THE IMPACT OF GOVERNANCE ON THE DEVELOPMENT OF TRUST IN BUYER-SELLER RELATIONSHIPS

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What influence does governance have on the development of trust in buyer-seller relationships? In this paper, a transaction cost argument is used to advance our understanding of this important yet under-researched area by studying the effect that various modes of governance has on trust building in buyer-seller relationships. We tested our proposed governance-trust model on a sample of purchasing agents and managers from the National Association of Purchasing Managers (NAPM). The results provide initial support for our hypothesized relationships and demonstrate the important role that mutual investments and goal congruence plays in the growth of trust between buying and selling firms.

INTRODUCTION

What impact does governance have on the development of trust in buyer-seller relationships? Although a great deal of research has investigated the effect that trust has on buyer-seller relationships (Anderson and Narus 1990; Anderson and Weitz 1989; Doney and Cannon 1997; Dwyer et al. 1987; Ganesan 1994; Geyskens et al. 1999; Morgan and Hunt 1994), surprising little research has been done concerning how the social (e.g., informal) aspects of relationships such social norms and trust first develop in an interorganizational setting (Rokkan et al. 2003). Researchers have long recognized the important role that formal (e.g., explicit contracts, monitoring, qualification programs) and informal governance (e.g., social norms) play in relationship development (Buvik and John 2000; Cannon et al. 2000; Gundlach and Murphy 1993; Heide and John 1990; 1992; Heide and Wathne 2006; Jap and Ganesan 2000; Lusch and Brown 1996; Rokkan et al. 2003; Stump and Joshi 1998). However, the interplay among the various forms of formal and informal governance relative to the development of trust has remained largely unexplored. This apparent lack of research prompted Rindfleisch and Heide (1997, p. 50) to conclude that "identifying the specific effects of different governance mechanisms" on trust is an important area for future research consideration.

In this paper, we attempt to answer Rindfleisch and Heide's (1997) call by developing and testing a framework that theoretically links relationship governance to trust. Based on a transaction cost analysis (TCA)-based argument, we propose that mutual investments made by the parties in the relationship actually play a more important role in trust's development than currently proposed in the literature (i.e., reducing opportunistic behaviors). They do so by fundamentally changing each party's motivational orientation from that of optimizing individual outcomes to optimizing joint (or relational) outcomes. The results of this study provide initial support for our proposed governance – trust relationships, which have important managerial and research implications. First, this research provides both buying and selling firm managers with additional insights regarding how to better develop strategies that encourage trust formation. This is important because trust has been linked to many positive outcomes such as the creation of relationship value (Jap 1999; Rokkan et al. 2003; Ulaga 2003) and positions

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of competitive advantage (Ghosh and John 1999; 2005). Moreover, this paper makes a major theoretical contribution by extending the role of governance from the more conventional perspective of primarily reducing interorganizational opportunism to that of creating a foundation upon which to establish a joint focus on optimizing relationship outcomes.

BACKGROUND AND HYPOTHESES

Trust

Trust is a construct that has been widely accepted in psychology, sociology, management, and marketing. A basic theme cutting across these disciplines is that trust involves an expectation that two parties, whether they are individuals or organizations, will continue to act in a trustworthy or dependable manner and in the best interest of their exchange partner (Duffy 2008; Wilson 1995). In their extensive study of the channel relationship literature, Geyskens, Steenkamp and Kumar (1999, p. 225) found that most channel studies define trust as "the extent to which a firm believes that its exchange partner is honest and/or benevolent." Thus, in much of the literature, trust has been examined from one party's perspective; however, "mutual" trust, a construct addressing both parties' perspectives, may be more relevant in a relationship context. Realizing this, Sarkar, Echambadi, Cavusgil and Aulakh (2001, p. 362) extended the more "traditional" definition of trust to the relationship setting. They defined "mutual" trust as "the level of confidence shared by the parties regarding each other's integrity." Since our study involves interorganizational buyer-seller relationships, we follow Sarkar's et al. (2001) lead and use their definition of trust in our study. Similar to Sarkar et al. (2001), we evaluate whether the parties: 1) are honest and truthful with each other, 2) treat each other fairly and justly, and 3) find it necessary to be cautious in dealing with each other. Overall, these three dimensions appear to capture the essence of trusting relationships between buying and selling firms. For instance, in trusting relationships, the parties should be honest with each other while fairly distributing the positive outcomes derived from the relationship (Buvik and John 2000); otherwise, the parties will likely deal with each other in a cautious and protective manner.

