Exchange Hazards, Relational Reliability, and Contracts in China:

The Contingent Role of Legal Enforceability

Kevin Zheng Zhou
School of Business
University of Hong Kong
Pokfulam, Hong Kong
Tel: 852-2859-1006
Fax: 852-2858-5614
Email: kevinzhou@business.hku.hk

Laura Poppo [a]
School of Business
University of Kansas
Lawrence, Kansas 66047
Tel: 785-864-1814; Fax: 785-864-5328
Email: lpoppo@ku.edu

Jan, 2010

Forthcoming at *Journal of International Business Studies*

Exchange Hazards, Relational Reliability, and Contracts in China:
The Contingent Role of Legal Enforceability

Abstract

Building on institutional and transaction cost economics, this article proposes that legal enforceability increases the use of contract over relational reliability (e.g. beliefs that the other party acts in a non-opportunistic manner) to safeguard market exchanges characterized by non-trivial hazards. The results of 399 buyer-supplier exchanges in China show that 1) when managers perceive that the legal system can protect their firm's interests, they tend to use explicit contracts rather than relational reliability to safeguard transactions involving risks (i.e. asset specificity, environmental uncertainty, and behavioral uncertainty), and 2) when managers do not perceive the legal system as credible, they are less likely to use contracts and instead rely on relational reliability to safeguard transactions associated with specialized assets and environmental uncertainty, but not those involving behavioral uncertainty. We further find that legal enforceability does not moderate the effect of relational reliability on contracts, but does weaken the effect of contracts on relational reliability. These results endorse the importance of prior experience (e.g., relational reliability) in supporting the use of explicit contracts, and alternatively suggest under conditions of greater legal enforceability, the contract signals less regarding one's intention to be trustworthy but more about the efficacy of sanctions.

Mahoney (2005: 109) advances that "the awarding of the Nobel Prize in economics to Douglass North suggests that, at the least, part of the economics profession has (implicitly) accepted that the evolution of institutional environment toward economic efficiency often fails." The conventional view of economic development suggests that formal institutions, such as courts and contracts, enable economies to grow and prosper because they can govern complex market transactions more efficiently than informal institutions, which includes the use of personal relationships that develop through close connections, ties, and prior experiences (North, 1990; Williamson, 1996). Transaction cost efficiency reinforces the evolutionary path of institutional change since parties create and endorse practices and institutions that enable greater administrative efficiency and thus lower transaction costs (Li, Park, and Li, 2003; Peng, 2003; Williamson, 1996).

However, as alluded to in the opening quote, this view is strikingly at odds with the realities of institutional change because of political and cultural obstacles (Mahoney, 2005). As North (1990) argues, the inability to develop a court system that can enforce contracts is "the most important source of both historical stagnation and contemporary underdevelopment in the third world" (see Mahoney, 2005: 122). Legal systems that enforce contract law do not automatically appear in emerging economies (North, 2005). Beliefs of favoritism and unpredictability may continue to mark some legal jurisdictions and thereby dampen the integrity of the courts, which in turn undermines the use of contracts. If formal legal institutions are unpredictable, managers may rely on informal, personal-based mechanisms to substitute the institutional void and coordinate exchanges (Peng, 2003; Xin and Pearce, 1996).

In addition, traditions and customs may impede managers' willingness to embrace new practices and institutions (North, 2005). In particular, China's cultural heritage of personal

connections and favors may not support the use of formal institutions, such as contract law and contracts (Boisot and Child, 1996; Child et al., 2003; Xin and Pearce, 1996). Prior research emphasizes the advantages of coordinating transactions through informal mechanisms, such as those based on personal relationships. Because prior experiences form a credible basis to predict future behavior, perceptions of economic exchange risk decline (McMillan and Woodruff, 1999; Xin and Pearce, 1996). Moreover, personal connections and ties foster stability and enhances bilateral coordination, especially in times of uncertainty (Keister, 2001; Zhou et al., 2003).

These alternative perspectives illustrate a significant research gap: Whether and in what conditions do managers rely more on formal institutions (e.g., contracts) over informal institutions (e.g., personal relationships, trust) to safeguard transactions in emerging economies? Our empirical inquiry attempts to fill this gap by examining whether variations in perceptions of legal enforceability in China affect the use of contracts and relational reliability.[1] We define *relational reliability* as beliefs that the other party involved in the market exchange will act in a non-opportunistic manner, such as not taking advantage of incomplete information, not profiting at the other's expense, or being even handed in negotiations. Whereas previous studies demonstrate the benefits of prior ties in emerging economies (e.g., Li et al., 2008; Peng and Luo, 2000), they do not employ a comparative governance choice approach to examine whether managers match exchange hazards with their choice of relational reliability and contracts. Without a comparative assessment, the debated path and direction of institutional change for emerging economies remains unanswered. That is, if the court system is perceived as a credible (e.g., it will enforce contracts), will managers choose contracts over relational reliability to safeguard their transactions? In contrast, will a cultural heritage that supports doing business

---

[1] We acknowledge Prof Alain Verbeke for the specific term of 'relational reliability,' commonly referred to as trust. Some researchers posit that relational reliability is a more meaningful and useful concept than the term 'trust' to characterize business relationships (Verbeke and Greidanus 2009; see also Williamson, 1996).

with personal relationships persist even when credible courts exist (Boisot and Child, 1996; Child et al., 2003)?

A second research gap is on how legal enforceability affects the relationship between relational reliability and contracts. While the governance choice perspectives outlined above view contracts and personal relationships (e.g. trust) as discrete structural choices, an alternative logic advances that contracts and such relational practices are related to one another (Doz, 1996; Poppo and Zenger, 2002; Faems et al., 2008). Unknown, however, is how legal enforceability affects this relationship. A prevailing view for doing business in emerging economies is that transacting with known parties is a necessary precondition to more complex, risky exchanges and thus more explicit contracts (Boisot and Child, 1996; Zhou et al., 2003). Based on the institutional logic (Peng, 2003), however, we extend that the effect of relational reliability on contracts may weaken as perceptions of legal enforceability increase: an effective legal system may mitigate the need to rely on relational reliability as a vehicle for governing more complex contractual exchanges. Related, others posit that contracts may function as a tangible sign for commitment which fosters trusting relationships (Woolthuis et al., 2005). Extending this logic, we advance that the signaling value of contracts necessarily weakens under a regime of legal enforceability as contracts signal more about the efficacy of sanctions but less of trustworthiness.

Taken together, our efforts enrich the development of institutional theory by examining whether a transaction cost logic characterizes governance choices in China and how legal enforceability influences the relationship between relational reliability and contracts. Figure 1 depicts our conceptual model.

Insert Figure 1 about here.

RESEARCH CONTEXT

Emerging economies typically are characterized by rapid economic development but also volatile changes in their social, legal, and economic institutions, which create serious strategic problems for firms (Hoskisson et al., 2000). In particular, concerns about property right protection, legitimate returns, and fair competition arise when adequate legal protection and law enforcement are lacking. For China, though economic reforms since 1979 clearly have transformed it toward a market-based economy, the "state-building" of market reform inevitably leads to a complicated, intertwined network between the government and the market. As a result, legal enforceability varies greatly from region to region and from industry to industry (Child and Mollering, 2003; Luo, 2007).

