less costly than hierarchical forms of governance, those that obtain semi-strong form trust through intermediate market forms will have a competitive advantage over those that must obtain trust in that exchange through hierarchical forms of governance. Similar reasoning could apply to those that are highly skilled in managing contractual forms of governance (e.g., complete contingent claims contracts) compared to those that are only able to use more costly intermediate market forms of governance or hierarchical forms of governance.

Heterogeneity in the skills and ability to create semi-strong form trust in an exchange may also reflect important social differences among competing exchange partners. For example, if a particular firm is contemplating an exchange with another firm, where that relationship is deeply embedded in a large complex network of social relations, these firms may be able to rely on (relatively inexpensive) social governance mechanisms to develop semi-strong form trust. On the other hand, if a competing firm is anticipating a similar exchange that is not deeply

embedded in this broader social network of relations, parties to this exchange may have to rely on (more costly) economic forms of governance to ensure semi-strong form trust. The firm that can rely on social governance to generate semi-strong form trust will have a cost-based competitive advantage over the firm that must rely on economic governance to generate semi-strong form trust.

Heterogeneity in governance skills and abilities is an important explanation of variance in a wide variety of different economic exchanges. Compare, for example, the exchanges between Toyota and its suppliers, on the one hand, and General Motors and its suppliers (Dyer and Ouchi, 1993; Womack, Jones, and Roos, 1990), on the other. Toyota's supply relationships are deeply embedded in long-standing networks of social and economic relationships. These social governance mechanisms have enabled both Toyota and its suppliers to engage in very vulnerable exchanges (due to high transaction-specific investments that lead to a high risk of hold-up) with substantially less contractual or other forms of governance than is the case at General Motors (GM). Without the ability to rely on social embeddedness to constrain the opportunistic behavior of its suppliers, GM has had to reduce the threat of opportunism by reducing the level of transaction-specific investment in its suppliers (i.e., by having multiple competing suppliers), by insisting on elaborate contractual protections, or by vertically integrating the supply relationship (Dyer and Ouchi, 1993; Womack *et al.*, 1990). Overall, the cost of creating semi-strong form trust at Toyota has been substantially lower than the cost of creating semi-strong form trust at GM.⁸

Of course, if several competitors all possess these special governance skills and abilities to approximately the same level, then they will not be a source of competitive advantage for any one of them, even if there are some competitors that do not possess these skills. However, as long as the number of competitors that have these special governance skills and abilities is less than what is required to generate perfect competition dynamics, then they can be a source

⁷ Competing exchange partners do not have to erect the same governance mechanisms for semi-strong trust to generate competitive parity. Rather, all that is required is that competing exchange partners erect functionally equivalent governance devices (i.e., governance devices that generate the same level of semi-strong form trust) and that these governance devices are about equally costly. These arguments also apply to *bundles* of governance devices to create semi-strong form trust.

⁸ Obviously, there may be some strong form trustworthiness attributes to Toyota's relationships with its suppliers that do not exist between GM and its suppliers.

of competitive advantage for those that possess them (Barney, 1991).

Moreover, if these skills and abilities can rapidly diffuse among competitors, they will be the source of only temporary competitive advantages. However, it seems likely that these skills and abilities will not rapidly diffuse through most populations. For example, the ability to rely on social governance mechanisms in different exchanges depends upon the structure of the network of relations within which an exchange is embedded. Those networks of relations, in turn, are developed over long periods of time, and are unique to a particular point in history. Such path-dependent (Arthur, 1989) phenomena are subject to time compression diseconomies (Dierickx and Cool, 1989), and thus costly to imitate. The development of special governance skills is also path dependent. Moreover, these skills are often socially complex, and thus costly to imitate (Barney, 1991).

Whenever exchange partners possess rare and costly-to-imitate governance skills and abilities, they may be able to use those abilities to gain competitive advantages in creating semi-strong form trust. On the other hand, when competing exchange partners possess similar governance skills and abilities, the creation of semi-strong trust will generate only competitive parity.

Strong form trust and competitive advantage

For strong form trustworthiness to be economically valuable, all those with a significant stake in an exchange must be strong form trustworthy. If one or more parties to an exchange may behave opportunistically in that exchange, then all parties to that exchange will need to invest in a variety of social and economic governance mechanisms to insure semi-strong form trust. Any potential economic advantages of being strong form trustworthy are irrelevant when semi-strong form governance protections are erected and exploited, since strong form trustworthy parties are forced to behave as if they were only semi-strong form trustworthy.