Trust plays a critical role in relationships because efficient exchange is largely controlled by social obligations (Cropanzano and Mitchell 2005; Lambe et al. 2001). These social obligations are exemplified when one party voluntarily provides a benefit to its partner, which obligates that party to reciprocate by providing another benefit in return (Atuaheme-Gima and Li 2002; Blau 1964; Whitener et al. 1998). Thus, a shared belief that each party will honor its obligations (Lambe et al. 2001) is an important relationship characteristic. Morgan and Hunt (1994) suggest that trust is the "cornerstone" of successful relationships as demonstrated by its positive effect on cooperation, shared values, commitment, satisfaction, and buying firm adaptation and its negative effect on conflict, uncertainty, and opportunistic behavior (Anderson and Narus 1990; Anderson and Weitz 1989; Doney and Cannon 1997; Dwyer et al. 1987; Ganesan 1994; Geyskens et al. 1999; Hewett et al. 2002; Hultman and Axelsson 2007; Morgan and Hunt 1994; Mukherji and Francis 2008; Seppanen et al. 2007). Clearly, prior research demonstrates the importance of trust in interorganizational relationships (Kingshott 2006) and as such, the development of trust merits continued theoretical and empirical focus. Interestingly, though a great deal of research has examined various aspects of trust (Geyskens et al. 1998), little academic work has been done to identify and evaluate the effect that governance has on its development in buyer-seller relationships.

Governance and Trust

Researchers have traditionally argued that relationships develop over time and in various stages ranging from new to well-established and mature relationships (Dwyer et al. 1987; Wilson 1995). Given the developmental nature of interorganizational relationships, Ring and

Van de Ven (1994) hypothesized that relationship governance will also change over time. In particular, they propose that as relationships develop, reliance on formal governance should be replaced / supplemented by less formal (relational) governance mechanisms.

Prior studies looking at the development of buyer-seller relationships (Dwyer et al. 1987; Narayandas and Rangan 2004; Wilson 1995) indicate that in the early stages of relationships, both firms typically have limited knowledge of and familiarity with each other and as such, may be uncertain about the relationship's longevity. For this reason, the focus of each party involves protecting itself while also attempting to control the behaviors of its exchange partner. Typically, the buying firm plays a larger role in the controls that are initially established in the relationship since they are frequently in the more dominant position (Narayandas and Rangan 2004). Some of the formal controls identified in the literature, which are commonly used by buyers, are contractual incentives (Wathne and Heide 2000), monitoring (Heide et al. 2007; Stump and Heide 1996), qualification of abilities and motives (Stump and Heide 1996; Wathne and Heide 2004), and requiring that suppliers make relationship investments that have limited transferability to other relational partners (Ganesan 1994; Heide 1994; Stump and Heide 1996; Wathne and Heide 2004). We refer to these as unilateral controls since they are designed to protect *one* party (the buyer in this case) from the opportunism of its exchange partner. Thus, by predominantly protecting only one of the parties in an exchange relationship, unilateral control mechanisms should have a major impact on the buyer's "trust" in the seller but have little effect on the seller's "trust" in the buyer.

As the firms continue to socially and economically interact, it may become increasingly evident to both that mutually beneficial outcomes may be realized by expanding the relationship to take advantage of new market opportunities (Narayandas and Rangan 2004). However, to realize these benefits, the parties may have to make substantial social and physical investments in the relationship (Ghosh and John 1999; 2005). For example, reduced inventory costs may be realized by making upfront investments in developing and implementing a JIT system (Frazier et al. 1988); furthermore, both parties may schedule regular visits to each other's facilities by individuals from various disciplines to develop and maintain the relationship's social infrastructure. A common characteristic of these two types of relationship investments is that they have substantially lower value when used in other uses or in relationships involving alternative exchange partners (Rindfleisch and Heide 1997). For instance, investments made to develop individual (personal) relationships between the firms should have little value in relationships involving alternative exchange partners. For this reason, investments in relationship specific assets (RSAs) such those specified earlier (e.g., development of a JIT system or investments in specialized tooling) may be called Relationship Specific Investments (RSIs). Prior research (Jap and Ganesan 2000; Rokkan et al. 2003; Wathne and Heide 2000) suggests that RSIs have a major effect on the nature of buyer-seller relationships.

Over the last three decades, academic researchers have studied the effect of RSIs on the nature and behaviors of the parties in buyer-seller relationships (Ganesan 1994; Heide 1994; Stump and Heide 1996; Wathne and Heide 2004). This research suggests that when both parties have made substantial RSIs, these investments act as a bilateral governance mechanism (Heide 1994) by creating organizational interdependencies due to their limited transferability (Samiee and Walters 2006). Essentially, mutual investments protect both parties in that each stands to lose their respective relationship investments if either or both behave in an opportunistic manner (Caniels and Gelderman 2007). Thus, mutual investments discourage opportunism (Gundlach et al. 1995) by establishing a shared focus on protecting relationship investments. However, opportunism and trust are different yet related constructs.

Williamson (1975; 1985; 1996) defines opportunism as a party's willingness to use deceit or guile to further its own self-interest. In contrast, trust is a mutual expectation shared by the parties that one's exchange partner has integrity (Sarkar et al. 2001). Thus, trust is a multi-faceted construct (Seppanen et al. 2007) that is more extensive than opportunism which Jap and Anderson (2003, p.1688) suggest is "more delimited and behavioral in nature". As a result, though a great deal of research has focused on the governance aspects of mutual investments (i.e., to mitigate opportunism), the relationship between mutual investments and trust needs further development.