Legal Reform in China

In the past 30 years, China has developed a legal system to support its market-driven initiatives. Unlike other transitional economies such as Russia, China did not create a political vacuum by disrupting its socialistic political structure to create a market-based economy; instead, it retained a strong central government that has directed legal reforms. In particular, in 1981, the government created its first Economic Contract Law, which endorsed the formation and implementation of contracts (Lubman, 1999). Subsequent laws have addressed exchanges between domestic and foreign firms, as well as technology transfer and cooperation (Zhou et al., 2003). In 1999, a new contract law took effect that provides a uniform legal framework for economic contracts.

Legal Enforceability in China

Despite continued institutional reform since 1979, the central government has not created a stable legal structure to enforce contract law throughout its provinces; enforcement is subject to particularism and personal accommodation due to (1) intervention from local or regional

government officials, (2) the lack of independent law enforcement, and (3) at times, frequent

unjustified law changes (Luo, 2007). Officials may intervene in business operations in an

inconsistent, arbitrary, or at times corrupt agenda (Child and Mollering, 2003). A local

government official, for example, may decide to mandate an operational direction or position for

a firm operating in its jurisdiction. If management chooses not to comply with the directive, the

firm must pay a tax/fee to the local government that is greater than the value of the company. In

effect, the local government can cause a firm to go bankrupt.[2] Because of the involvement and

power of government officials, it is not uncommon for some companies to designate a high-

ranking manager to function as a boundary spanner or to locate some operations in close

proximity to the central government (Li et al., 2009).

Case studies also describe the inconsistent enforcement of contract law and lack of

property rights protection; in particular, political officials representing the local government

often dismiss contract law when conflict arises and tend to accommodate the desires of

companies with strong political connections (Li, 2004). Empirical work shows that Chinese

businesses benefit from strong political ties with government officials, presumably because

government officials personally accommodate their needs (Peng and Luo, 2000). Thus, the

regional government, which is actively involved in the operational and strategic decisions of

businesses in its jurisdiction (Luo, 2007), can undermine the integrity of the legal system. As a

result, legal enforceability varies by regions and locations, which makes it a pivotal factor that

affects business operations and governance. China thus serves as a rich context for examining

how variations in legal enforceability influence the governance choices of contracts and

relational reliability.

---

[2] This example is based on the information the authors obtained from field interviews with senior managers in China.

CONCEPTUAL DEVELOPMENT

Institutional theory indicates that the comparative efficacy of alternative governance choices depends on a broad set of interrelated factors, including the institutional environment that defines the rules and beliefs of socially acceptable economic behavior, the organizations and constituents that articulate and impose rules or norms of legitimate behavior, and the individuals with whom behavioral preferences originate (North, 1990; Williamson, 1996). Institutions "include any form of constraint that human beings devise to shape human interaction" (North, 1990: 4), which can be formal, such as rules, or informal, such as conventions or codes of conduct, and are influenced by organizations and their constituents.

According to institutional economics, as markets develop, formal institutions based on law and contracts should supplant a traditional reliance on informal mechanisms, such as personal relationships or trust[3]. The logic behind this claim states that formal institutions provide a superior means to protect property rights and avoid the risks inherent in many market exchanges (North, 1990; Peng, 2003). Assuming a well-established legal system exists, transaction cost economics (TCE) then suggests that efficient governance choices result from matching governance structures, which vary in their effectiveness, with exchanges, which differ in their attributes (Williamson, 1996).

Central to this logic is the notion that exchange hazards trigger the potential for increased transaction costs which undermines the efficiency of economic exchange. More recently, Verbeke and Greidanus (2009) propose the concept of bounded reliability as a more complete set

---

[3] There are a variety of informal governance mechanisms, such as reputation, bonds, network ties, professional pressures, etc. (Verbeke, 2003). This study focuses on relational reliability because it reflects the relational quality of informal mechanisms (Poppo, Zhou, and Ryu, 2008; Uzzi, 1997), is linked to trust, a focal governance mechanism for research on inter-organizational exchanges (Zaheer and Harris, 2005), and as such is theorized as an alternative or substitute to formal governance mechanisms (e.g. contracts, vertical integration) (see Dyer and Singh, 1998; Poppo and Zenger, 2002; Peng, 2003).

of rationales underlying the transaction costs associated with coordination failures. While Verbeke and Greidanus (2009) focus on coordination failures within the MNE, their framework readily applies to market failures: actors may exhibit ex post unreliable behavior and 'break promises or agreements' due to 1) opportunistic behavior, 2) an ex post preference reversal that leads one party to reprioritize terms or aspects of the agreement, and 3) an ex post preference reversal due to an overcommittment which means one party can no longer fulfill the original agreement. Thus, a variety of situations could increase transaction costs, which may be intentionally opportunistic or not. That is, Verbeke and Greidanus (2009) argue that 'benevolent' preference reversals are not opportunistic ploys, but simply ex post adaptations triggered by reprioritizations or over commitments.

According to Williamson (1996: 30), an obvious governance solution to situations that increase transaction costs is to write more explicit contracts that harmonize "the contractual interface that joins the parties, thereby to affect adaptability and promote continuity." *Explicit contracts* refer to formal agreements that specify and detail the obligations of each party, such as their roles and responsibilities, performance expectations, monitoring procedures, and dispute resolution processes (Barthelemy and Quelin, 2006). In doing so, contracts seek to *control* behavior by specifying a mutually agreed upon set of behaviors or activities and sanctions for non-compliance (Masten, 1993; Poppo and Zenger, 2002).

An alternative function of contracts is *coordination* – the contract is a 'technical aid' for managing the exchange relationship (Carson, Madhok, and Wu, 2006; Woolthuis et al, 2005). For example, the contract may specify shared goals, delivery dates and information related to system interactions (Mayer and Argyres, 2004), specific coordination mechanisms such as steering committees, project groups, or face to face meetings (Hoetker and Mellewigt, 2009), as

well as processes for resolving disputes, setting goals, and adapting exchanges to unforeseen contingencies (Poppo and Zenger, 2002). These coordination devices foster more frequent communication and a greater flow of information. Such initiatives may also reduce preference reversals because when 'commitments are kept top of the mind', biases that lead to preference reordering are minimized (Verbeke and Greidanus, 2009).

Explicit contracts may or may not be wholly complete. If the contract is complete in accordance with the classical view of contracts, it specifies obligations of the parties in different states of the world (Macneil, 1978; Ring and Van de Ven, 1994). However, as exchange hazards increase, contracts may become less complete because it is impossible to know all future states (Hart and Moore, 1999). In such situations, hazards trigger more incomplete contracts that explicate rules and processes for resolving disagreements and addressing unexpected events (Hagedoorn and Hesen, 2007; Macneil, 1978). In general, transaction-based logic posits that exchange hazards promote the use of more explicit contracts. Because of the costs of writing, enforcing, and monitoring contracts, parties further specify contracts only when the risk is significant (Joskow, 1988; Poppo and Zenger, 2002).

Legal Enforceability, Exchange Hazards, and Contracts

TCE identifies three major types of exchange risks: asset specificity, environmental uncertainty, and behavioral uncertainty. *Asset specificity* refers to the specialized portion of investments that cannot be redeployed if the exchange relationship terminates prematurely (Williamson, 1996). It increases the risk of opportunistic behavior because one party may haggle or hold up the other to capture a larger portion of the quasi-rent associated with the specialized investment (Williamson, 1996). Similarly, it signals the risk associated with adapting the transaction should parties no longer choose to honor the agreement because their preferences

change over time (Verbeke and Greidanus, 2009); that is, a supplier may not follow through on an agreement because poor planning lead to an over commitment of resources or an emergent conflict lead to a reordering of priorities. As asset specificity increases, more explicit contracts eliminate or attenuate costly bargaining over the profits earned from specialized assets (i.e. opportunism) and protect parties from the costs associated with preference reversals, such as the costs associated with pre-mature termination, scaled-back investments, or a significant drop in volume. Consistent with this logic, Reurer and Arino (2007) find that contracts are more likely to contain explicit pre-termination, arbitration, and lawsuit provisions for more asset-specific transactions.

