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RELATIONAL GOVERNANCE AS AN INTERORGANIZATIONAL STRATEGY: AN EMPIRICAL TEST OF THE ROLE OF TRUST IN ECONOMIC EXCHANGE

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We develop a model of relational governance as a specific form of interorganizational strategy that is distinct from the traditional modes of markets and hierarchies. We conceptualize this form of strategy in terms of structural and processual dimensions and derive a model of its determinants through arguments drawn from transaction cost economics and the sociological exchange literature. Hierarchical regression modeling is employed to test the theoretical model on data collected from a sample of 329 independent insurance agencies. We include the relational variable of trust and demonstrate that the combined model explains relational governance better than a model with the traditional determinants of governance form alone. Further, we observe that governance structure and process are related and discuss implications of the dynamic link between them. Directions for extensions are developed for strategic management research and practice.

A current research thrust in organizational economics and strategic management is focused on 'intermediate' modes of governance, distinct from the traditional modes of market and hierarchy (Williamson, 1975, 1991). Intermediate modes of governance may serve as alternative governance structures to vertical financial ownership (Mahoney, 1992; Ring and Van de Ven, 1992). These take several forms such as joint ventures (Harrigan, 1985a; Kogut, 1988), strategic partnerships between suppliers and buyers (Heide and John, 1990), technology licensing (Koh and Venkatraman, 1991) and alliances (James, 1985;

Lewis, 1990). Such governance modes have been variously termed as hybrids (Williamson, 1991) or networks (e.g., Eccles and Crane, 1987), and are not only widespread in the contemporary business environment, but are increasing greatly in number (Harrigan, 1988). Further, their strategic importance is growing (Thorelli, 1986; Powell, 1987, 1990); for example, networks are said to enhance the competitive positioning of firms (Jarillo, 1988). Research into intermediate governance modes has significant implications for strategic management as it explores critical choices relating to the scope of the firm and to firm boundaries.

This paper builds on transaction cost reasoning (Williamson, 1975, 1985) and evaluates an emerging view that noneconomic factors, primarily

Key words: relational governance; trust; interorganizational strategy

embodied in trust—which we term ‘sociological’ in order to distinguish them from more traditional transaction cost determinants—are *complementary* to economic ones in the governance of exchange relationships (Dore, 1983, 1987; Granovetter, 1985; Lazerson, 1988; Ring and Van de Ven, 1992). In other words, we are interested in understanding the determinants—both economic and sociological—of *relational governance* (Macneil, 1980; Williamson, 1985; Dwyer, Schurr, and Oh, 1987). Further, the paper views relational governance as embodied in both the *structure* and the *process* of an interorganizational relationship—specifically, one involving exchange. Thus, we draw on research streams on transaction cost economics and sociological exchange perspectives to develop a research model which is empirically tested in a service industry by using data from the commercial segment of the U.S. property and casualty (P&C) insurance industry (see also Etgar, 1978; Cummins and VanDerhei, 1979).

More generally, our paper responds to Hill’s (1990) call for a greater research focus on the nature and effects of the ‘long-term cooperative relationships’ between economic actors. Further, this work is in line with Hansen and Wernerfelt (1989), who integrated economic and behavioral-sociological factors to explain firm performance and stressed the need for research attention to multidisciplinary approaches in explaining firm-level phenomena.

RESEARCH MODEL AND HYPOTHESES

Relational governance: A conceptualization

The transaction cost perspective argues that the transaction costs of exchange are the most significant determinants of the governance form. Transaction costs are largely determined by the extent to which the assets of the parties to the relationship are specialized to the transaction that occurs between them (Klein, Crawford, and Alchian, 1978; Williamson, 1985). In order to protect transaction-specific assets from opportunistic appropriation, firms will choose to internalize the transaction or otherwise arrange to increase the extent of hierarchical control over the other party to the relationship.

While traditionally the choice of governance has been cast in terms of the two polar extremes,

market or hierarchy (Coase, 1937; Williamson, 1975), this paper is focused on intermediate governance modes—specifically on *relational governance*. It builds on the assertion articulated by Macneil (1978, 1980), Dore (1987), and others, that contracting is never completely *discrete* (i.e., anonymous, characterized by limited communication, as assumed by neoclassical theories) but that even the most fundamental model of discrete exchange includes *some* relational elements.¹ Use of the term ‘relational governance’ in this paper suggests interfirm exchange which includes significant relationship-specific assets, combined with a high level of interorganizational trust. This is consistent with Ring and Van de Ven (1992).

The relational nature of contracting owes its origins to Macneil (1978, 1980), who views a contract as reflecting ‘the relations among parties to the process of projecting exchange into the future’ (1980: 4). Central to Macneil’s argument is the proposition that relational exchange is based on a social component, largely represented by trust. Specifically, the parties involved in relational exchange derive ‘non-economic satisfactions and engage in *social exchange* as well as . . . economic exchange’ (Macneil, 1980: 13; emphasis added). Further ‘. . . modern relations . . . just like primitive relations, require solidarity and hence a degree of *trust*, or faith in others, to work successfully’ (1980: 21; emphasis added).

This line of reasoning is consistent with the work of sociologists such as Powell (1990) and Granovetter (1985), who develop the notion of *embeddedness*. Specifically, these scholars have argued for recognizing the role played by socially embedded personal relationships in economic exchange. Economic exchange relations thus depart from ‘pure economic motives’ and ‘become overlaid with social content that carries strong expectations of trust and abstention from opportunism’ (Granovetter, 1985: 490). The significant social component in economic action is generally ignored in economic explanations of exchange activity, and is frequently consigned to the error term or to ‘noise’ (Ring and Van de Ven, 1992). However, economists such as Arrow (1973: 24) have also recognized that ‘there is an element of trust in every transaction’.

¹ As a reviewer rightly points out, nor is exchange ever completely hierarchical, as long as exit is an option.

In a similar vein, Dore (1987) invokes examples from the Japanese textile industry to argue for the significance of sociological elements in exchange. Specifically, he discusses the role that continuity, mutual dependence, trust, and social norms play in the maintenance of exchange relationships between supplier and buyer firms. He argues that similar considerations intervene to a greater extent than is generally believed in Western business contexts as well (see also Macauley, 1963). Hill (1990) argues that contrary to the classic transaction cost view that opportunism generally characterizes exchange, it is relationships based on *cooperation* and *trust* that are more likely to survive in the marketplace. His rationale is that 'opportunism, the safeguards needed to check opportunism, and internalization as a response to opportunism dissipate the composite quasi rent' (1990: 511), and actors who do not cooperate and trust each other will therefore tend to be less efficient than those who do. Competitive pressures will tend to select out inefficient relationships and firms that enter into them, leaving behind the more efficient, trust-based ones. Thus, empirically, the assumption that opportunism characterizes exchange should be reconsidered in favor of one that suggests that trust does.