In this research, we address this issue by proposing that mutual investments in RSAs cause a motivational change to occur in buyer-seller relationships. They do so in two ways. First, mutual investments (in RSAs) cause a motivational transformation in both the buying firm and the selling firm from protecting "oneself" to protecting the mutual investment itself. This has the effect of encouraging cooperation and unity of purpose in the relationship. More formally stated, because of the protection provided by the controls established at the onset of the relationship (e.g., formal contracts, qualification programs, etc.) and by the mutual social and physical investments made by the parties in the course of developing the relationship, the firms' individual focus shifts from protecting "self" to protecting the relationship. As a result, a spirit of cooperation and unity permeates the relationship, which encourages increased closeness between the firms. Thus, mutual investments not only reduce opportunism (Gundlach et al. 1995) but also encourage the development of closer relationships (Heide and John 1992). Since higher levels of trust have been found to be strongly related to closer relationships (Doney and Cannon 1997; Wilson 1995), we propose the following relationship between mutual investments and trust:

H_1: Mutual investments in relationship specific assets are positively related to the level of trust between buying and selling firms.

A second and more profound way that mutual investments change the orientation of buyer-seller relationships is by setting the stage for a more "extensive" relationship vision to be established between the firms. In particular, because both parties are protected through their mutual investments, their focus may now extend past merely protecting the relationship from external threats to a more long-term and unified perspective of maximizing the returns from their relationship investments. As a result, a common or mutual goal of maximizing relational benefits acts to align the activities of the firms and provides direction to the relationship. Consistent with this notion, we consider the parties to have congruent goals when their individual goals for the relationship are to maximize its value.

In a relational context, goal congruence is expected to increase as the firms continue to realize mutual benefits and those benefits are equitably split (Buvik and John 2000). The resulting increase in goal congruence encourages higher levels of information exchange, cooperation, and unity between the firms (Jap 1999). Thus, at any particular point in time, the level of goal congruence between the buying firm and the selling firm is posited to reflect the closeness of the relationship between them. This has important governance and motivational implications. First, increased goal congruence mitigates the potential for opportunism by acting as a "self enforcing" agreement (Telser 1980) since the mutual benefits expected to be realized in the relationship may be lost if either or both parties behaved opportunistically (Heide and Miner 1992; Liu et al. 2008). From a motivational standpoint, the potential for mutual benefits encourages the parties to search for and identify new ways to increase positive relational outcomes resulting in even higher levels of goal congruence and closer, more collaborative relationships (Jap 1999; Moller 2006). Thus, we propose the following relationship between goal congruence and trust.

H_2: Goal congruence is positively related to the level of trust between buying and selling firms.

METHODS AND FINDINGS

To empirically test our hypotheses, we contacted local chapter presidents of the National Association of Purchasing Management (NAPM) and asked for their chapter's support for our study. Five chapters located in major metropolitan centers located in the northeastern U.S.A. agreed to endorse our research and allowed us to solicit the participation of their members by distributing questionnaires at their monthly chapter meetings. Moreover, these chapters allowed us to introduce our study and to solicit membership participation in their monthly newsletters. As a result, our sample was composed of knowledgeable and active purchasing professionals from a wide range of industries and products.

Buyer-seller relationships are a complex phenomenon that is multidimensional in nature and as such, requires informants to provide a wide range of information regarding their firm's relationships. Thus, the task of informants is quite complex; for this reason, they should be selected based on the special knowledge they possess or the specific responsibilities they perform (Phillips 1981). Although we initially wanted to use knowledgeable informants from both firms, informant anonymity concerns such as those experienced by Lambe, Spekman and Hunt (2002) prevented us from collecting relationship data from suppliers. Therefore, similar to a number of recent studies (Jap and Ganesan 2000; Lambe et al. 2002; Sarkar et al. 2001), we used the buyer's perceptions of the relationship. Prior studies have found that purchasing agents and managers provide valid and reliable responses (Cannon et al. 2000; Cannon and Perreault 1999; Heide and John 1990; Stump and Heide 1996) because of their intimate knowledge of and close involvement in their firm's supplier relationships. The members of NAPM are especially ideal respondents because of their strong professional interest and training in the purchasing discipline and the major role that they play in their firms' supplier decisions. To assess each respondent's ability to provide valid information, we asked them to rate on a 7-point Likert scale (1 = not very knowledgeable and 7 = very knowledgeable) their knowledge of the supplier relationship that they had reported on. Similar to Lambe et al. (2002), we eliminated informants who rated themselves at a level of 5 or less. For these reasons, we concluded that the relationship data reported by our respondents was appropriate for this study.