Economic opportunities in strong form trust exchanges

On the other hand, if all those with a significant stake in an exchange are strong form trustworthy,

some important and valuable economic opportunities may exist. These opportunities reflect either the governance cost advantages that strong form trust exchanges may enjoy over semi-strong form trust exchanges and/or the ability that strong form trustworthy exchange partners may have to explore exchange options not available to semi-strong form trustworthy exchange partners.

When two or more strong form trustworthy individuals or firms engage in an exchange, they can all be assured that any vulnerabilities that might exist in this exchange will not be exploited by their partners. Moreover, this assurance comes with no additional investment in social or economic forms of governance. As long as the cost of developing and maintaining strong form trustworthiness in an individual or firm, plus the cost of discovering strong form trustworthy partners, is less than the cost of exploiting or creating semi-strong form governance devices, those engaging in a strong form trustworthy context will gain a cost advantage over those exchanging in a semi-strong trustworthy context.

Consider, for example, several competing firms looking to purchase raw materials from a set of suppliers. Suppose that a small number of these buyers and sellers are strong form trustworthy, and that there are some significant exchange vulnerabilities in this raw materials purchase. In order to complete this purchase, those purchasing from semi-strong suppliers will need to rely on and/or erect a variety of social or economic governance devices. While these governance devices are costly, their existence will enable firms to purchase the raw material in question. On the other hand, strong form trustworthy buyers purchasing from strong form trustworthy suppliers will not have to rely on or erect social or economic forms of governance in order to complete their purchase of the raw material. As long as the cost of developing and maintaining strong form trustworthiness, plus the cost of discovering strong form trustworthy exchange partners, is less than the cost of relying on or erecting social or economic governance devices, the firms purchasing raw materials in a strong form trust exchange will have a cost advantage over those firms purchasing raw materials in a semi-strong trust exchange.⁹

⁹ While ultimately an empirical question, it seems likely that the cost of creating and maintaining strong form

Perhaps even more important than this governance cost advantage, those engaging in strong form trust exchanges may be able to exploit exchange opportunities that are not available to those who are only able to engage in semi-strong form trust exchanges. It has already been suggested that valuable semi-strong form exchanges will not be pursued when the cost of governance needed to generate semi-strong form trust is greater than the expected gains from trade. This can happen when the expected gains from trade are small (but modest vulnerabilities in this exchange require modest levels of expensive governance) or when the expected gains from trade are substantial (but very large vulnerabilities in this exchange require very substantial levels of costly governance). While semi-strong form trust exchanges will not be pursued in these situations, it may be possible to pursue strong form trust exchanges. In this sense, strong form trustworthiness may increase the set of exchange opportunities available to an individual or firm, compared to those who are only semi-strong form trustworthy (Zajac and Olsen, 1993; Ring and Van de Ven, 1994).

Consider, for example, several competing firms looking to cooperate with one or more of several other firms in the development and exploitation of a new, and sophisticated, technology. Suppose that only a small number of these two sets of firms are strong form trustworthy, that the technology in question has significant economic potential, but that there are enormous exchange vulnerabilities in the technology development process. Semi-strong form trustworthy firms, in this setting, will need to invest in substantial amounts of costly governance to try to create semi-strong form trust. It may even be the case that no form of governance will create semi-strong form trust (Grossman and Hart, 1986). The potential economic return that could be obtained from this exchange will need to be reduced by an amount equal to the present value

trustworthiness, plus the cost of discovering strong form trustworthy exchange partners, will often be less than the cost of relying on or erecting semi-strong governance devices. The cost of creating and maintaining strong form trustworthiness can be spread across numerous economic exchanges, thus reducing the per exchange cost. The cost of discovering strong form trustworthy exchange partners can be reduced through the discovery and signalling mechanisms described below.

of the cost of governing this exchange. Moreover, the present value of this exchange will also have to be discounted by any residual threat of opportunism. The reduced value of this exchange could lead semi-strong form trustworthy firms to decide not to pursue it, even though substantial economic value may exist.

On the other hand, exchanges of this sort between strong form trustworthy firms are burdened neither by the high cost of governance nor any residual threat of opportunism. Strong form trustworthy firms will be able to pursue these valuable, but highly vulnerable exchanges, while semi-strong form trustworthy firms will be unable to pursue them. This may represent a substantial opportunity cost for semi-strong form trustworthy exchange partners, and a source of competitive advantage for strong form trustworthy exchange partners.¹⁰

Traditional transactions cost logic suggests that, when faced with these valuable but highly vulnerable exchanges, exchange partners will opt for hierarchical forms of governance and use managerial fiat as a way to manage trustworthiness problems (Williamson, 1985). However, hierarchical governance is not always a solution to these problems. First, there may be important legal and political restrictions on the use of hierarchical governance. For example, one cannot acquire a direct competitor if such actions lead to unacceptably high levels of industry concentration. Also, firms may be required, for political reasons, to maintain market or intermediate market relationships with an exchange partner (e.g., when entering into a new country market).