Environmental uncertainty refers to unanticipated, unpredictable changes in circumstances surrounding an exchange. It challenges exchange coordination by creating the need to adapt operations and strategies in situations fraught with incomplete and asymmetric information (Krishnan, Martin, and Noorderhaven, 2006). Thus, uncertainty arising from bounded rationality can be a mitigating source of preference reversals and/or opportunistic behavior. When the environment is highly uncertain, more explicit clauses facilitate adjustments as events unfold and avoid constant renegotiations (Masten, 1993). Related, formalizing roles and processes that support periodic joint planning sessions alleviates costs associated with preference reversals (Verbeke and Greidanus, 2009). Empirically, Barthelemy and Quelin (2006) find that the greater the uncertainty about future needs, the more explicit the contract regarding contingencies, which fosters adaption of the exchanges given that level of uncertainty.

Behavioral uncertainty occurs when one party cannot effectively monitor or measure the collective performance of the other. When performance is difficult to measure, parties have incentives to limit their efforts, because their partner cannot accurately measure and reward

productivity. Alternatively, because of the lack of explicit information, parties cannot readily

determine courses of actions should preference reversals occur (Verbeke and Greidanus, 2009).

To mitigate these costs, parties draft more explicit contracts regarding non-performance,

incentives, the roles and responsibilities of each party, and periodic monitoring or reviews

(Krishnan et al., 2006).

The preceding logic indicates that parties choose more explicit contracts as exchange

hazards grow increasingly consequential. Critical to this logic is the assumption that the legal

system enforces contracts effectively. If laws are not enforced in a consistent manner but instead

are subject to particular circumstances, legal institutions cannot create the necessary level of

credibility, stability, and certainty to support the use of contracts (North, 1990; Peng, 2003). At

the firm level, Luo (2007) indicates two major sources that make managers perceive poor legal

enforceability in China. First, less developed geographic areas generally have weaker legal

systems, poorer legal services, and lower law enforceability, in which the local governments are

more likely to interfere with companies' operations. Second, political ties and connections with

government officials play a pivotal role in China. When legal institutions lack predictability and

can be readily influenced by managerial requests, firms with fewer political connections or ties

are likely to be disadvantaged. As a result, managers with fewer connections with local judiciary

and government authority will perceive a lower level of legal enforceability.

For our purposes, strong (weak) *perceived legal enforceability* means that one party

perceives that the court system can (cannot) protect their company's financial interests when

doing business with another company. Consistent with the institutional and TCE logics, we posit

that weak legal protection significantly reduces a firm's reliance on contracts to mitigate the risks

of exchange hazards. First, because a weak legal system provides little legal recourse for victims

of opportunistic conduct or for preference reversals that negate the original terms of the agreement, firms are unlikely to use contracts to safeguard their transaction-specific investments. When irresolvable differences exist and premature termination occurs, firms are not confident the courts will intercede to divide the assets in an equitable manner (Luo, 2007). Second, environmental uncertainty requires exchange partners to monitor changes and to adjust their strategies accordingly. Such changes imply that the original terms of the agreement are modified to accommodate the change. However the use of formal procedures to resolve changes or disputes in an equitable or timely fashion cannot be easily enforced with a weak legal system. For example, explicit contracts cannot guarantee the parties will disclose private information to facilitate equitable adjustments or periodically meet for joint activity planning to ease the costs associated with preference reversals. Alternatively if exchange partners do not comply with the terms of the contract, companies cannot be certain that the courts will uphold sanctions against those misbehaviors (Child and Mollering, 2003). Third, ineffective courts cannot enforce the use of contractually specified remedies for difficult performance measurement, such as the disclosure and audit of private information. Thus, when the legal system is weak, parties are unlikely to craft more explicit more explicit mechanisms to monitor or review the supplier's actions and decisions. In summary,

> **H1a**: The relationship between asset specificity and contract explicitness is *stronger* when perceived legal enforceability is high rather than low.
> **H1b**: The relationship between environmental uncertainty and contract explicitness is *stronger* when perceived legal enforceability is high rather than low.
> **H1c**: The relationship between behavioral uncertainty and contract explicitness is *stronger* when perceived legal enforceability is high rather than low.

Legal Enforceability, Exchange Hazards, and Relational Reliability

In interorganizational relationships, relational reliability prompts exchange parties to hold a collective, long-term orientation and to display a willingness to rely on and be vulnerable to the

other organization (Rousseau, Burt, and Camerer, 1998). As such, relational reliability operates as a governance mechanism that sanctions exchange behavior from opportunistic behavior. For simple exchanges with low levels of exchange hazards, relational reliability is unnecessary because the risk of opportunism must be present to experience benefits from relational reliability (Bradach and Eccles, 1989). Thus, matching risk and relational reliability can function as a preemptive strike against losses from opportunistic behavior, and managers increasingly rely on relational reliability to attenuate potential losses from opportunistic behavior (e.g. Anderson and Weitz, 1992; Bercovitz et al, 2006; Poppo and Zenger, 2002).

The primary benefit of relational reliability is that parties know what to expect from the other; the party has an expectation for how the other will act in the future. Prior relationships and interactions, a shadow of the past, creates a social institution capable of building relational reliability (e.g. Granovetter, 1985; Gulati, 1995). Through the accumulation of exchange-specific experiences a party develops an expectation of the other's behavior or type (e.g. Larson, 1992; Zajac and Olsen, 1993). Once developed the social-psychological bonds of norms, sentiments and friendships as well as the faith in the morality and goodwill of others reinforces and supports it use (Ring and Van de Ven, 1994; Uzzi, 1997). More recent empirical work shows that the past plays a facilitating, albeit indirect role in producing relational reliability through its effect on a shadow of the future: that is, expectations of future business figure more directly, and thus, prominently than a shadow of the past in determining relational reliability (Poppo, Zhou, and Ryu, 2008). Thus, relational reliability is entrenched in social relationships with strong conventions and expectations of future interaction.

While creating perceptions of intention, reliability, and trustworthiness occupies a historical past in China and coordinates business deals for thousands of years (Child and

Mollering, 2003; Xin and Pearce, 1996), we advance that perceptions of legal enforceability are likely to affect the use of relational reliability. In particular, managers likely rely on relational reliability to safeguard their transactions when legal institutions are perceived as weak. If legal enforcement is unreliable and third-party verification of information is not available, parties will not seek greater use of contracts because distrust of not only rules but also public information arises (Luo, 2007). Due to the lack of formal legal-supporting institutions, firms often resort to informal, trust-based relationships to substitute the institutional void, settle disputes, and protect their business needs (Boisot and Child, 1996; Li et al., 2008). Armed with positive expectations about the other party's reliability, predictability, and motives, parties have greater assurances that promises and agreements with be honored by both parties. Thus, they are can rely on relational reliability to coordinate behavior within the economic exchange. In addition since personal relationships enable the exchange of richer and more detailed information, trusted parties realize lower search costs and can make more informed decisions. Thus, relational reliability facilitates coordination and adaptation of economic exchanges.