Survey Instrument and Sample

In the questionnaire, we asked informants to provide information regarding a relationship that existed between their firm and the supplier of a key product of their firm's primary business. This was done to reduce the likelihood that the sample would be composed of an excessive number of relationships involving incidental purchases. The survey underwent two rounds of pretesting. In the first round, three buyers of a local automotive specialty firm were used to evaluate the clarity of scale items and the overall organization of the survey instrument. In the second round, four members of two local NAPM chapters were provided copies of the revised survey and asked to complete them. These individuals were later interviewed to identify areas of confusion as well as ways to improve the survey's quality and clarity. We used their comments and recommendations to further refine our survey. The survey instrument was also evaluated throughout the data collection process by asking informants to provide feedback regarding the clarity of scale items and instructions; no major problems were identified.

Survey packets that included a cover letter, a self-addressed postage paid envelope, and a link to an on-line version of the survey were distributed at the meetings of our focal NAPM local chapters. The on-line survey tool used to administer and track responses was Questionpro (www.questionpro.com). A reminder was provided at subsequent meetings and in the monthly newsletters for each chapter. Overall, 197 surveys were distributed of which 49 paper and 31 on-line survey responses were received (i.e., a total of 80 survey responses) for a response rate of 40.61 percent. No significant differences were found between the paper and on-line responses for any of the items used in this study. Of the surveys that were completed, four were later removed for excessive missing data resulting in a final sample of 76 or a final response rate of 38.56 percent.

The average age of the relationships was 13 years and ranged from 1 to 50 years. The average annual sales of the buying firms in 2004 were $75 million with a range of less than $1 million to more than $1 billion. Relative to firm size, 48 percent of the buying firms were small (less than $100 million in annual sales), 26 percent medium (annual sales of $101 million to $1 billion) and 26 percent large (annual sales exceeding $1 billion). The firms in our sample represented a wide range of industries and product classifications with 26 percent providing consumer products and services, 63 percent industrial products and services, and 11 percent distributors.

The Questionnaire and Variable Measurement

Dependent Variable. Trust was conceptualized as the degree of confidence that the parties have regarding each other's integrity and was measured by a four item scale modified from Sarkar et al. (2001) that evaluated the perceived level of integrity, fairness, and dependability of the firms participating in the relationship. Each item used a 7-point Likert scale that was anchored by 1 = "strongly disagree" and 7 = "strongly agree." Trust was computed as the sum of the individual item responses. The scale exhibited good internal consistency with a Cronbach's alpha value of .84 (Nunnally 1978; Peterson 1994).

Since one of the primary goals of this study was to examine the influence of goal congruence on trust we considered the possibility that, in more mature relationships, trust could have a residual effect on the level of goal congruence identified by the respondent (Seppanen et al. 2007). To address this concern, we organized our survey by measuring goal congruence immediately before measuring trust. By staging the questions in this manner, we emphasized goal congruence's impact on trust thereby limiting the residual effects (if any) of trust on goal congruence.

Independent Variables. Two independent variables were used in this study: mutual investments and goal congruence. Mutual investments involve the degree to which the firms had made investments in relationship specific assets (RSAs). In particular, mutual investments were measured by a two item scale modified from Rokkan et al. (2003) that asked informants to rate the degree to which both parties had made substantial investments of time and resources to develop the relationship. Each item used a 7-point Likert scale that was anchored by 1 = "strongly disagree" and 7 = "strongly agree." Mutual investments were computed as the sum of the individual item responses. Overall, the scale exhibited good internal consistency with a split-half reliability value of .85. Consistent with Jap (1999, p. 465), goal congruence was conceptualized as the extent to which the parties "perceive the possibility of common goal attainment." Goal congruence was measured using a four-item scale modified from Jap (1999) that evaluated the degree to which the respondent perceives that the buying firm and the selling firm have congruent goals. Each item used a 7-point Likert scale that was anchored by 1 = "strongly disagree" and 7 = "strongly agree." Goal congruence was computed as the sum of the individual item responses and exhibited excellent internal consistency with a Cronbach's alpha of .89 (Nunnally 1978; Peterson 1994).

Control Variables. In our model, we included four governance mechanisms that had been identified and studied in prior research (Wathne and Heide 2000). These are: supplier incentives, qualification, monitoring, and supplier lock-in. Because these mechanisms are frequently established by the buying firm at the onset of the relationship (Narayandas and Rangan 2004) and as such, are more "matter of fact" (e.g., objective) as opposed to abstract in nature, we used single item measures for each to avoid redundant items in our survey. To measure supplier incentives, respondents were asked to rate the degree to which their firm's agreements with the supplier included performance incentives. Respondents were also asked to identify if the supplier was initially required to undergo an extensive qualification program to verify the supplier's ability to meet his/her firm's needs. We also included an item, monitoring, to evaluate if the buyer regularly monitored the supplier's performance. Finally, the respondent was asked to identify the level of investment that the supplier had initially made in the relationship. Because such investments often have limited transferability to alternative relationships, they tend to "lock" the investor, in this case, the supplier, into one particular exchange relationship. For this reason, we called this supplier lock-in.

A common characteristic of these governance mechanisms is that they are often selected by the buying firm to protect its own interests (e.g., unilateral governance). Thus, by including these variables in our analysis, it was possible to contrast the effect that unilateral governance has on trust with those of mutual investments and goal congruence (bilateral governance). The measurements used in this study are identified in the appendix of this paper.