Second, as Grossman and Hart (1986) suggest, hierarchical governance does not necessarily 'solve' opportunism problems. Rather it simply shifts those problems from a market or intermediate market context to inside the boundaries of the firm. Where, in market-based exchanges, firms face the threat of opportunism in exchanges with other firms, bringing these transactions within the boundaries of a firm can simply lead to division facing the threat of opportunism in

¹⁰ As previously, it seems likely that the cost of creating and maintaining strong form trustworthiness, plus the cost of discovering strong form trustworthy exchange partners, will be less than the opportunity cost of relying only on semi-strong form trust governance devices.

exchanges with other divisions. Put differently, hierarchical governance does not automatically create strong form trust exchange (Ouchi, 1980).

Where hierarchical governance may not always be a solution to the threat of opportunism, exchanges between strong form trustworthy exchange partners—whether those exchanges are within the boundary of a single firm or not—will, in general, create strong form trust. Strong form trustworthy individuals or firms will often be able to gain governance cost advantages over semi-strong form trustworthy individuals or firms. Moreover, strong form trustworthy individuals or firms will often be able to engage in economic exchanges that cannot be pursued by semi-strong form trustworthy exchange partners. Put differently, the level of vulnerability in some economic exchanges may be greater than the ability of any standard governance devices to protect against the threat of opportunism. The only way to pursue these exchanges is through strong form trustworthiness.

Of course, if most competitors are strong form trustworthy, and engage in exchanges with others that are also strong form trustworthy, then the advantages of strong form trustworthiness would only be a source of competitive parity, and not competitive advantage. However, while the number of strong form trustworthy exchange partners in a particular segment of the economy is ultimately an empirical question, it seems like a reasonable guess that strong form trustworthiness in at least some segments of the economy is probably rare, and thus (assuming exchanges with other strong form trustworthy exchange partners are developed) at least a source of temporary competitive advantage for strong form trustworthy individuals and firms.

Locating strong form trustworthy exchange partners

Given the important competitive advantages that may attend exchanges between strong form trustworthy exchange partners, an important question becomes: how can strong form trustworthy exchange partners recognize each other? This process is problematic, since exchange partners that are not strong form trustworthy have a strong incentive to assert that they are. If a strong form trustworthy individual or firm believes that an exchange partner is strong form

trustworthy, even though this partner is not, then that strong form trustworthy individual or firm will be willing to engage in a highly vulnerable exchange without social or economic governance devices. Without these devices in place, the untrustworthy exchange partner could exploit the strong form trustworthy partner's exchange vulnerabilities with impunity. Thus, simple assertions that one is strong form trustworthy are not sufficient justification for assuming that an exchange partner is, in fact, strong form trustworthy.

Of course, a simple solution to this adverse selection problem would be to observe directly whether or not a potential exchange partner is strong form trustworthy, and respond appropriately. Unfortunately, the individual and organizational attributes that create strong form trustworthiness are difficult to observe directly. At an individual level, the values, principles, and standards around which strong form trustworthy individuals organize their lives are clearly not directly observable. At the firm level, an organization's culture, and associated control systems, may be difficult to observe, and their implications for individual behavior ambiguous—at least to those not deeply embedded in this culture and control system. Moreover, if the development of strong form trust depends on the strong form trustworthiness of small groups of people in a larger organization, evaluating the individual values, principles, and standards of these people remains difficult.

Even with these challenges, strong form trustworthy exchange partners can still be found. It will often be the case, for example, that exchange partners will begin a relationship assuming that others are at least semi-strong form trustworthy. As this relationship evolves overtime, parties to an exchange may be able to gain sufficient information to judge accurately whether or not others are strong form trustworthy. If two or more parties to an exchange discover that they are strong form trustworthy, any subsequent exchanges between these parties can generate strong form trust, and these exchange partners will subsequently obtain all the advantages of strong form trustworthiness. On the other hand, if experience shows that an exchange partner is only semi-strong form trustworthy, then future exchanges with this partner will continue with semi-strong form trust generating governance mechanism in place.