Consistent with this position many advocate the use of prior personal experiences for transacting in emerging economies that lack strong legal systems. Because prior experience forms a credible basis to predict future behavior, perceptions of economic exchange risk decline, so that for example, bank lenders are more likely to lend credit to reliable parties (McMillan and Woodruff, 1999; Xin and Pearce, 1996). When facing uncertainty or difficult performance measurement, companies turn to their trusted partners for timely information sharing and speedy coordination (Inkpen and Currall, 2004). Related, with relational reliability, parties act as if the expected value of the exchange were stable, even in the presence of uncertainty (Zajac and Olsen, 1993). Thus, parties choose to forgo opportunistic behaviors, they forbear, and mutual

forbearance becomes a defining feature of their successful interorganizational exchanges (Inkpen and Currall, 2004). Less accepted in extant literature is whether trusting beliefs safeguard parties from the risks associated with unrecoverable investments or specialized assets (Inkpen and Currall, 2004). Some researchers argue that investments in specialized assets signal trustworthiness (Anderson and Weitz, 1992), but others claim transaction-specific investment may impede the development of trust-based governance (Sheng et al., 2006).

However, if managers believe that the courts will enforce contracts, it is no longer obvious that managers should rely as much on relational reliability to safeguard exchanges. As formal governance institutions become effective and legitimate, managers may not seek informal mechanisms because it is costly to establish and then maintain personal connections through frequent interactions (North, 1990; Peng, 2003). Courts also decrease the need for personalized relationships because as institutions they enable a more reliable, predictable system to enforce the terms of the agreement and assure conflict is resolved in an equitable fashion (Zucker, 1986; Suchman, 1995). For example, should dispute or changes arise and parties have different perceptions of fairness or equity or the intent of the transaction (Arino and Torre, 1998; Husted and Folger, 2004) trusting beliefs cannot provide assurance that each party gets paid or gets paid a 'fair' share given the incurred costs. Empirical work further shows that even when trusting beliefs exist, parties appear to shirk some when it benefits them to do so, such as when one party cannot effectively monitor the other or when one party has invested in specialized assets (Poppo et al., 2008). Related, expectations of cooperation can be associated with lower realized levels of cooperative behavior and this gap is associated with lower performance (Bercovitz et al., 2006). Thus, relational reliability may be an inherently less reliable enforcement mechanism than contracts.

Based on this logic, we advance that whereas relational reliability can safeguard market transactions from exchange hazards, parties may favor explicit contracts over it when they perceive legal enforceability as high. That is, as economic risk increases as a function of asset specificity, environmental uncertainty, and behavioral uncertainty, parties choose to draft more explicit contracts because legal enforcement offers greater assurance than relational reliability. Thus, as legal enforceability increases, it should weaken the association between exchange hazards and relational reliability. This decreased reliance on relational reliability, coupled with an increased reliance on explicit contracts (H1a–c), suggests how the enforceability of the legal system might affect governance preferences. Therefore,

> **H2a**: The relationship between asset specificity and relational reliability is *weaker* when perceived legal enforceability is high rather than low.
> **H2b**: The relationship between environmental uncertainty and relational reliability is *weaker* when perceived legal enforceability is high rather than low.
> **H2c**: The relationship between behavioral uncertainty and relational reliability is *weaker* when perceived legal enforceability is high rather than low.

Legal Enforceability, Contracts, and Relational Reliability

Well-accepted in the literature is the plural use of governance mechanisms (Bradach and Eccles, 1989; Dyer and Singh, 1998); that is, for many exchanges formal and informal mechanisms co-exist. Less explored in this literature however is how structures and relationships may impact one another (Doz, 1996; Poppo and Zenger, 2002; Faems et al., 2008). Whereas some works suggest that contracts facilitate trust-building (Poppo and Zenger, 2002), other studies posit the opposite (Malhortra and Murnighan, 2002). Recent work suggests that to resolve inconsistencies, further specification of contingencies is necessary (Woolthuis et al., 2005; Faems et. al., 2008). We join this effort by examining a new angle: how broader institutions, such as a credible legal system, may influence the relationship between relational reliability and contracts. In particular, we examine as legal enforceability in China increases, 1)

does relational reliability play a less pivotal role in supporting the use of contracts, and 2) does the signaling value of contracts, as a sign of commitment and trustworthiness, decline?

A prevailing view for doing business in emerging economies is that personal connections are a necessary precondition to more complex, risky exchanges (Boisot and Child, 1996; Keister, 2001). Consistent with this logic, Zhou et al. (2003) observe that partners meeting for the first time tend to rely on informal contracts to initiate their business transactions in China; only after time has passed and knowledge of the other is garnered through experience do parties develop more formal contractual provisions to coordinate exchanges. Our field interviews with a senior purchasing manager confirm the point that prior experience supports the use of contracts:

> It is impossible to sign a contract with someone you do not know well. First, who knows whether he/she can fulfill the contract? Second, if he/she misbehaved, how would you reinforce the contract? It is just too difficult to rely on the court to do so. So a common practice is to do business with someone you know well, and over time then you can draft more specialized contract for more complicated transactions.

Yet, according to the institutional perspective, one of the benefits of a credible legal system is that parties can substitute formal mechanisms for informal governance (e.g. North, 1990; Peng, 2003). That is, with stronger perceptions of legal enforceability, managers may no longer seek prior experience with an exchange partner to support their use of more explicit contracts. As argued in H2, personal relations may be an inherently less reliable and more costly enforcement mechanism. Moreover, prior experience may be less necessary because more explicit contracts can structure coordination, resulting in greater bilateral interaction and decision-making. As a result, contracts can effectively ease coordination problems that arise from benevolent preferences, such as reprioritization or over commitment (Verbeke and Greidanus, 2009). Thus, armed with greater legal enforceability, parties may be less likely to rely on relational reliability as a vehicle for supporting the use of more explicit contracts.

H3a: The effect of relational reliability on contract explicitness is *weaker* when perceived legal enforceability is high rather than low.

An alternative view is whether contracts support the development of personal relationships. We advance that when legal enforceability is low, contracts may support the use of relational reliability because it helps inform a central problem in exchange: discerning another's motives when one is uncertain or ignorant of the other's likely behavior. That is, selecting a business partner who is likely to honor the business agreement, which is particularly difficult in the relative absence of a credible legal system. In this context, the contract may represent a tangible sign of commitment: the expression and intention to be a trustworthy or reliable partner (Woolthius et al., 2005; Bacharach and Gambetta, 2001). Since the contract essentially represents a costly-to-develop, bilateral agreement structuring coordination, outcomes, and sanctions, it is not likely to be a false signal, if undertaken. That is, if parties choose to cheat another, they risk the cost of contract development as well as having a reputation for being dishonest. A second benefit of contracts which may foster the development of a reliable relationship is formalization: when the contract contains an explicit structure for behavior, it promotes the expectation that the other party will behave cooperatively, which not only fosters reliability but also complements one of the known limits of personal exchange, namely, the lack of formal rules and expectations (Poppo and Zenger, 2002). As recent work shows, a flexible application and broad form of contract formalization is more likely to be associated with trust-building (Faems et al., 2008).

Yet, we advance that the signaling value of contracts may decline as legal enforceability improves. When legal enforceability is strong, the commitment signal of contracts is noisier: the contract may still signal the intention to honor the agreement, but it also signals a reliance on formal means to produce cooperation. That is, as a legally binding document, it is a sign of

coercion and sanctions that is meant to protect both parties should irreconcilable differences occur. Thus, we argue that under a regime of legal enforceability, a contract signals more about the efficacy of sanctions but less regarding trustworthiness.

H3b: The effect of contract explicitness on relational reliability is *weaker* when perceived legal enforceability is high rather than low.