Validation of Measures. Several methods were used to evaluate the reliability and validity of our measures. In particular, we assessed our measures by examining the individual-item reliabilities and the convergent and discriminant validity of our measures relative to each construct.

To assess the individual-item reliabilities, we examined the loadings of the measures on their respective constructs. We looked for loadings of .70 or higher (implying a shared variance of at least 50 percent between the item and the construct) and found that all item loadings exceeded the .70 minimum limit suggested by Hulland (1999) demonstrating that our mutual investment and goal congruence measures had good individual-item reliabilities.

To evaluate the validity of our constructs, we computed composite reliabilities for each construct and looked for internal consistency values that exceeded .70 (Fornell and Larcker 1981). All of our constructs exceeded this limit indicating that the reliabilities of our constructs were acceptable (Hulland 1999). To assess the discriminant validity of our measures, we computed the average variance extracted (AVE) as recommended by Fornell and Larcker (1981). The AVE was .75 for mutual investments and .79 for goal congruence. Since both exceeded .50, we concluded that our measures exhibited acceptable levels of convergent validity (Barclay and Smith 1997). As an additional evaluation of convergent validity, we examined the individual item loadings to ensure that no single item loaded more heavily on another construct than it did on the construct it was intended to measure (Fornell and Larcker 1981). Based on the results shown in Table 1, we concluded that our mutual investments and goal congruence measures exhibited acceptable levels of convergent and divergent validity.

Finally, to investigate the fit properties of our measurement model, we performed a confirmatory factor analysis (CFA) using AMOS (6.0) on all variables using maximum likelihood estimation. The model exhibited a good fit (χ^2 = 3.76, degrees of freedom [df] = 8, root mean square error of approximation [RMSEA] = .00, $CI_{90\%}$ = .00 to .06, normed fit index [NFI] = .98, relative fit index [RFI] = .97, comparative fit index [CFI] = .99).

To evaluate for distortion due to a non-normal distribution, all variables in the model were

TABLE 1
Measurement Model Results[a]

Observed Variable/Items	Mutual Investments	Goal Congruence
Mutual Investment Item 1	**.75**	.51
Mutual Investment Item 2	**.75**	.45
Goal Congruence Item 1 (R)	.43	**.70**
Goal Congruence Item 2	.41	**.76**
Goal Congruence Item 3	.51	**.79**
Goal Congruence Item 4	.46	**.82**

[a] Results illustrate correlations of each item with its own scale (bold) relative to the other scale

Note: (R) indicates items that were reverse-coded.

tested for excessive skewness and kurtosis. This was done by calculating the skewness and kurtosis indices from SPSS, converting them to z-scores, and comparing the result to ± 2.58 for a .01 level test (Avlonitis and Panagopoulos 2005). All variables acceptably met this requirement. Based on this as well as the reliability/validity tests previously discussed, we concluded that the measures used in this study appropriately represented the focal constructs of interest.

Analysis

To evaluate the potential for multicollinearity, we initially examined the correlations among our variables (Hair et al. 1998). A review of the correlations shown in Table 2 revealed that no unusually large correlations existed between any of the independent variables. Furthermore, the largest variance inflation factor (VIF) for the independent variables in our model was 1.933 (for the Mutual Investments variable), which was smaller than the maximum limit of 10 identified by Neter, Kutner, Nachtsheim and Wasserman (1996). As a result, multicollinearity did not appear to be a problem.

We used OLS regression models to evaluate the relationship between trust and our independent variables, mutual investments, and goal congruence. We conducted hierarchical regression because it allowed us: 1) to examine the importance of mutual investments and goal congruence relative to trust while controlling for many of the unilateral (formal) governance mechanisms identified in earlier studies and 2) to evaluate the marginal effects of bilateral governance (e.g., mutual investments and goal congruence) on trust.

FINDINGS

The results of the hierarchical regression analysis used to test the effect of our control variables (Supplier Incentives, Supplier Lock-in, Monitoring, and Qualification) and Mutual Investments and Goal Congruence with Trust are shown in Table 3.

Model 1 explained about 18 percent (R-squared = .184; adjusted R-squared = .138) of the variance in trust. Of the four control variables, only Supplier Lock-in was significantly related to Trust ($b = .37$, $p < .01$). These findings suggest that the effect of unilateral governance on trust is limited to the supplier's investment(s) in the relationship; however,

TABLE 2
Means, Standard Deviations, and Correlation Matrix

Variable	Trust	Supplier Incen-tives	Supplier Lock-in	Monitoring	Qualification	Mutual Investments	Goal Congruence
Mean	5.26	4.49	4.99	5.34	4.64	5.52	4.90
Standard Deviation	1.06	1.62	1.40	1.34	1.72	1.08	1.16
Avg. Variance Extracted						.75	.79
Trust	1.00						
Supplier Incentives	0.24*	1.00					
Supplier Lock-in	0.41**	0.39**	1.00				
Monitoring	0.21	0.28*	0.42**	1.00			
Qualification	0.17	0.38**	0.34**	0.38**	1.00		
Mutual Investments	0.51**	0.52**	0.54**	0.30**	0.44**	1.00	
Goal Congruence	0.73**	0.33**	0.48**	0.33**	0.28*	0.50**	1.00

*p<0.05; **p<0.01; N=76. All variables have no missing values.

given that supplier lock-in was no longer significant once Mutual Investments was added in Model 1, this relationship may be an artifact of the mutual investments made by the parties.