Notice that this process of discovering strong form trustworthy exchange partners assumes that one's trustworthiness type does not automatically change as a result of experience in a semi-strong form trust relationship. If the creation of semi-strong trust exchanges inevitably led exchange partners to become strong form trustworthy, then all exchanges would inevitably be characterized by strong form trust, and strong form trustworthiness would not be a source of competitive advantage to any individual or firm. Rather than changing an exchange partner's trustworthiness type, the creation of a semi-strong form trust exchange creates an opportunity for exchange partners to observe more directly another's trustworthiness type. While it is certainly true that an exchange partner's trustworthiness type may evolve over the long run, the historical, path-dependent, socially complex, and causally ambiguous nature of strong form trustworthiness makes it unlikely that semi-strong form trustworthy firms will be able to become strong form trustworthy in the short and medium term.

This search for potential strong form trustworthy exchange partners can be shortened through the use of signals of strong form trustworthiness (Spence, 1973). Signals of strong form trustworthiness must have two properties: (1) they must be correlated with the underlying (but costly to observe) actual level of strong form trustworthiness in a potential exchange partner; and (2) they must be less costly to exchange partners that are actually strong form trustworthy than they are to exchange partners that only claim they are strong form trustworthy (Spence, 1973).

Several behaviors by exchange partners qualify as signals for strong form trustworthiness. For example, a reputation for being strong form trustworthy is a signal of strong form trustworthiness.¹¹ Gaining a reputation as a strong form trustworthy exchange partner occurs, over time, as an exchange partner confronts situations where opportunistic behavior is possible, but chooses not to engage in opportunistic activities. There

are no opportunity costs associated with a strong form trustworthy individual or firm not behaving opportunistically, since such behavior is not in this kind of exchange partner's opportunity set. On the other hand, a nonstrong form trustworthy exchange partner will have to absorb opportunity costs each time they decide not to behave in an opportunistic way. These opportunity costs make it more costly for an exchange partner that is not strong form trustworthy to develop a reputation as strong form trustworthy, compared to an exchange partner that is actually strong form trustworthy.

While a reputation for being strong form trustworthy is a signal of strong form trustworthiness, it is noisy. In particular, this reputation cannot distinguish between those exchange partners that are actually strong form trustworthy, and those that are not strong form trustworthy, but have yet to engage in an exchange where returns to opportunistic behavior are large enough to motivate opportunistic behavior. While a reputation for being strong form trustworthy does eliminate those exchange partners who have acted opportunistically, it does not eliminate those exchange partners who might act opportunistically, given the right incentives.

Another signal of strong form trustworthiness is being open to outside auditing of the exchange relationship. This is less costly to strong form trustworthy exchange partners, compared to those that are not strong form trustworthy, since trustworthy exchange partners were not going to behave opportunistically anyway. One would expect to see strong form trustworthy firms and individuals to be very open to outside auditors, perhaps even paying the cost of outside auditors chosen by potential exchange partners.

A third signal of strong form trustworthiness might be to make unilateral transaction-specific investments in an exchange before that exchange is actually in place. Gulati, Khana, and Nohria (1994) have found, for example, that it is not uncommon for firms with a strong track record of successfully engaging in joint ventures to sign long-term third-party supply contracts that are only valuable if a particular joint venture actually goes forward—before that joint venture agreement is complete. Such unilateral transaction-specific investments are less costly to strong form trustworthy firms, since they were not going to behave in an opportunistic manner in developing

¹¹ Note that having a reputation for being strong form trustworthy is not the same as not having a reputation for being opportunistic. A potential exchange partner may not have a reputation for being opportunistic (i.e., they may not be known as a 'cheater') but still not have a reputation for being strong form trustworthy (i.e., they may not be known as 'hard-core' trustworthy).

this joint venture anyway. These investments foreclose opportunistic opportunities for firms that are not strong form trustworthy, and thus represent significant opportunity costs to these firms. If all those involved in an exchange independently make these kinds of unilateral transaction-specific investments, then others in these exchanges can conclude, with some reliability, that they are strong form trustworthy.

If strong form trustworthiness is relatively rare among a set of competitors, and if two or more strong form trustworthy exchange partners are able to engage in trade, then these strong form trustworthy individuals or firms will gain at least a temporary competitive advantage over individuals or firms that are not strong form trustworthy. For this competitive advantage to remain, however, the individual and organizational attributes that make strong form trustworthiness possible must also be costly to imitate and immune from rapid diffusion. Fortunately, the individual and organizational attributes that make strong form trustworthiness possible (i.e., individual values, principles, and standards; an organization's culture and associated control system) reflect an exchange partner's unique path through history (path dependence) and are socially complex. As was suggested earlier, these types of individual and organizational attributes are usually immune from imitation and rapid diffusion among competitors (Barney, 1991; Arthur, 1989; Dierickx and Cool, 1989).¹²

DISCUSSION

Trust, in economic exchanges, can be a source of competitive advantage. However, trust in these exchanges is not always a source of competitive advantage. Weak form trust is only a competitive advantage when competitors invest in unnecessary and costly semi-strong form

governance mechanisms. Semi-strong form trust is only a source of competitive advantage when a small number of competitors have special skills and abilities in conceiving of and implementing social and economic governance devices, and when those skills and abilities are immune from low-cost imitation. Strong form trust is a source of competitive advantage when two or more strong form trustworthy individuals or firms engage in an exchange, when strong form trustworthiness is relatively rare among a set of competitors, and when the individual and organizational attributes that lead to strong form trustworthiness are immune from low-cost imitation.