METHOD

Sampling and Data Collection

To test the hypotheses, we examine buyer–supplier relationships of manufacturing firms located in two major regions (Beijing and Shanghai) in China in 2004. Both Beijing and Shanghai are administratively equal to a province (i.e., state). Shanghai, which is slightly larger than Delaware, consists of 19 county-level divisions. Nine of these divisions constitute urban Shanghai, where prominent central business districts are located. The other 10 divisions are mostly suburbs, satellite towns, and rural areas. Beijing, which is comparable in size to New Jersey, contains 8 urban divisions and 10 suburban and rural divisions. All the central business districts are located in urban areas.

To learn about the institutional factors and context, we conducted field interviews with ten managers, asking them a series of open-ended questions regarding the role of the government, legal enforceability, contracts, and relational reliability. Our field interviews revealed that urban areas, especially central business districts in these two regions, are characterized by a relatively well-developed legal system and services, whereas other districts, especially rural areas, lack consistent enforcement of contract law and property rights. Therefore, Beijing and Shanghai provide significant variation in legal enforceability, which enables us to examine its effects on governance choices in an emerging economy.

To collect data, we collaborated with local researchers and trained interviewers to administer the survey during onsite personal meetings, the method of choice to obtain reliable and valid information in emerging economies (Zhou, Tse, and Li, 2006). Our survey was first developed in English and then, with the assistance of independent translators, translated into Chinese, and finally translated back to English to ensure conceptual equivalence (Hoskisson et al., 2000). To ensure the content and face validity of the measures, we conducted five in-depth interviews with senior purchasing managers and asked each respondent to verify the relevance and completeness of the measures. On the basis of their responses, we revised a few questionnaire items to enhance their clarity. We then conducted a pilot study with 40 purchasing professionals who not only answered all the items but also provided their feedback about the design and wording of the questionnaire. We finalized the questionnaire according to the results of the pilot study.

A sample of 1,000 firms was randomly selected from a list of all manufacturing firms located in the two areas that operated within the four-digit Chinese Industrial Classification (CIC) codes 1311–4290, which are similar to Standard Industrial Classification codes (but with slight variations). These firms span diverse industries (e.g., mechanics, materials, chemicals, plastics, electronics, computer equipment, apparel, furniture, and food). In each firm, a senior purchasing manager serves as the key informant because our interviews revealed that these managers would be most knowledgeable about relationships with suppliers.

Managers were first contacted by telephone to solicit their cooperation. To motivate their participation, the interviewers informed them of the academic nature of the study and the confidentiality of their responses, and then offered an incentive in the form of a summary report. A total of 476 managers from different firms agreed to participate, of whom 403 were

successfully interviewed onsite. Informants selected one of their firm's major suppliers and answered the survey questions regarding their exchanges with that supplier. After eliminating four surveys with missing data, we obtained 399 complete responses, representing an effective response rate of 39.9% (399 of 1,000 firms). The majority of the firms (64.1%) had 100–1,000 employees, and 65.4% had annual sales revenues of more than US$3 million. In addition, 57.7% were Chinese firms (9.0% state-owned, 35.8% private, and 12.9% stock or public-listed companies), whereas 42.3% were foreign-owned firms (23.3%) or joint ventures (20.3%). On average, respondents had been working for 10.9 years in the industry and 6.2 years with their company.

After the fieldwork, one of the authors randomly called 40 respondents to confirm that the interviews had been conducted and found no cheating in the fieldwork. A comparison between the responding and nonresponding firms using MANOVA indicates no significant differences in terms of key firm characteristics (i.e., industry type, firm ownership, number of employees, and annual sales revenues) (Wilks' $\Lambda = .957$; $F = 1.423$; $p = .658$), which suggests nonresponse bias is not a concern in our study. To validate our key informant approach, we used Podsakoff and Organ's (1986) post-hoc technique to select 40 firms randomly from among those participating in the 2004 survey and conducted onsite interviews in 2005 with two purchasing managers or directors from each firm. Of the two managers, one had participated in the 2004 survey and the other was a new informant. We successfully obtained responses from 64 managers from 32 firms. The test–retest reliability of the same managers' responses in 2004 and 2005 ranged from .99 (exchange duration) to .76 (environmental uncertainty) (all $p < .001$), and the interrater reliability between the two managers' responses in 2005 ranged from .98

(transaction frequency) to .80 (asset specificity) (all $p < .001$). These results demonstrate the validity of our key informant approach.

Measures

The measures used in the survey are adapted from established studies. The measurement items and validity assessment appear in the Appendix.

Exchange hazards. We examine three types of hazards: asset specificity, environmental uncertainty, and behavioral uncertainty. Our measure of *asset specificity* comes from Cannon and Perreault (1999) and captures buyers' specific investments in product features, personnel, inventory and distribution, marketing, and capital equipment and tools to accommodate suppliers' needs. We also adapt a measure of *environmental uncertainty* from Cannon and Perreault (1999) to examine the environmental changes in the supply market with respect to pricing, product features and specifications, vendor support services, technology, and product supply. On the basis of Brown, Dev, and Lee's (2000) and Poppo and Zenger's (2002) work, we develop a measure of *behavioral uncertainty* that assesses the difficulty of evaluating the performance of the other party.

Governance. We focus on two types of governance structures: relational reliability and explicit contracts. We adapt the measure of *relational reliability* from Zaheer et al. (1998) to examine the predictability, opportunistic intent, and fairness of the exchange partner. The measure of *explicit contracts* comes from Lusch and Brown (1996) and examines the degree to which the contract specifies and details the roles and responsibilities of each party, how each party is to perform, and how to deal with unexpected events.

Legal enforceability. We adapt the measure of *perceived legal enforceability* from Child et al. (2003). Our items measure the degree to which the legal system can protect the firms'

business interests, including their financial obligations (e.g., payments from the other party, recouping financial interests).

Controls. We control for four sources of heterogeneity. First, we consider the transaction characteristic of duration. *Exchange duration* is a well-established antecedent of relational reliability through the accumulation of experiences over time (Poppo, Zhou, and Ryu, 2008). We measure it as the logarithm of years the firm has been doing business with its supplier.

Second, because of the variation in the institutions that characterize emerging markets (Hoskisson et al., 2000), we control for the effects of *foreign ownership* and *business group affiliation*. Foreign firms are accustomed to using contracts, and we suspect that foreign and domestic firms use contracts differently. We code foreign ownership as a dummy variable, with 1 = international joint ventures or foreign firms and 0 = otherwise. Previous research also indicates that business group membership offers legitimacy and protection from unknown suppliers (Keister, 2001). Thus, we suspect that transactions within a business groups are more inclined to develop relational reliability. Following Keister (2001), we code it as a dummy variable, equal to 1 when the buyer and supplier belong to the same business group, and 0 otherwise.

Third, we control for *firm size* and *industry*, which may be important exogenous factors that affect governance decisions (Poppo and Zenger, 2002). We use the logarithm of the number of employees in the company to indicate firm size. For industry, we use three dummy variables to control for the differences in the primary industry in which the firm operates: *mechanics, heavy* (i.e., chemicals, materials, automobile), and *electronics*. The remaining industries (i.e., consumer products such as apparel, furniture, and food) represent the baseline group.

Fourth, we control for firm location and political ties because they likely affect managers' perceptions of legal enforceability. We measure *firm location* as a dummy variable where 1 = urban location and 0 = others (i.e., suburbs, towns, and rural areas). *Political ties* is measured with one seven-point indicator: In the past three years, the government and its agencies have provided significant support to our firm (1 = strongly disagree; 7 = strongly agree).