Transaction cost theorists such as Williamson (1985) have recognized the abundance of intermediate governance forms and suggest that, under certain conditions, these 'relational' forms are maintained by *economic* weapons such as hostages and credible commitments to keep opportunistic behavior at bay. However, this view of relational governance is somewhat at variance from that articulated by Macneil (1980) and Dore (1987), who conceive of relational exchange as supported by *non-economic* factors such as trust. It is possible that over time, relational forms evolve from using economic safeguards to protect specific assets to employing trust in this way (Ring and Van de Ven, 1992).

Dimensionalizing governance as structure and process

We view relational governance as comprised of two basic underlying dimensions: (a) the *structure* of the relationship—conceptualized in terms of the degree of vertical *quasi-integration* (Blois, 1972) reflecting the degree of market or hier-

archical structuring of the transaction; and (b) the *process* underlying the relationship—conceptualized in terms of the degree of *joint action* (Heide and John, 1990) in the exchange relationship. More broadly, the governance structure in this discussion is viewed as the *interunit or interfirm framework* within which exchange takes place. The use of the term 'structure' here refers to 'governance' structure, which we emphasize is quite distinct from *organizational* structure. The latter concept is most frequently used to describe the administrative relationships *within* an organization. Governance process refers to the interunit or interfirm *activities* that accompany exchange within the framework of the governance structure.

We argue that viewing relational governance in terms of *both* structure and process is important since a combination of structural and processual dimensions more completely describes the complexity of such intermediate relationships than either the structure or the process dimension alone. Of course, structure and process are closely related, as we discuss in more detail later. The choice of the form of governance, specifically the determination of the appropriate governance structure and process, is broadly defined as the *interorganizational strategy* of the firm. More specifically, since we develop our theoretical and empirical arguments in the contexts of a vertical exchange relationship, we can refer to this type of interorganizational strategy as a *vertical control strategy*. In this paper, we use the two terms interchangeably.²

Quasi-integration as a structural dimension

We define vertical quasi-integration as a 'close relationship which is based primarily upon the [firm's] dependence for a significant proportion of its total business upon a particular [firm]' (Blois, 1972: 267). Blois asserts that a relationship of this type involves an interdependence between the two firms such that it 'can be considered as a type of vertical integration without the legal form' (1972: 268). We argue that this is a structural dimension of governance, since it

² While we have focused on interorganizational strategy, a more precise view is offered by Mahoney (1992) that vertical control strategy is distinct from the choice of governance form.

captures the transactional form of the dyad in terms of the extent of market or hierarchical mediation of transactions. The rationale for conceptualizing quasi-integration as governance structure becomes clearer from the limiting case when 100 percent of a firm's output goes to a single buyer. Although such a situation does not automatically imply a hierarchical relationship, for exchange could conceivably be based entirely on price, in practical terms it is rare to find pure price-based contracts in these contexts. Such a relationship in fact would be tantamount to a hierarchical one if exchange occurred repeatedly. As Macneil (1978: 898) notes, '[a]s contractual relations expand, those relations take on more and more the characteristics of mini societies and mini states.' Eccles (1981) calls stable, long-term relationships between contractors and subcontractors 'quasi-firms' for the same reason.

We argue that higher degrees of quasi-integration imply a stable, long-term relationship between buyer and supplier. This form of relationship is distinct from a spot market, occasional transaction, for it implies continuing transactions between buyer and seller. When quasi-integration is high, the expectation is that the volume of such transactions account for a significant proportion of the seller's output over multiple periods of time. Our use of vertical quasi-integration as a manifestation of governance is consistent with previous empirical research, such as John and Weitz (1988), testing transaction cost explanations for vertical integration.

We further suggest that the higher the level of quasi-integration, the greater the costs of terminating the relationship for the exchange partners (Kay, 1992). This proposition follows from our previous argument that higher quasi-integration generally implies a larger component of nonprice, or 'hierarchical' elements in the relationship. The existence of such nonprice elements in an exchange relationship suggests a relational contract, and we argue that terminating a *relational* contract is costlier than terminating a *discrete* contract.

Joint action as a process dimension

Joint action reflects a move toward closer relationships which 'involves the parties carrying out the focal activities in a cooperative or coordinated way' (Heide and John, 1990: 25).

Joint action serves as a safeguard for transaction-specific investments since firms that invest in relationships with other firms would like to reduce the risks of opportunistic appropriation by getting involved in joint activities (Leenders and Blenkhorn, 1988). Joint action is viewed as governance *process* since it comprises a set of decision process mechanisms that determine the terms of exchange between the members of the dyad (Achrol, Reve, and Stern, 1983) and due to its focus on future exchange and implications of a cooperative endeavor. The rationale is that the joint responsibility for the activities of the dyad will serve to protect the party with specific assets from their appropriation. From a macro-organization perspective, joint action provides an appropriate mechanism for planning and forecasting, in addition to the coopting of environmental elements, and thus would appear to serve as a process counter to organizational dependence by reducing the uncertainty caused for the organization by environmental elements (Thompson, 1967; Pfeffer and Salancik, 1978).

Determinants of governance from the transaction cost perspective

We consider three key determinants of transaction costs—(a) the degree of transaction-specific assets (or asset specificity); (b) the level of uncertainty; and (c) the extent of reciprocal investments—in this section. Asset specificity, by creating a small numbers exchange condition, has been argued to be a key source of transaction costs. Similarly, uncertainty has been a prominent factor in previous empirical studies of vertical integration using the transaction cost approach (e.g., Anderson and Schmittlein, 1984). Reciprocal investments (or reciprocal asset specificity) refer to transaction-specific investments by the other party to the exchange and are akin to being a mirror image of asset specificity. Reciprocal assets may tend to moderate opportunism by serving as 'hostages' in an exchange (Williamson, 1985).

Asset specificity as a determinant of transaction costs

Asset specificity has been extensively employed in empirical research (see, for instance, Monteverde and Teece, 1982; Walker and Weber, 1984;

Heide and John, 1990; Anderson and Weitz, 1991) on transaction cost explanations for vertical integration. Given our focus on a service industry as a research context, rather than considering *physical* asset specificity, we develop the concept of *business process* asset specificity—which incorporates components of both *human* asset specificity (Williamson, 1975, 1985) and *procedural* asset specificity as discussed below.