Our first variable of interest, mutual investments, is included in Model 2. Model 2 explained about 30 percent (R-squared = .304; adjusted R-squared = .255) of the variance in trust. The R-squared change (.120) over Model 1 (the base model) (F-value = 12.125) was significant at a $p < .01$ level. None of the control variables, including supplier lock-in, were found to be significantly related to trust; however, as hypothesized, mutual investments was positively and significantly related to trust ($b = .46$, $p < .01$). Thus, our results support H_1 that mutual investments in relationship specific assets are positively related to the level of trust between buying and selling firms.

In Model 3, our second variable of interest, goal congruence was added to Model 1. Model 3 explained about 55 percent (R-squared = .546; adjusted R-squared = .513) of the variance in trust. Similar to Model 2, the R-squared change (.362) over Model 1 (F-value = 55.784) was significant at a $p < .01$ level; moreover, none of the control variables were significantly related to trust. However, as predicted, the relationship between goal congruence and trust was positive and significant ($b = .70$, $p < .01$). Thus, our results support H_2 that goal congruence is positively related to the level of trust between buying and selling firms.

Finally, in Model 4, both mutual investments and goal congruence were added to Model 1. Model 4 explained about 58 percent (R-squared = .583; adjusted R-squared = .547) of the variance in trust. The R-squared change (.399) over Model 1 (the based model) (F-value = 33.027) was significant at a $p < .01$ level. Consistent with our earlier results, mutual investments ($p < .05$) and goal congruence ($p < .01$) remained positively related to trust; moreover, as predicted by our proposed framework, the effect size of mutual investments dramatically falls from .46 to .26 when goal congruence is added to Model 2 thereby demonstrating the critical role that congruent goals play in the development of trust in buyer-seller relationships.

TABLE 3
Hierarchical Regression Models - The Influence of Governance on Trust

Variables	Model 1	Model 2	Model 3	Model 4
	Trust			
Supplier Incentives	0.09	-0.05	-0.01	-0.07
	(0.72)	(-0.44)	(-0.01)	(-0.78)
Supplier Lock-in	0.37***	0.20	0.12	0.04
	(2.94)	(1.60)	(1.17)	(0.42)
Monitoring	0.03	0.04	-0.05	-0.04
	(0.27)	(0.36)	(-0.52)	(-0.41)
Qualification	0.01	-0.09	-0.05	-0.10
	(0.01)	(-0.82)	(-0.52)	(-1.10)
Mutual Investments		0.46***	____	0.26**
		(3.48)		(2.48)
Goal Congruence			0.70***	0.64***
			(7.47)	(6.79)
Change in R-squared		0.120	0.362	0.399
F-value for Change in R-squared		12.125***	55.784***	33.027***
F-value significance		0.001	0.000	0.000
R-squared	0.184***	0.304***	0.546***	0.583***
Adjusted R-squared	0.138	0.255	0.513	0.547

† $p<0.10$; ** $p<0.05$; *** $p<0.01$
N = 76 in all models. For each variable, the reported values are standardized betas with

Overall, the results of this study provide initial empirical support for the governance-trust relationship proposed and developed in this paper. First, with the exception of supplier lock-in, none of the unilateral governance mechanisms examined in this study had a significant effect on trust. Since the effect of supplier lock-in dramatically decreased once mutual investments was added to Model 1, we suspect that the significance of supplier lock-in in Model 1 occurred because it represented the suppliers' component of mutual investments and as such, was merely a residual outcome derived from the mutual investments made by the parties. Thus, our findings suggest that unilateral governance mechanisms have little influence in establishing trust in buyer-seller relationships; in fact, the negative signs associated with supplier incentives, monitoring, and qualification in Model 4 (b = -.07, b = -0.04, and b = -0.10 respectively) indicates that unilateral governance may actually detract from the development of trust though additional research would be needed to establish this conclusion.

Second, based on the magnitudes of the standardized beta coefficients in Model 4, goal congruence had the largest effect on mutual trust (b = .64). In fact, 36 percent of the total variance in trust was explained by goal congruence. Though this intuitively makes sense, little work has been done to empirically examine the impact that goal congruence has on trust in a buyer-seller context. This finding suggests that trust is very likely to exist when buying and selling firms have congruent goals.