Common method assessment. Because information about the dependent and independent variables comes from the same respondent, we recognize the potential for common method bias. We therefore run a Harman one-factor test (Podsakoff and Organ, 1986), which loads all the perceptual items into an exploratory factor analysis. Common method bias is a concern if a single factor emerges from the factor analysis or factor 1 accounts for the majority of the variance. The factor analysis of all measurement items results in a solution that accounts for 70.86% of the total variance, in which factor 1 accounts for 16.97%. Because a single factor does not emerge and factor 1 does not explain most of the variance, common method bias is unlikely to be a concern in our data.

Construct validity. We refine the multiple-item measures and assess their construct validity following the guidelines suggested by Anderson and Gerbing (1988). First, we run exploratory factor analyses for each of the multiple-item variables, which results in factor solutions as theoretically expected. Reliability analyses further show that these measures possess satisfactory coefficient reliability. Second, we run confirmatory factor analysis (CFA) with AMOS 6.0 for an overall six-factor model with all the variables included. The Appendix reports the results of this CFA, including the goodness-of-fit index, factor loadings, and composite reliability.

Because the chi-square test is sensitive to sample size, we rely on the goodness-of-fit index (GFI), comparative fit index (CFI), incremental fit index (IFI), and root mean squared error of approximation (RMSEA) to evaluate the model fit (Bollen, 1989). As the Appendix shows, all the fit indexes are equal to or above the .90 benchmark (GFI = .92, CFI = .96, IFI = .96), and the RMSEA is less than .05 (.049, p(close fit) = .61); therefore, the model fits the data satisfactorily (Bollen, 1989; Hu and Bentler, 1999). Furthermore, the composite reliabilities of all constructs range from .859 to .938, well above the usual .70 benchmark. The average variance extracted for every construct is higher than the .50 cutoff (Fornell and Larcker 1981). Thus, these measures demonstrate satisfactory convergent validity.

We assess the discriminant validity of the measures in two ways. First, we run pairwise chi-square difference tests for all multiple-item scales to determine whether the restricted model (correlation fixed at 1.0) fits the data significantly worse than the freely estimated model (correlation estimated freely). All the chi-square differences are highly significant (e.g., asset specificity vs. environmental uncertainty: $\Delta\chi^2$ (1) = 747.366, p = .000), in support of discriminant validity (Anderson and Gerbing, 1988). Second, we perform a more stringent test to determine whether the average variance extracted for each construct is greater than its highest shared variance with other constructs (Fornell and Larcker, 1981). The results show that for each construct, the average variance extracted is much higher than its highest shared variance with other constructs, in additional support of discriminant validity (see the Appendix). Overall, these results show that our measures possess satisfactory reliability and validity.

Table 1 presents the means, standard deviations, and correlations for the constructs. As Table 1 shows, perceived legal enforceability relates positively to urban location and political ties, supporting the logic that location and political connection are two significant sources of

variations in managers' perception of legal enforceability (Luo, 2007). Moreover, 48% firms are located in urban areas and 52% are in other areas, showing a relatively equal representation of locations with low vs. high legal enforceability.

Insert Table 1 about here.

ANALYSES AND RESULTS

Because our model contains a bidirectional link between relational reliability and contracts, a non-recursive model is appropriate for estimating the relationships simultaneously (Bollen, 1989). We estimate a model with structural equation modeling (SEM) that contains a link from relational reliability to contract, as well as a link from contract to relational reliability. With this non-recursive model, we must treat some controls as instrumental variables; otherwise the model would be overidentified and could not be estimated. We link exchange duration to relational reliability, foreign ownership to contract, and others to both relational reliability and contract. Our model also contains interaction effects. The resultant challenge associated with running SEM with interaction terms pertains to how to manage the model complexity created by the large number of interaction items. To keep the model parsimonious, we adopt Ping's (1995) method to calculate the interaction indicators. We summarize the estimation results in Table 2.

Insert Table 2 about here.

H1 examines whether legal enforceability (LE) positively moderates the relationships between explicit contracts and (a) asset specificity (AS), (b) environmental uncertainty (EU), and (c) behavioral uncertainty (BU). As Table 2 shows, the interaction terms AS × LE, EU × LE, and BU × LE all have significant and positive effects on explicit contracts (b = .22, $p < .01$; b = .13, $p < .05$; and b = .13, $p < .05$, respectively), in support of H1a, H1b, and H1c.

27

To gain more insight into the interaction effects, we follow the procedure proposed by Aiken and West (1991) to decompose the interactive terms. Specifically, we conduct simple slope tests and plot the relationships in Figure 2. For H1a, we split the legal enforceability variable into two groups—low (one standard deviation below the mean) and high (one standard deviation above the mean)—and estimate the effect of asset specificity on contracts for both levels. As we show in Figure 2, when legal enforceability is low, asset specificity relates negatively to explicit contracts (b = -.42, $p < .01$); when legal enforceability is high, asset specificity is positively associated with contracts (b = .13, $p < .05$). Similarly, we decompose the interaction for H1b and H1c. When legal enforceability is low, both environmental uncertainty (b = -.16, $p < .01$) and behavioral uncertainty (b = -.14, $p < .05$) negatively influence contracts. However, when legal enforceability is high, both environmental uncertainty (b = .16, $p < .01$) and behavioral uncertainty (b = .14, $p < .05$) have positive effects on contracts. These results suggest that when legal enforceability improves from low to high levels, the relationships between explicit contracts and exchange hazards change from negative to positive. In other words, managers are not inclined to draft more explicit contracts in response to exchange hazards when legal enforceability is weak; when legal enforceability is strong, they favor more explicit contracts to safeguard their transaction from exchange hazards.

Insert Figure 2 about here.

H2 assesses whether legal enforceability negatively moderates the relationships between exchange hazards and relational reliability. Table 2 shows that the interaction terms of asset specificity and legal enforceability and of environmental uncertainty and legal enforceability have significant and negative effects on relational reliability (b = -.17, $p < .01$ and b = -.15, $p < .01$, respectively), in support of H2a and H2b. However, the interaction of behavioral uncertainty

and legal enforceability relates positively to relational reliability (b = .11, p <.05), in the opposite direction as predicted in H2c.

Similarly, we decompose the interaction effects of H2 and plot the relationships in Figure 2. As Figure 2 shows, when legal enforceability is low, asset specificity is positively associated with relational reliability (b = .20, p < .01); but when legal enforceability is high, asset specificity relates negatively to relational reliability (b = -.20, p < .01). Moreover, environmental uncertainty is positively associated with relational reliability when legal enforceability is low (b = .35, p < .01) but has no significant relationship with relational reliability when legal enforceability is high (b = .03, p > .10). Finally, behavioral uncertainty relates negatively to relational reliability when legal enforceability is low (b = -.28, p < .01) but has no significant relationship when legal enforceability is high (b = -.05, p > .10). These results suggest that when legal enforceability is weak, managers are more likely to match high levels of asset specificity and environmental uncertainty with relational reliability; alternatively, when legal enforceability is strong, managers are less likely to rely on relational reliability to safeguard their transactions from the hazards that can arise from asset specificity and environmental uncertainty. However, for behavioral uncertainty, the results show that managers do not choose relational reliability to safeguard against this risk, even when legal enforceability is low.

In H3a, we examine whether legal enforceability moderates the effect of relational reliability on contract. Consistent with the notion that relational reliability is precondition of signing a contract in China, we find that relational reliability positively affects contract explicitness (b = .25, p < .01). However, legal enforceability does not moderate this effect (b = .06, p > .10), showing no support to H3a. The effect of relational reliability on contracts appears robust to whether legal enforceability is strong or weak.