Human asset specificity deals with the degree to which skills, knowledge and experience of a firm's personnel are specific to the requirements of dealing with another firm in a vertical relationship. Anderson (1985) considered specialized human knowledge in sales operations as representing human asset specificity given her focus on the salesperson's role as an agent (vs. an employee). Masten, Meehan, and Snyder (1991) conceptualized specialized technical knowledge in ship building as reflecting human asset specificity. John and Weitz (1988) operationalize human asset specificity in terms of the level of training and experience specific to the product-line in distribution channels.

Procedural asset specificity refers to the degree a firm's workflows and processes are customized in line with the requirements of the exchange partner (Malone, Yates, and Benjamin, 1987). This notion is akin to the concept of organizational routines (Nelson and Winter, 1982) which are hard to alter once established, and may have involved significant investments in terms of training and specialization. Dealing with a regular exchange partner, particularly when the product or the transaction is complex, can clearly result in transaction-specific routines which may not transfer easily to another partner. We need to discriminate between organizational routines that are likely to become so transaction-specific that they are expensive to redeploy, and those that do not have such asset-specific characteristics. While there is clearly a continuum of organizational routines along an asset-specific dimension, we venture that routines which are highly complex, or those that are set up to handle highly specialized products or services produced by an exchange partner, will possess greater procedural asset specificity. In the case of the insurance agencies dealing with complex commercial products from their focal carriers, such procedural asset specificity can be reasonably assumed.

Integrating these two components of asset specificity, we argue that the greater level of business process asset specificity creates an increased requirement for the governance form to offset the dependence caused by such specific assets. Put differently, a higher degree of dependence due to higher investments made in business processes—both people and procedures—requires that the relationship include greater safeguards so that its transaction-specific assets are not opportunistically appropriated. Since a higher level of quasi-integration imposes higher termination costs on both the parties to the exchange (Kay, 1992), it can serve effectively as the requisite safeguard. Thus, we expect a positive effect of asset specificity on quasi-integration:

Hypothesis 1: Asset specificity is positively and significantly associated with greater degrees of quasi-integration.

Uncertainty as a determinant of transaction costs

Uncertainty has been commonly employed as a determinant of transaction costs in the literature on pressures for vertical integration (Walker and Weber, 1984; John and Weitz, 1988). In an exchange context, the relevant form of uncertainty is 'behavioral uncertainty' (Williamson, 1985), which could be viewed as a subset of Koopmans' (1957) 'secondary uncertainty.' Behavioral uncertainty arises from the difficulty in predicting the actions of the other party in the relationship, in view of the potential for opportunistic behavior and since bounded rationality precludes the writing of complete contingent contracts. As contingencies develop, it becomes costlier to conduct transactions in pure market settings since opportunistic parties may reinterpret contract terms to suit themselves.

In addition, macro-organizational theorists have argued for the role of uncertainty in defining the boundaries of the firm. For example, Thompson (1967) specifically postulates that 'organizations . . . seek to place their boundaries around those activities, which if left to the task environment would be crucial contingencies' (1967: 39). Stinchcombe (1990) asserts that relationships incorporate more elements of hierarchy when dealing with higher levels of uncertainty. Since a higher degree of vertical quasi-integration implies greater hierarchy, we derive the following hypothesis:

Hypothesis 2a: Uncertainty is positively and significantly associated with greater degrees of quasi-integration.

Once a high degree of quasi-integration has been achieved between the partners to the exchange, behavioral uncertainty would tend to be moderated. Since our research model is a cross-sectional one, we are not in a position to capture the temporal sequence of events, and accordingly develop an alternative hypothesis which suggests a *negative* relationship between uncertainty and quasi-integration.

Hypothesis 2b: Uncertainty is negatively and significantly associated with greater degrees of quasi-integration.

Reciprocal investments

Reciprocal investments—namely, transaction-specific investments in the relationship by the other partner to the exchange—can serve as a credible commitment in an exchange relationship. Such investments balance the transaction-specific investments made by the one party in the exchange relationship, and thereby signal continuity and imply a guarantee to a stable, long-term relationship (Williamson, 1985; Anderson and Weitz, 1991). Actions that suggest reciprocity and commitment to the interorganizational relationship by the parties to the exchange also tend to reinforce the bonds between them as well as expand the extent of mutual cooperation. Since reciprocal investments protect the transaction-specific investments of the focal party in the relationship, they moderate the trading hazard and would consequently tend to *lower* the need for other protection from opportunism. Hence, we hypothesize the extent of reciprocal investments as a *negative* determinant of increased hierarchical governance, exemplified by quasi-integration:

Hypothesis 3: Reciprocal investments are negatively and significantly associated with greater degrees of quasi-integration.

Trust as a sociological element of exchange

The presence of trust in exchange is a basic postulate of a *socialized* view of relationships (Granovetter, 1985). Defined in contracting

behavior terms, trust reflects ‘the extent to which negotiations are fair and commitments are upheld’ (Anderson and Narus, 1990) and one party’s belief that its requirements will be fulfilled through *future* actions undertaken by the other party (Anderson and Weitz, 1989). Trust behavior is viewed as an important element of long-term hierarchy-like relationships (Williamson, 1985; Dore, 1987; Aoki, 1990; Mahoney, Huff, and Huff, 1994) and is a necessary condition for relational governance (Macneil, 1980; Granovetter, 1985).

It is important to distinguish between forms of trust, arising from various sources. Different mechanisms are implied in the creation of each form. Sociologists such as Zucker (1986) have identified three forms: (1) *characteristic-based trust*, which is formed within a group on the basis of factors such as ethnicity; (2) *process-based trust*, which results from past and expected future exchanges; and (3) *institutional-based trust*, which stems from embedded social practices (Dore, 1987; Jarillo, 1988). The extensive psychological and sociological literature on trust has also distinguished between *affective*, *cognitive*, and *behavioral* dimensions of trust (Lewis and Weigert, 1985). Williamson (1993) makes a further distinction between *calculative*, *personal*, and *institutional* trust. The first refers to a ‘rational’ form of trust fostered by mutual hostages and built upon reputation effects (Kreps, 1990). Williamson (1993) suggests that this type of trust is similar to *risk*. Personal trust, on the other hand, is akin to ‘altruistic’ behavior—it does not depend on calculations of self-interest for its formation or continuation, and applies only in close personal relations. The third form of trust, institutional trust, derives from the social and organizational embeddedness, but in fact, according to Williamson (1993), is calculative as well.