Finally, as our proposed framework would predict, the effect size of mutual investments was found to dramatically fall (b=.46 to b=.26) when goal congruence was added to Model 2. This result was expected because mutual investments are theorized to set the stage for goal congruence to be established and for this reason, the effect of mutual investments on trust should decrease as goal congruence (the more dominant mechanism) increases in the relationship. To statistically evaluate this effect we regressed the interaction of mutual investments and goal congruence onto trust. The resulting coefficient (b= -.19) for the interaction term was negatively and significantly related to trust ($p < .05$, single-tailed test) thereby supporting our proposed model.

Thus, our results support our contention that mutual investments play a more far-reaching role in relationship development than currently proposed in the marketing literature. In particular, mutual investments not only reduce opportunistic potential by "locking in" the parties but also create a more unified relational orientation that enhances the development of goal congruence and trust.

DISCUSSION

We began this study by asking what influence governance has on the development of trust in buyer-seller relationships. Researchers have long recognized the importance of formal and informal governance in terms of relationship development and trust building. However, the interplay among the various forms of formal and informal governance on the development of trust has remained largely unexamined.

In this paper, we developed a TCA-based argument that links governance to trust in buyer-seller relationships. We proposed that the mutual RSIs made by the parties fundamentally change their orientation toward the relationship from that of optimizing individual outcomes to optimizing joint or relational outcomes. We further proposed that mutual investments set the stage for a more "extensive" vision of maximizing relationship returns to be established by the parties. As a result, a common goal of maximizing relational benefits aligns the firms and provides direction to the relationship.

Consistent with our proposed mutual investments-trust relationship, we hypothesized that the mutual investments made by the firms and the goal alignments (i.e., goal congruence) created from these investments have a positive impact on the level of trust between buying and selling firms. We found initial empirical support for our hypotheses based on a sample of industrial buyer-seller relationships. Our study further suggests, as proposed by Ring and Van de Ven (1999), that many of the formal governance mechanisms used in the early stages of the relationship may be relaxed as the level of mutual investments and goal congruence increase over time. This provides an opportunity for the costs associated with controlling opportunism to be reduced as the relationship matures though formal controls (e.g., monitoring) may be retained to address situations when informal controls fail.

Research and Managerial Implications

The results from this research have far reaching implications for both researchers and managers. First, from a research standpoint, the theoretical argument developed in this paper advances our understanding of the importance of mutual investments in buyer-seller relationships. By doing so, we extend the current thinking about the role that mutual investments play in relationship formation and then develop a TCA-based theoretical argument that supports many of the findings in the marketing literature (Gundlach et al. 1995; Heide 1994; Heide and John 1992; Lusch and Brown 1996). Essentially, we posit that mutual investments enable a fundamental reorientation to occur because of their ability to create interdependencies between the parties in which both either "sink or swim" together. Thus, the motivation of the parties shifts from protecting oneself to protecting the *relationship* from external threats (i.e., new competitors and technology) while also focusing their collective efforts to that of maximizing mutual benefits thereby encouraging unity of purpose and higher levels of trust. To date, few studies have considered the development of trust in buyer-seller relationships from this perspective. Moreover, this study provides an important theoretical link between the economic and social research streams that to this point has not been considered in the extant literature.

Second, our study is one of a few to empirically evaluate the impact that goal congruence has on trust in buyer-seller relationships. Our results suggest that goal congruence is significantly related to trust; in fact, the degree to which the parties have congruent relationship goals appears to be a major factor in the level of trust that ultimately exists between buying and selling firms. This is because goal congruence mitigates the potential for opportunism by acting as a "self enforcing" agreement (Telser 1980); moreover, from a motivational perspective, goal congruence encourages the parties to search for and identify new ways to increase positive relational outcomes resulting in closer, more collaborative relationships (Jap 1999).

From a managerial perspective, our results provide useful insights for both suppliers and buyers. For suppliers, our findings suggest that they look for and identify ways to integrate their capabilities with those of the buyer in order to expand the value potential of the relationship. For example, if a supplier is very knowledgeable about a particular market that the buyer is not, the supplier may be able to identify ways to combine their resources and capabilities (Moller 2006) with those of the buyer to introduce a new product offering to that market. As part of this process, the supplier should attempt to interact with the buyer on a regular basis in order to establish an extensive social network between themselves and the buying firm. This requires the buying firm to make social investments in the relationship, which according to our results enhance goal congruence and trust while also improving the supplier's ability to learn more about the buyer's capabilities and needs. In early relationships, investments in physical assets should be minimized unless they can be linked to a substantial increase in relationship value and even then, investments that are mutually made by both parties should be preferred over investments made exclusively by the supplier. For example, mutual investments made to develop a conveyor system between the buyer's and seller's manufacturing facilities to improve product flow and transportation costs should be given priority over an investment by the supplier in specialized tooling to support the buyer's inventory storage facility. Moreover, physical investments in projects that have low value potential should be avoided by pursuing other less investment intensive alternatives. For instance, instead of making a major investment in developing a sophisticated JIT system to control inventory levels (Frazier et al. 1988) between themselves and the buyer, the supplier may propose a manually driven and less-investment oriented kanban system that can just as effectively do the job (Womack and Jones 1996).