With H3b, we assess whether legal enforceability moderates the effect of contracts on relational reliability. We find that explicit contracts positively influence relational reliability (b = .14, $p < .05$) and legal enforceability negatively moderates this effect (b = -.14, $p < .05$), which suggests that as legal enforceability improves, the effect of explicit contracts on relational reliability declines. We also decompose this moderating effect and graph it in Figure 2. The results show that when legal enforceability is low, explicit contracts positively affect relational reliability (b = .34, $p < .01$), whereas when legal enforceability is high, explicit contracts do not significantly influence relational reliability (b = .02, $p > .10$).

Effects of Controls. Consistent with the time-dependence of relational reliability, exchange duration (i.e., prior ties) has a positive effect on relational reliability. Foreign firms, including foreign wholly-owned and international joint ventures, use more explicit contracts than local firms. We further find that if the buyer and supplier belong to the same business group, they are more likely to use relational reliability to coordinate exchanges. In addition, heavy industries (i.e., materials, chemicals, automobiles) use more explicit contracts.

Post-hoc Analysis. In this study we view relational reliability as an informal governance mechanism. That is, it is based on prior social relationships and informal expectations regarding continuance (i.e. future exchange) (Poppo, Zhou, and Ryu, 2008). Prior work also suggests that reputation bonds exist within business group, which may generate trusting perceptions (Keister, 2001; Verbeke, 2003). Therefore, we run additional analysis to regress relational reliability against exchange duration (years the firm has been doing business with its supplier), socialization ('our company and this supplier often visit each other'), exchange continuity ('we expect this supplier to be working with us for a long time'), and business group affiliation (whether the company and the supplier belong to the same business group). The results show that

relational reliability is positively related to all these four factors, namely duration (b = .08, p < .05), socialization (b = .24, p < .01), exchange continuity (b = .36, p < .01), and business group affiliation (b = .15, p < .01).

DISCUSSION

The way in which the development of credible formal institutions affects business practice remains debatable because politics and culture may thwart attempts to induce change (Mahoney, 2005; North, 2005; Peng, 2003). This study represents the first attempt, to our knowledge, to inform this debate through an empirical snapshot of how variation in perceptions of legal enforceability affects the governance choices of relational reliability or contracts. Our results show that legal enforceability affects the governance choices of relational reliability and contracts in a manner consistent with the governance choice logic of TCE.

In particular, when perceptions of legal enforceability are strong, managers are more likely to draft more explicit contracts and less likely to use relational reliability to safeguard their exchanges from transaction risks (i.e., asset specificity, environmental uncertainty, and behavioral uncertainty). In contrast, when legal enforceability is low, managers are less likely to use explicit contracts and more likely to rely on relational reliability to safeguard their exchanges with high asset specificity and environmental uncertainty. These findings suggest: 1) when legal enforceability is low, relational reliability appears to be the preferred governance choice for some conditions (asset specificity, environmental uncertainty); and 2) when legal enforceability is high, contracts are a preferred governance mechanism to safeguard transactions from economic risks.

One surprising finding is that managers do not choose relational reliability in response to behavioral uncertainty that arises from the difficulty or inability to observe or monitor their

partner's actions and decisions (see Figure 2, H2c). In theory, relational reliability should be important when situations of distrust exist (Bradach and Eccles, 1989). That is, relational reliability purportedly reduces self-interested actions that otherwise would occur when behavioral uncertainty exists (Krishnan et al., 2006). Yet our findings suggest that relational reliability is not a desirable choice to handle behavioral uncertainty, regardless of whether strong or weak legal enforceability exists. It may be that the Chinese are highly risk averse in situations in which they cannot monitor or formally evaluate the other (Zhou, Su, and Bao, 2002); in a related sense, this result may suggest that if one party can get away with cheating, it will, and relational reliability does not sanction this behavior. Consistent with recent inquiries (Carson et al., 2006; Verbeke and Greidanus, 2009), this finding cautions the unqualified enthusiasm of using relational reliability to coordinate exchange. Possibly, vertical integration may be necessary to handle behavior uncertainty when legal enforceability is low.

Overall, these results endorse the logic that as emerging economies progress, firms rely more on formal contracts than personal relationships with partners to safeguard risky market transactions (North, 1990; Peng, 2003). More generally, our findings indicate that legal enforceability plays a pivotal role in governance choices in emerging economies. Therefore, our first major contribution is the enrichment of institutional theory by demonstrating that a credible legal system shapes the choices of governance choices of contracts and relational reliability in the emerging economy of China.

A second contribution of this research is our extension of extant literature regarding the relationship between contracts and relational reliability. A substitution perspective posits that relational reliability and contracts are incompatible control devices: the use of relational reliability supplants the need for contracts, because prior experiences and joint expectations can

readily support economic exchanges without the added costs of negotiating and amending detailed contracts (Adler, 2001; Dyer and Singh, 1998). In contrast, other researchers suggest a complementary relationship between relational norms and contracts (Luo, 2002; Poppo and Zenger, 2002). We propose that legal enforceability may affect these relationships. Contrary to our proposed logic, we find no support that legal enforceability moderates the effect of relational reliability on contracts. This nonsignificant result reinforces the prevailing view that prior experience with the trading party functions as a precondition of explicit contracts in China (Zhou et al., 2003).   Yet, consistent with our proposed logic, we find that legal enforceability moderates that relationship between contracts and relational reliability. In particular, the effect of contracts on relational reliability declines as legal enforceability increases. We advance that because the contract is viewed as a legally binding document in conditions of greater legal enforceability, it carries a sign of coercion and sanctions. Thus, it signals less regarding trustworthiness in this context, and more about the efficacy of sanctions. Yet, when legal enforceability is weak, the contract is a stronger signal of motives and commitment, and as such fosters greater relationship development (e.g. relational reliability).

Managerial Implications

Our findings also provide important implications for managers regarding the use of contracts and the selection of trading partners in China. Companies operating overseas must gather local information to understand how cultural and political institutions shape business transactions. Our findings highlight the importance of perceived enforceability of the local legal system, which is affected by firm locations as well as political ties. If firms attempt to obtain strong protection from the court system, they may want to locate in city areas and build connections with government officials. With strong legal enforceability, firms can rely on

contracts to protect their exchanges characterized by high levels of specialized assets, environmental uncertainty, and behavioral uncertainty. Managers should also consider how to specify contracts that foster continued interaction and awareness of commitments; when 'commitments are kept top of the mind,' biases that lead to preference reordering are minimized (Verbeke and Greidanus, 2009).

When legal enforceability is weaker, firms need to build more personal relationships to coordinate their exchanges. However, our work suggests that personal relationships do not enable managers to overcome the risk associated with behavioral uncertainty: the difficulty of monitoring or observing another firm's actions and decision. Instead, contracts, given strong legal enforceability, are a better safeguard against such risk. Finally, and not surprisingly, our results confirm the importance of establishing relationships with exchange partners. Prior experience is often characterized as an important lubricant for social exchange. In China, transacting with a known party appears to provide a variety of positive functions: a safeguard against economic and market risks when effective courts do not exist, and a mechanism that encourages exchanges to go with greater contractual details and specifications.

Limitations and Further Research

Our study represents an initial effort to examine a complex phenomenon, which implies that further research clearly is necessary. First, our model does not examine the costs and benefits associated with relational reliability and contracts. Further work should consider whether governance preferences are consistent with the outcomes and costs of these choices.