If we examine Zucker’s typology of the sources of trust discussed above in Williamson’s terms, we could view them all as being of the ‘calculative’ kind to a certain extent, since each depends on sanctions of some type for its existence. Thus, the maintenance of characteristic-based trust depends on sanctions of some kind by members of an ethnic group, process-based trust relies on the expectations of future exchange, and institutional-based trust is dependent on legal or other sanctions to enforce trusting behavior. Again,

the 'cognitive' dimension of trust is close to 'calculative' trust, while the 'affective' trust dimension probably includes the altruistic type of trust. However, the 'behavioral' dimension of trust does not fit neatly within a calculative–altruistic dichotomy, but could include elements of both.

Williamson (1993) suggests that the term 'trust' should be reserved for the personal, altruistic version alone, and commercial relations cannot include trust defined in this manner. We modify this conception of trust in three important ways: first, we believe that trust is a complex notion, and that calculativeness, or a cognitive component, *is* one element of trust. However, trust is a "leap" beyond the expectations that reason and experience alone would warrant—they simply serve as the platform from which the leap is made' (Lewis and Weigert, 1985: 970). Thus, *both* the rational calculation *and* the 'leap of faith' comprise trust. Second, we allow for a sizable sociological component of trust, captured by the 'mutuality' intrinsic in the notion of interorganizational trust. Thus, trust begets trust, and a situation develops where 'I trust because you trust' (Lewis and Weigert, 1985). Third, we believe that such a form of trust is common in business relationships, even in the West.

Considerable evidence exists to support the idea that dyadic business relationships often have a strong non-economic flavor. In this regard, the social embeddedness of economic actions (Granovetter, 1985) is noteworthy, as is the tendency for commercial relationships to be closely interwoven with personal ones, which has been documented both in the West and in Japan (Macaulay, 1963; Dore, 1983, 1987). Thus, our focus in this research is on trust as a property of the interorganizational *dyad*, and is primarily sociological in nature, although we believe that trust is a multidimensional concept, significantly developed on affective, behavioral and cognitive bases as well.

The rationale for the key role of trust is straightforward: in the extreme case, it does away with formal contracts, which are costly to write, monitor and enforce (Bromiley and Cummings, 1991). Thus, trust acts to reduce transaction costs by reducing or eliminating both *ex ante* and *ex post* opportunism. Arguing from a pure transaction cost viewpoint, therefore, the presence of trust should be associated with a lower level of hierarchical governance since trust serves as a

substitute for hierarchical control. These arguments are formalized in the hypothesis below:

Hypothesis 4a: Trust is negatively and significantly associated with greater degrees of quasi-integration.

However, the above reasoning assumes that increased trust levels *precede* the observed governance form. Put another way, an argument that asserts that interorganizational trust is in place before safeguards are established makes assumptions about the temporal structure of the model, which we are not in a position to test conclusively since ours is a cross-sectional rather than a longitudinal study. If on the other hand we argue that it is the increased levels of quasi-integration or the extent of recurrent exchange that gave rise to the observed level of trust, then it would imply a hypothesis with the signs reversed, or that closer interorganizational ties will be associated with higher levels of trust. From a sociological perspective the latter hypothesis, which we term the alternate hypothesis, appears to have greater force validity. The corresponding hypothesis relating governance structure to the levels of trust in the relationship is as follows:

Hypothesis 4b: Trust is positively and significantly associated with greater degrees of quasi-integration.

The complementary role of the two perspectives

We argue that the inclusion of the sociological perspective, expressed as trust, will add significantly to the explanatory power to the models of transaction cost explanations of the structure of governance, for the reasons discussed in earlier sections. We test this assertion through the following hypothesis:

Hypothesis 5: A model of quasi-integration that includes variables from both the economic and sociological perspectives will have significantly increased explanatory power than a model that includes only the economic variables.

Relating quasi-integration and joint action

We now consider the relationship between the two dimensions of governance outcomes, quasi-

integration and joint action. We suggest that a dynamic relationship exists between the two dimensions and propose that it is the *development of trust between the exchange partners* to relational exchange that, together with governance structure—quasi-integration—contribute to the establishment and enhancement of governance process outcomes, operationalized in joint action. In essence, we argue that governance structure is but the first phase in the development of relational governance. As the interfirm relationship develops with the context of recurrent transactions between the two parties, social elements and relational norms, epitomized by trust, become established in the relationship (Ring and Van de Ven, 1992). Subsequently, the parties come to rely on these relational norms to adopt process elements that serve as safeguards in their relationship, contributing to a more durable, stable, long-term relationship. While we cannot demonstrate the foregoing in a cross-sectional study such as this, we draw on theoretical bases to buttress our argument.

Stinchcombe's (1990) work on contracts as substitutes for hierarchies makes a similar point: rather than a formal hierarchical structure, it is the provisions for processes such as those for conflict resolution and standard operating procedures—some built-in, others evolved—that often underlie exchange in the real world. The reasoning is also consistent with the spirit of Grossman and Hart's (1986) rationale for defining a firm. Simply put, their definition of the boundaries of a firm extends beyond mere formal ownership of assets to the notion of *control* over assets, which is essentially analogous to what we define as process. Thus, process, rather than formal structure, may be the key to explaining the boundaries of a firm.

In the current research context, the foregoing implies that the recurrent transactions that occur with quasi-integration will form the structural basis for the development of the governance process, exemplified by joint action. This idea leads to the following hypothesis:

Hypothesis 6: Quasi-integration and joint action are positively and significantly related.

However, the power of the governance structure—quasi-integration—in explaining joint action will, as we have argued, be substantially

enhanced with the addition of a sociological component: trust. The following hypothesis captures this notion:

Hypothesis 7: The model of joint action that includes trust will have significantly greater explanatory power than a model that includes only quasi-integration.

Size as a control variable

Empirical research on vertical integration using the transaction cost approach has often included size as a variable, since larger supplier or customer firms will be harder to integrate within a hierarchy, all else being equal (e.g., Anderson, 1985). However, we do not explicitly hypothesize a direction for the variable of firm size in our model, but include it as a control variable.

METHODS

Research setting

The P&C insurance industry in the U.S. served as the setting for testing the research model. The P&C industry offers protection against such risks as fire, theft, accident and general liability. Coverage is provided to both personal and commercial customers; the former include individuals (for automobile and homeowner insurance) and the latter business policy-holders (for general liability and workers' compensation, among others). P&C insurance is largely sold through independent insurance agencies who can choose to place the insurance risks of their clients with whichever insurance company, or carrier, best meets their requirements. While insurance agencies typically deal with a number of insurance carriers, agencies will often elect to give the bulk of their business to a single insurance company—the 'lead' market or 'focal' carrier. However, agencies differ widely in their degree of dependency on the focal insurance carriers (or, the extent of quasi-integration) as well as in the extent of joint action with the carriers, thus providing an appropriate setting for testing the research model.