This analysis has important implications for research in organization theory and strategic management. For example, these ideas can be seen as an extension of transactions cost theory—an extension that makes this form of analysis strategically more relevant. Where transactions cost economics implicitly assumes that the skills and abilities needed to conceive of and implement governance mechanisms are constant across individuals and firms (Williamson, 1985), this approach suggests that these skills and abilities may vary in some strategically important ways. Also, where transactions cost theory assumes either that all potential exchange partners are equally likely to behave opportunistically or that one cannot distinguish between those that will behave opportunistically and those that will not behave opportunistically (Williamson, 1985), this analysis suggests that potential exchange partners' opportunistic tendencies may vary, and that these differences can be discovered. Discovery of exchange partners that will not engage in opportunistic behavior enables firms to gain all the advantages of trade, without the cost of governance.

Thus, consistent with many of the more behaviorally oriented organizational scholars cited earlier, the approach in this paper rejects both the assumption that all exchange partners are likely to engage in opportunistic behavior and the assumption that it is not possible to know how opportunistic a particular exchange partner is likely to be. However, these transactions cost assumptions are not replaced by equally extreme, if opposite, assumptions that most exchange partners are trustworthy most of the time. Rather, the approach adopted here is

¹² Given the challenge of discovering strong form trustworthy exchange partners, these relationships are likely to be relatively stable over time. Indeed, it may well be the case that exchanges between strong form trustworthy partners may continue, even though they have limited potential for generating current economic value (Ring and Van de Ven, 1994). In this setting, the challenge facing exchange partners is to discover new ways to generate economic value with older, stable, relationships. Even when this cannot be done, economically nonviable exchanges may continue for some time because of the close relationships between partners.

that the trustworthiness of exchange partners can vary, and that how trustworthy an exchange partner is can be discovered. The adoption of this approach leads to the conclusion that, in some circumstances, trust can be a source of competitive advantage—a conclusion that is not possible if it is assumed that most exchange partners are either untrustworthy or that most exchange partners are trustworthy.

This analysis also points to two important exchange processes that have not received sufficient attention in the organizations and strategy literatures. First, the argument suggests that semi-strong form trust can be a source of competitive advantage if competing exchange partners vary in their skills and abilities in conceiving of and implementing governance mechanisms. What these specific skills and abilities might be, and why they might develop in some economic actors and not others, are unexplored issues in this paper. Casual observation suggests that, for example, some firms seem to be better at managing certain kinds of governance devices than others. Corning seems to be able to manage joint ventures more effectively than, say, TRW (Sherman, 1992). Toyota seems to be able to manage complex supply relationships more effectively than GM (Dyer and Ouchi, 1993; Womack *et al.*, 1990). How these different skills and abilities evolve, and their competitive implications, are important research questions. In this context, comparative research on semi-strong form governance in different industries and different countries is likely to be very important (Dyer and Ouchi, 1993).

Second, the argument suggests that strong form trustworthy exchange partners may be able to discover other strong form trustworthy exchange partners. Once discovered, these kinds of exchange partners can gain important competitive advantages from working with each other. However, much more empirical work needs to focus on the process through which strong form trustworthiness evolves in an economic actor. Such empirical work will establish whether or not strong form trustworthiness is a relatively stable attribute of economic actors, and whether or not this attribute can be imitated at low cost. Also, empirical research needs to focus on the process of searching for strong form trustworthy exchange partners. In particular, the role of

signals of strong form trustworthiness deserves special empirical attention. In this context, it may be helpful to compare the decisions and behaviors of firms that have been able to develop many strong form trustworthy exchanges (e.g., Corning) with the decisions and behaviors of firms that have been unable to develop these strong form trustworthy exchanges.

By examining the competitive implications of different types of trust in economic exchanges, it becomes clear that extreme assumptions about potential exchange partners—that most are trustworthy and that most are opportunistic—are overly simplistic. Rather, the trustworthiness of exchange partners may vary, and in that variance the possibility of competitive advantage may exist.

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