Buyers that are interested in establishing a relationship with a "high priority" supplier should attempt to identify and encourage the pursuit of "joint" value creation opportunities. If necessary, the buyer should encourage that mutual relationship investments be made by both parties and when situations arise that the supplier needs to make individual investments to the relationship (e.g., specialized tooling, etc.), the buyer should offer to make an offsetting investment whenever possible. Most importantly, similar to the supplier, the buyer should attempt to identify opportunities for both parties to work together on new, high value potential opportunities in order to facilitate goal congruence and trust development.

Finally, in established, high potential relationships, both parties should attempt to develop integrative policies that are designed to establish mutually beneficial outcomes. To do so, both parties might schedule periodic meetings to learn more about each other, to identify any impediments to relationship success, and to discuss their joint expectations regarding the relationship. For instance, gaining a clear understanding of each party's strategic goals and objectives should serve to provide the basis for determining if goal alignments are possible. Discussion or negotiation may ensue to bridge any goal variance gaps that may be uncovered (e.g., lower prices) or to take advantage of shared goals (e.g., developing new markets). Initially, formal governance may be employed to protect the parties and to encourage cooperation; however, as the relationship develops, the firms may be able reduce their dependence on formal controls which will allow them to reduce costs while maintaining high levels of trust.

Limitations and Future Research

This study had a few limitations. First, the sample used in this study was fairly small (n = 76). Though this makes it more difficult to obtain significant results, both of our independent variables were strongly related to trust. This is because: 1) the effect sizes (e.g., b = .26 and b = .64) of both variables were large with mutual investments and goal congruence respectively representing 20.5 percent and 62.0 percent of the variance in trust explained by our full model and 2) the high homogeneity of our sample resulting from our decision to use NAPM purchasing managers and agents rather than informants identified from mailing lists who may have higher levels of variability regarding their knowledge of their firms' supplier relationships. Thus, the small sample size in this study makes it more difficult to obtain significant results; as such, our results are conservative in that they reflect the large effect sizes of our independent variables rather than the smaller standard errors associated with large samples.

Second, purchasing agents and managers were used in this study to provide information regarding their firms' supplier relationships. Though this is not an unusual practice in relationship studies (Jap and Ganesan 2000; Lambe et al. 2002; Sarkar et al. 2001), future studies may consider gaining additional insights by collecting relationship data from both buyers and sellers in a dyadic fashion. Additionally, more insights may be gained by collecting longitudinal data to test the relationship between governance and trust over time.

Finally, though our model explains 55 percent of the total adjusted variance in trust, other factors may also play a role in its development. Since our results suggest that mutual investments and goal congruence are strongly related to the level of trust between buying and selling firms, these two variables should be incorporated in future research studies. We further wish to encourage researchers to more extensively examine the impact of mutual investments and goal congruence on trust in other types of marketing relationships. For example, the sales manager-salesperson relationship represents a research context in which investments made by both parties in training and skills development may have major effects on goal congruence and trust.

To our knowledge, this is one of the first studies to specifically examine the impact that different governance mechanisms have on the development of trust in buyer-seller relationships. Moreover, the governance-trust relationship developed here represents an important initial effort at linking together the economic and social aspects of buyer-seller relationships. Our results suggest that in addition to the role that mutual investments play in the governance of relationships, they play just as important if not more important role in encouraging higher levels of goal congruence and ultimately trust. Thus, consistent with Rindfleisch and Heide's (1997) insights, the results of this study suggests that examining the effects of governance relative to the development of trust is a fruitful area of future research. For this reason, we hope that this study will inspire other scholars to pursue this important area of research.

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APPENDIX

Trust (Cronbach's alpha = .84) *(7-point Likert scale anchored by 1= "strongly disagree" to 7 = "strongly agree")*

1. Both of us (both firms) are honest and truthful with each other
2. We treat each other fairly and justly
3. Both of us are cautious in dealing with each other (Reverse coded)
4. We deal with each other in a trustworthy manner

Mutual Investments (Split-half reliability = .85) *(7-point Likert scale anchored by 1 = "strongly disagree" to 7= "strongly agree")*

1. We (both firms) have made significant investments dedicated to this relationship
2. Both of us have made substantial investments of time and resources to develop this relationship

Goal Congruence (Cronbach's alpha = .89) *(7-point Likert scale anchored by 1 = "strongly disagree" to 7= "strongly agree")*

1. We have different goals (Reverse coded)
2. We support each other's objectives
3. We have compatible goals
4. We share the same goals in this relationship

Control Variables *(7-point Likert scale anchored by 1 = "strongly disagree" to 7= "strongly agree")*

1. **Supplier Incentives**
   The agreement between us includes incentives for this supplier to perform well
2. **Supplier Lock-in**
   This supplier has made large investments dedicated to this relationship
3. **Monitoring**
   My firm regularly monitors this supplier's performance
4. **Qualification**
   This supplier had to undergo an extensive qualification process to verify its ability to meet my firm's needs