We restricted our study to the commercial lines segment where independent agencies are the dominant form for the distribution of P&C insurance, writing over 77 percent of total

commercial premiums in 1988 (*Best's Review*, 1990). Thus, we exclude direct distribution, and seek to explain the extent to which independent agencies are quasi-integrated with their focal insurance carriers.

Data

Overview

We collected the required data during spring 1991 by means of questionnaires mailed to a stratified random sample of 1000 independent agencies who are members of the National Association of Professional Insurance Agents (PIA). Stratification was done on the basis of agency size (in terms of premium volume) and product mix (ratio of personal to commercial lines business), in order to improve representativeness from the sample frame. Responses were received from 329 agencies representing an effective response rate of 33 percent. Assessment of nonresponse bias indicated no serious concerns across the waves of responses.³ Within this sample, the mean agency size in terms of annual commercial premiums was \$4 million.

Informant

With the objective of minimizing key-informant bias (Bagozzi and Phillips, 1982), we sought to identify knowledgeable informant(s) as well as assess the feasibility and benefits of multiple informants during the initial round of interviews. As most agencies are owner-managed, we chose the owner as our only informant since no other person has the vantage point for providing the data relevant for this study. This approach is consistent with the general recommendation to use the most knowledgeable informant (Huber and Power, 1985; Venkatraman and Grant, 1986) and the research practice of relying on a single senior-level informant in studies involving small organizational units (see, for instance, Daft and Bradshaw, 1980). The small number of commercial personnel (mean: less than four) of

the insurance agencies in the sample supports our contention of the validity of reliance on a single, senior-level informant.

Measurements

Details of the constructs and the operationalizations are provided in Table 1 and are discussed below.

Asset specificity

We measured asset specificity in terms of six indicators capturing both the procedural and the human aspects of asset specificity in our research context. The former was operationalized as a set of three indicators that captured the extent to which the focal carrier workflows and routines were customized. Human asset specificity measured in terms of the extent to which the skill levels of our employees working on the focal carrier's business are specifically customized. All the indicators were measured on a seven-point scale from 'significantly customized' to 'relatively similar to other carriers'. The Cronbach α measure of reliability for this construct is 0.86.

Uncertainty

Behavioral uncertainty was operationalized with two indicators regarding the uncertainty the agency perceives due to the pricing and the new product introduction actions of the focal carrier. The Cronbach α reliability for this construct was marginal, but acceptable, at 0.61.⁴

Reciprocal investments

Reciprocal investments in our research take the form of the extent of transaction-specific resources invested by the insurance carrier in the development of the relationship with the agency. Specifically, these resources include support such as consultation regarding business processes, and the individual effort given to developing personal relationships at the agency by the field and office

³ There were no statistically significant differences between the demographic characteristics of the responding agencies between the first and the second waves of responses generated by the initial and the subsequent mailing of the questionnaire (Armstrong and Overton, 1977).

⁴ Alternative specifications of uncertainty were attempted, among them Anderson and Schmittlein's (1984) operationalization adapted as follows: *the margin of error within which the agent could predict next year's business activity* with similarly poor results.

Table 1. Details of constructs and measures

Construct	No. of items	Description of the measures
Asset specificity	6	<p>(I) (<i>Procedural asset specificity</i>) Please indicate the extent to which the following are relatively <i>similar</i> to other carriers or are significantly <i>different</i> from other carriers (e.g., <i>unique</i> or <i>customized</i> to suit the requirements of the focal carrier)</p> <p>(a) The focal carrier's workflows and routines</p> <p>(b) The use of rating and other manuals of the focal carrier</p> <p>(c) The forms needed for the focal carrier</p> <p>(Significantly customized—Relatively similar to other carriers, 7-point scales)</p> <p>(II) (<i>Human asset specificity</i>) Please indicate the extent to which the following are relatively <i>similar</i> to other carriers or are significantly <i>different</i> from other carriers (e.g., <i>unique</i> or <i>customized</i> to suit the requirements of the focal carrier)</p> <p>(a) The skill levels of our employees working on the focal carrier's business</p> <p>(b) The extent of training needed for staff</p> <p>(c) The focal carrier's unwritten norms, expectations, guidelines, etc.</p> <p>(Significantly customized—Relatively similar to other carriers, 7-point scales)</p>
Uncertainty	2	<p>Please estimate the extent to which you could predict changes in the following factors in relation to your focal carrier for the next year</p> <p>(a) Pricing of existing products</p> <p>(b) Introduction of new products</p> <p>(Relatively predictable—Relatively unpredictable, 7-point scales)</p>
Reciprocal investments	3	<p>The extent to which the focal carrier has invested resources in</p> <p>(a) providing customized support</p> <p>(b) improving personal relations</p> <p>(c) providing initial training</p> <p>(Significant resources—Hardly any resources, 7-point scales)</p>
Trust	3	<p>(a) The focal carrier and our agency have a high level of mutual trust</p> <p>(b) The focal carrier is well known for fair dealing</p> <p>(c) The focal carrier stands by its word</p> <p>(Agree—Disagree, 7-point scales)</p>
Degree of quasi-integration	1	Percentage of total commercial lines' premiums accounted for by the focal carrier, transformed as follows: $QI^* = LN[QI/(100 - QI)]$
Joint action	3	<p>Indicate the extent to which you jointly plan the following activities with your focal carrier</p> <p>(a) Your marketing strategy</p> <p>(b) New product launches</p> <p>(c) Premium volumes</p> <p>(Significant joint action—Insignificant joint action, 7-point scales)</p>
Size	1	LN [Total written premiums (commercial lines)]

staff of the insurance carrier. We measured reciprocal investments using three indicators: in terms of the agent's perception of the degree to which the focal carrier has invested resources in the areas of developing personal relationship

with the personnel of the independent agency, providing training to agency staff, and providing customized support to the agency. Each indicator was measured using a seven-point scale—'invested hardly any resources' to 'invested considerable

resources'. The Cronbach α for this construct is 0.77.

Trust

Consistent with Anderson and Narus (1990) and Heide and John (1990), we operationalized trust using three indicators, tapping the extent of perceived trust between the focal carrier and the agency. Specifically, the construct includes the mutuality element of trust, as well as behavioral and 'process' dimensions of trust. The detailed wording of the indicators is included in Table 1. Each indicator was measured on a 7-point scale from 'strongly agree' to 'strongly disagree'. The reliability of the trust construct was good—the Cronbach α was 0.81.

Degree of quasi-integration

Consistent with our conceptualization of quasi-integration as the degree of the independent agent's dedication to its focal carrier, we measure this construct in terms of the *percentage of business (commercial premiums) directed to the focal carrier*. This indicator is consistent with John and Weitz (1988), who view forward integration as 'percentage of direct sales to end-users'. In the analysis, we use a transformed version of this variable, consistent with Caves and Bradburd (1988). Quasi-integration can serve as a safeguard for specific assets by increasing the carrier's costs of termination since, in this market, carriers with larger agency shares also have business with lower loss ratios.⁵ Thus, *ceteris paribus*, carriers with larger agency shares will tend to have lowered incentives to terminate the agency.

Joint action

Following Thompson (1967) and Heide and John (1990), this construct was measured using three indicators—designed to capture the extent of *planning* and *forecasting* of the agency's business activities jointly carried out by the agency and

the focal carrier. The reliability of this construct was good, with the Cronbach α measuring 0.82. The exact format of the multi-item scale is provided in Table 1.

Figure 1 provides a schematic of the research model of relational governance with its determinants and its outcomes—in terms of its structural and process manifestations.

Analysis

We employed hierarchical regression analysis (Cohen and Cohen, 1975) to test Hypotheses 1 through 7. This procedure allows us not only to estimate the statistical significance of the coefficients corresponding to our set of hypotheses but also to assess changes in the proportion of variance explained (R^2) and the statistical significance of the changes with the introduction of each new block of variables. We began by regressing quasi-integration on the variables that explain governance from the transaction cost perspective—asset specificity, uncertainty, and reciprocal investments—and added the construct representing the sociological component of exchange: trust. We then assessed the statistical significance of the change in R^2 when the new block was added. Next, we regressed joint action, the process outcome of governance, on quasi-integration, and added the trust construct, assessing the significance of the change R^2 as before. Conceptually, the stages in the analysis can be represented by the following equations:

$$\begin{aligned} \text{Quasi-integration} = & b_0 + b_1 \text{ asset specificity} + b_2 \text{ uncertainty} \\ & + b_3 \text{ reciprocal investments} \\ & + b_4 \text{ size} + e \end{aligned} \quad (1)$$

$$\begin{aligned} \text{Quasi-integration} = & b_0 + b_1 \text{ asset specificity} + b_2 \text{ uncertainty} \\ & + b_3 \text{ reciprocal investments} + b_4 \text{ size} \\ & + b_5 \text{ trust} + e \end{aligned} \quad (2)$$

$$\begin{aligned} \text{Joint action} = & b_0 + b_1 \text{ quasi-integration} \\ & + b_2 \text{ size} + e \end{aligned} \quad (3)$$

$$\begin{aligned} \text{Joint action} = & b_0 + b_1 \text{ quasi-integration} \\ & + b_2 \text{ size} \\ & + b_3 \text{ trust} + e \end{aligned} \quad (4)$$

⁵ There exists a strong belief in insurance companies, with some basis in industry studies, that there is a direct relationship between the 'quality' of the business, as measured by loss ratios, and the 'agency share' of the insurance company.

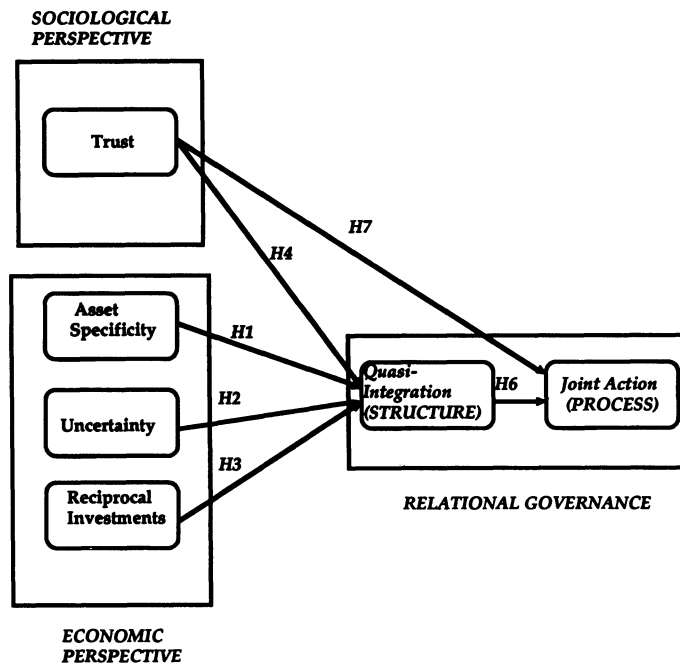


Figure 1. Research model of economic and sociological determinants of governance structure and process

Table 2. Descriptive statistics and zero-order correlations among constructs ($n = 329$)

Constructs	Mean	s.d.	1	2	3	4	5	6
1 Asset specificity	3.42	1.44	1.00					
2 Uncertainty	3.10	1.46	0.119*	1.00				
3 Reciprocal investments	4.09	1.54	0.174**	-0.164**	1.00			
4 Trust	5.19	1.19	0.072	-0.271**	0.244**	1.00		
5 Quasi-integration ^a	0.411	0.254	0.246**	-0.019	0.037	0.147**	1.00	
6 Joint action	3.13	1.60	0.167**	-0.106*	0.377**	0.183**	0.133*	1.00
7 Size	7.77	1.06	0.032	0.012	0.075	-0.089	-0.175**	0.074

* Significant at $p < 0.05$; ** significant at $p < 0.01$.

^a Mean and standard deviation provided for untransformed variable. Correlations are with transformed variable.

RESULTS

Table 2 summarizes the zero-order correlations among the constructs used in the study. As can be noted, multicollinearity is not an issue with our data.⁶

⁶ We tested the stability of the beta coefficients by adding the variables to the models one at a time. We found the coefficients to be robust.

Table 3 summarizes the results of the hierarchical regression analyses. Table 4 summarizes the support for the hypotheses.

Hypothesis 1 supported. Asset specificity was positively and significantly associated with quasi-integration. The parameter value (b) in the regression model which included both the economic and the sociological variables was 0.26, statistically significant at $p < 0.01$.

Table 3. Results of hierarchical regression analyses ($n = 329$)

Model	Dependent variable			
	Quasi-integration Economic perspective	Quasi-integration Economic perspective + trust	Joint action Economic perspective	Joint action Economic perspective + trust
Equation	(1)	(2)	(3)	(4)
R^2	0.10	0.11	0.03	0.06
F	9.23	8.37	4.92	6.69
Sig. F	0.000	0.000	0.008	0.0002
R^2 change		0.01		0.03
Sig. F change		0.03		0.002
Independent variables	b (Sig. t)	b (Sig. t)	b (Sig. t)	b (Sig. t)
Quasi-integration			0.16 (0.004)	0.14 (0.01)
Asset specificity	0.27 (0.000)	0.26 (0.000)		
Uncertainty	-0.06 (0.26)	-0.03 (0.59)		
Reciprocal investments	-0.01 (0.82)	-0.04 (0.50)		
Size	-0.18 (0.001)	-0.17 (0.001)	0.09 (0.09)	0.10 (0.06)
Trust		0.12 (0.03)		0.17 (0.002)

Hypothesis 2a rejected; Hypothesis 2b rejected. Uncertainty was not positively and significantly related to the governance outcome as hypothesized in Hypothesis 2a. However, the construct was negatively signed in the model, consistent with Hypothesis 2b, though not statistically significant (Equation (2), $b = -0.03$; n.s.).

Hypothesis 3 rejected. This hypothesis, positing a negative and significant relationship between reciprocal investments and quasi-integration, was not supported; although the b value was negatively signed, it was not statistically significant (Equation (2), $b = -0.04$; n.s.).

Hypothesis 4a rejected; Hypothesis 4b supported. Hypothesis 4a related trust to quasi-integration from the transaction cost perspective, and argued that trust serves as a substitute for the need for control; hence a negative relationship between trust and quasi-integration was hypothesized. This hypothesis was rejected since the sign of the parameter was opposite to that hypothesized. The alternative hypothesis

(Hypothesis 4b) of a positive relationship between trust and quasi-integration was, instead, supported (Equation (2), $b = 0.12$, $p < 0.05$).

Hypothesis 5 supported. As hypothesized, the results showed that the combination of economic and sociological variables explained a greater amount of variance in quasi-integration than only the economic variables. In the case of quasi-integration, the value of the increment to R^2 was statistically significant (change in F -statistic $p < 0.05$).

Hypothesis 6 supported. As hypothesized, quasi-integration, the structural form of governance, is positively and significantly related to joint action. The F -value for the regression equation is statistically significant, with $p < 0.01$.

Hypothesis 7 supported. This hypothesis, suggesting that the trust construct from the sociological perspective adds significantly explanatory power to the model of joint action, was supported. The R^2 value was incremented by 0.03 to 0.06.

Table 4. Results of testing hypotheses

Hypothesis	Relationship	Expected sign	Actual sign	Value	Sig. (<i>t</i> or <i>F</i> ; <i>p</i> value)	Result
1	Asset specificity and quasi-integration	+	+	0.26	$p < 0.01$	Supported
2a	Uncertainty and quasi-integration	+	–	–0.03	$p = 0.59$ (n.s.)	Rejected
2b	Uncertainty and quasi-integration	–	–	–0.03	$p = 0.59$ (n.s.)	Rejected
3	Reciprocal investments and quasi-integration	–	–	–0.04	$p = 0.50$ (n.s.)	Rejected
4a	Trust and quasi-integration	–	+	0.12	$p < 0.05$	Rejected
4b	Trust and quasi-integration	+	+	0.12	$p < 0.05$	Supported
5	Economic variables and trust	N.A. ^a	N.A.	Increase in $R^2 = 0.01$	Sig. of <i>F</i> change $p < 0.05$	Supported
6	Quasi-integration and joint action	+	+	$R^2 = 0.03$	Sig. of <i>F</i> ; $p < 0.01$	Supported
7	Quasi-integration, trust and joint action	N.A.	N.A.	Increase in $R^2 = 0.03$	Sig. of <i>F</i> change $p < 0.01$	Supported

^a N.A. = not applicable.

The statistical significance of the increment to R^2 was high, with the change in the F -statistic significant at $p < 0.01$.

DISCUSSION

Asset specificity

Our empirical tests found support for the classic transaction cost variable of asset specificity, consistent with previous empirical research. In accordance with transaction cost reasoning, asset specificity was positively and significantly related to the structural dimension of governance. One distinctive aspect of this research relates to our operationalization of asset specificity in terms of both *human* and *procedural* asset specificity, where the latter is analogous to organization routines (Nelson and Winter, 1982). Such routines embody a powerful form of transaction-specific assets in service firms with strong vertical linkages.

Uncertainty

The coefficient for uncertainty was not statistically significant in the model. In order to be consistent with previous empirical research on transaction costs (e.g., Anderson, 1985), an alternative specification of the model was tested, with an interaction term between uncertainty and asset specificity. The coefficient was again found to be non-significant.

In fact, the construct of uncertainty has proved controversial due to contradictory empirical findings. For instance, counter to the classic transaction cost arguments, Harrigan (1985b) found that uncertainty was negatively related to vertical integration, as did Balakrishnan and Wernerfelt (1986). The latter authors argued that this empirical finding was due to their having operationalized uncertainty as *technological* uncertainty of high specificity, which would decrease the likelihood of investment in such technology. However, others (e.g., Monteverde and Teece, 1982) have demonstrated that when the form of technological uncertainty stems from the requirements of coordinating complex technical systems, a positive relationship between uncertainty and internalization is observed. Our operationalization of this construct is consistent with Williamson (1985), who views uncertainty

in terms of uncertainty about the actions of the exchange partner. Despite operationalizing uncertainty as behavioral uncertainty, the construct emerged non-significant. Further, it was negatively signed, which was contradictory to transaction cost predictions.

Alternatively, it is possible that the nature of this statistical relationship is nonlinear, and one may speculate that when increased hierarchical coordination leads to an ambiguous change in control over uncertainty, organizations in intermediate governance modes will reduce rather than increase their degree of hierarchical coordination when uncertainty is high, if total integration is not a possibility. Of course (as a reviewer points out), our operationalization of hierarchy as quasi-integration is not identical to the classic transaction cost conception, which could account for the construct of uncertainty being non-significant with respect to governance choice. Also, in terms of measurement, the uncertainty construct itself was weaker than we would have liked. However, our results are consistent with a temporal explanation that closer ties reduce behavioral uncertainty.

Reciprocal investments

We introduced and operationalized the concept of reciprocal investments in a model of relational governance, and found that this variable was a not significant explanatory factor of structural governance outcomes. However, we note that the correlation between reciprocal investments and joint action is strong and significant, $r = 0.378$ (Table 2). This result suggests that reciprocal investments may play a salient role in joint action, although we did not specify such a relationship *ex ante*.

On the other hand, if reciprocal investments in the relationship are viewed once again from a sociological perspective as *reciprocity*, possibly including a dynamic component, then the strong observed correlation between reciprocal investments and joint action becomes both theoretically and intuitively plausible. Thus, for example, norms of reciprocity and reciprocal action theory (Gouldner, 1960) imply that each partner in the exchange relationship responds to the actions taken by the other in a reciprocal fashion. Exchange theory (Homans, 1961) and equity norms (Blau, 1964) are similar expressions of

conditions supporting stable exchange relationships. Reciprocal action serves as the basis for mutual commitment (Dwyer *et al.*, 1987) and symmetric levels of commitment favor longevity and stability in relationships. The recognition in the game-theoretic literature of *infinite horizon games* and the empirical demonstration that a tit-for-tat strategy is most optimal under those circumstances (Axelrod, 1984) provides further evidence for the role of reciprocity in long-term relational exchange. We suggest that as attention to interorganizational strategy increases, consideration should be given to reciprocal investments and reciprocity in research on governance.

Trust

The role of trust, although consistent with an alternative hypothesis based on sociological explanations, was found to be the opposite of what was hypothesized from a pure transaction cost viewpoint. In order to further investigate the phenomenon of trust as it relates to governance, we tested the *moderating* role of trust as well. We introduced an interaction term of trust and asset specificity in a model of quasi-integration which included the main effects terms, and found the coefficient of the interaction term moderately significant ($p < 0.1$). The coefficient was again positively signed, suggesting that higher levels of trust interact with asset specificity to increase the extent of hierarchical governance. However, from a sociological perspective, the results are supportive of extant work and intuition; simply that higher levels of trust are found in closer relationships.

The role of trust is more salient in the process manifestation of governance, for the addition of a relational factor is instrumental in increasing the extent of variance explained in joint action. The presence of trust as an explanatory factor for the structural manifestation of governance, quasi-integration, may therefore be due to reputation and other effects that may be present at the time of the formation of the relationship. While temporal effects may partly explain the positive relationship of trust with both the process and structural aspects of governance, further research is needed to explicate the particular role of this construct in transaction cost explanations of interfirm relationships. The influence of trust deriving from embedded *personal* relationships

in interfirm dyads also merits closer research attention.

Governance structure and process

Our research makes a modest contribution to the organizational economics literature by offering operationalizations of both a structural view (quasi-integration) and a process view (joint action) of governance, and in empirically investigating, however preliminarily, the phenomenon of relational governance and the role of trust in interfirm exchange. Our contention is that conceptualizations of governance, especially pertaining to interfirm relationships, should extend beyond the traditional structural aspects to begin including the processual elements, often key to understanding such relationships and indeed, a good deal of organizational and interorganizational behavior (Marrett, 1971).

Our results suggest that merely *adopting an appropriate governance structure may not lead to the required process outcomes of governance, for the governance structure explained only a small amount of variance in governance process*. A dynamic view of the role of trust in relational governance asserts that recurrent transactions may provide a context for the development of trust over time (Ring and Van de Ven, 1992), contributing to the observed strong relationship between trust and governance process. In turn, this may stimulate the development of process safeguards for transaction-specific assets, such as standard operating procedures and other mechanisms that favor stable, long-term, relational governance relationships. In this vein, Heide and Miner (1992) demonstrated the value of process elements in interorganizational relationships and called for research using multiple theories. However, they do not specifically demonstrate results from *both* structural and process theories.

Multiple perspectives in interorganizational research

This research has been motivated by a desire to integrate economic and noneconomic perspectives to understand a hybrid form of interorganizational strategy, namely relational governance. This integration is important as the two sets of theoretical arguments may together provide complementary insights into this theoretically

and empirically important phenomenon. Support for the structural manifestation of governance from both transaction cost and sociological viewpoints suggests that the economic determinants of governance do not by themselves provide a complete understanding of the phenomenon. Rather, as we demonstrate empirically, the combination of variables from independent theoretical perspectives, economics and sociology, contributes to an understanding of the inter-organizational phenomenon.

The use of diverse but complementary perspectives in the examination of a phenomenon such as interorganizational exchange has a number of successful precedents in the strategic management and organization literature. In addition to Hansen and Wernerfelt (1989), who combined behavioral and economic approaches empirically, a number of research streams have been developed by theoretical interdisciplinary contributions. Nelson and Winter's (1982) addition of organizational phenomena such as *routines* to economic aspects of firms, itself following in a tradition of March and Simon (1958) and Cyert and March (1963), generates useful insights into firm behavior. More recently, Milgrom and Roberts (1992) have added formalized behavioral components, in the form of influence costs and bargaining costs, to the transaction costs framework, which had already appended behavioral dimensions—the assumptions of bounded rationality and opportunism—to the economic ones of uncertainty and small numbers (Williamson, 1975).

Directions for future research

Several future research directions seem promising. From the perspective of research design, a useful advance would be to obtain information on interorganizational constructs from *both* sides of the interfirm dyad. This will enable cross-validation of inherently relationship-oriented constructs like trust, and permit more valid measures of constructs which relate to the other party, such as reciprocal investments. Further, obtaining data from both sides of the dyad would also permit the modeling of differing perceptions on the same phenomena. Other design possibilities include the use of multiple respondents to improve the validity of organization-level constructs, particularly if larger firms are included in the sample (Bagozzi and Phillips, 1982).

We have taken some license in this paper to speculate on causal and temporal linkages, while operating within the confines of a cross-sectional study. Clearly, a longitudinal study to capture the dynamics of the development of relational governance would be highly appropriate to test the assertions made herein. Further, from a theoretical point of view, it would be useful to develop a richer set of constructs beyond the four developed here to capture the determinants of relational governance.

Finally, investigating the *performance implications* of forms of relational governance is another important lacuna in current research (Heide and John, 1988, is an exception). Whereas the transaction cost literature, due to its economic antecedents, has been less concerned with performance than with demonstrating that theoretically predicted forms exist, this approach is based on some fairly stringent assumptions. Thus, it is generally assumed that efficient forms will exist and that inefficient forms will tend toward efficiency or be forced to exit. When we factor in organizational inertia (Hannan and Freeman, 1984), disequilibrium (Robins, 1987), and something less than complete knowledge of costs of governance (Dow, 1987), the performance implications of alternative governance mechanisms become considerably more relevant. One approach would be to demonstrate that deviations from theoretically predicted forms are associated with inferior performance.

CONCLUDING REMARKS

This paper integrated economic and sociological perspectives to explain the determinants of relational governance. Our empirical results support the assertions by Macneil (1980), Granovetter (1985) and others that there exists a significant social component in exchange relationships which may be masked or missed in economic explanations of exchange. The two combined perspectives explained a significantly greater proportion of the variance in the structural manifestation of intermediate forms of inter-organizational relationships. Further, the structural dimension by itself was inadequate in explaining the processual aspects of relational governance. The addition of the sociological perspective, captured in the trust construct,

significantly enhanced the explanatory power of the model of governance process.

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