Second, recent research suggests that contracts involve two aspects, control and coordination (Mayer and Argyres, 2004; Reurer and Arino, 2007; Faems et al., 2008). For example, Reurer and Arino (2007) find that the contracts among parties that represent prior ties

34

are less likely to contain coordination provisions, yet they still retain control provisions. Although our results suggest that relational reliability increases contract explicitness, we do not examine how the coordination and control aspects of contracts may vary as a function of relational reliability and legal enforceability.

Third, we only consider relational reliability as the informal governance. Our ad hoc analyses show that consistent with prior literature, relational reliability is positively related prior exchange duration, socialization practices, expectation of future exchange, and business group affiliation. Further research could uncover the roles of specific informal mechanisms, such as reputation bonds, network ties, and professional sanctions. Other formal mechanisms such as vertical integration and hybrid organization need additional attention. For example, further work may examine the make-or-buy decision as it may be advisable for firms to vertically integrate production to augment specialization or to minimize transaction costs arising from unobservability. Related, how to model and measure the concept of bounded reliability represents a fruitful area for further research.

Fourth, our cross-sectional design offers only a snapshot of how legal enforceability affects governance choice. To document institutional changes in governance choices, a longitudinal design is necessary. A longitudinal design also could tackle the causal links between informal and formal mechanisms and their contemporary evolutions. Fifth, our findings are limited to business transactions in two Chinese provinces. Although China shares many characteristics with other emerging economies, its unique cultural and political institutions likely possess some idiosyncrasies that may limit the generalizability of the findings. Additional research should assess whether legal enforceability is sufficient to change governance choices. Japan, for example, would be a highly interesting context because its legal system is well

established, quasi-integration is common, and trust is heavily used—yet debate continues about whether the Japanese choose to litigate (Ginsburg and Hoetker, 2006; Visser 'T Hooft, 2002).

As the global economy defines the boundaries of many firms, understanding how to structure exchanges in emerging markets or, alternatively, clarifying the impact of institutions on governance choice are important research queries. Because the underlying political, social, and legal institutions in emerging economies are often complex, idiosyncratic, and dynamic, the impact of such institutions on governance decisions remains relatively underexplored. Our study informs this topic by showing how legal institutions interact with exchange hazards to affect the choice of contracts and relational reliability in China. We hope that further research continues to explore and document institutional changes, governance choices, and their performance implications in emerging economies.

REFERENCES

Aiken, L.S., West, S.G. 1991. *Multiple Regression: Testing and Interpreting Interactions*. Newbury Park, CA: Sage Publications.

Adler, P. 2001 'Market, hierarchy, and trust: The knowledge economy and the future of capitalism.' *Organization Science*, 12: 215-234.

Anderson, E., and Weitz, B. 1992 'The use of pledges to build and sustain commitment in distribution channels.' *Journal of Marketing Research*, 29 (February): 18–34.

Anderson, J. C., and Gerbing, D.W. 1988 'Structural equation modeling in practice: A review and recommended two-step approach.' *Psychological Bulletin*, 103: 411-23.

Arino, A., J. Torre. 1998. Learning from failure: Toward an evolutional model of collaboration ventures. *Organ. Sci.* **9** 306–325.

Bacharach, M., and Gambetta, D. 2001 'Trust in Signs.' In *Trust in Society*, Cook, K. (eds). New York: Russell Sage Foundation; 148-184.

Barthelemy, J. and Quelin, B. 2006. 'Complexity of outsourcing contracts and ex post transaction costs: An empirical investigation.' *Journal of Management Studies*, 43(8): 1775-1797.

Bercovitz, J., Jap, S. and Nickerson, J. 2006. 'The antecedents and performance implications of cooeprative exchange norms.' *Organization Science*, 17(6): 724-740.

Bradach, J. and Eccles, R. 1989. 'Price, authority, and trust: From ideal types to plural forms'. *Ann. Rev. Sociology*. 15: 97-118.

Boisot, M., and Child, J. 1996 'From fiefs to clans and network capitalism: Explaining China's emerging economic order.' *Administrative Science Quarterly*, 41: 600-628.

Bollen, Kenneth A. (1989). *Structural Equations with Latent Variables*. New York: John Wiley.

Brown, J. R., Dev, C.S., and Lee, D.J. 2000 'Managing marketing channel opportunism: The efficacy of alternative governance mechanisms.' *Journal of Marketing*, 64 (April): 51–65.

Cannon, J. P., and Perreault, W.D. 1999 'Buyer-seller relationships in business markets.' *Journal of Marketing Research*, 36 (4): 439-460.

Carson, SJ., Madhok, A., and Wu, T. 2006 'Uncertainty, opportunism, and governance: The effects of volatility and ambiguity on formal and relational contracting.' *Academy of Management Journal*, 49(5): 1058-1077.

Child, J., Chung, L. and Davies, H. 2003 'The performance of cross-border units in China: A test of natural selection, strategic choice and contingency theories.' *Journal of International Business Studies*, 34: 242-254

Child, J., and Mollering, G. 2003 'Contextual confidence and active trust development in the Chinese business context.' *Organization Science*, 14 (1): 69-80.

Doz, Y.L. 1996. 'The evolution of cooperation in strategic alliances: Initial conditions or learning processes?' *Strategic Management Journal*, 17: 55-83.

Dyer, J., and Singh, H. 1998 'The relational view: Cooperative strategy and sources of interorganizational competitive advantage.' *Academy of Management Review*, 23: 660-679.

Faems, D., Janssens, M., Madhok, A., Van Looy, B. 2008. 'Toward an integrative perspective on alliance governance: Connecting contract design, trust dynamics, and contract application'. *Academy of Management Journal*, 51(6): 1053-1078.

Fornell, C., and Larker, D.F. 1981 'Evaluating structural equation models with unobservable variables and measurement error.' *Journal of Marketing Research*, 18 (1), 39-50.

Ginsburg, T and Hoetker, G. 2006. 'The unreluctant litigant? An empirical analysis of Japan's turn to litigation.' *Journal of Legal Studies* 35:31-59.

Granovetter, M. 1985. 'Economic action and social structure: The problem of embeddedness.' *American Journal of Sociology*, 91, 481-510.

Gulati, R. 1995. 'Does familiarity breed trust? The implications of repeated ties for contractual choice in alliances.' *Academy of Management Review*, 38, 85-112.

Hagedoorn, J. and Hesen, G. 2007 'Contract law and the governance of inter-firm technology partnerships—an analysis of different modes of partnering and their contractual implications.' *Journal of Management Studies,* 44(3): 342-366.

Hart, O. and Moore, J. 1999 'Foundations of incomplete contracts.' *Review of Economic Studies*, 66(1): 115-138.

Hoetker, G. and Mellewigt, T. 2009 'Choice and performance of governance mechanisms: matching alliance governance to asset type.' *Strategic Management Journal*, 30(10): 1025-1044.

Hoskisson, R. E., Eden, L., Lau, C.M., and Wright, M. 2000 'Strategy in emerging economics.' *Academy of Management Journal*, 43 (3): 249-267.

Hu, L. and Bentler, P. 1999. 'Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives.' *Structural Equation Modeling*, 6:1-55.

Husted, B., R. Folger. 2004. Fairness and transaction costs: The contribution of organizational justice theory to an integrative model of economic organization. *Organ. Sci.* **15**(6) 719-729.

Inkpen, A. C. and Currall, S.C. 2004 'The coevolution of trust, control and learning in joint ventures.' *Organization Science*, 15(5): 586-599.

Joskow, P. L. 1988 'Asset specificity and the structure of vertical relationships: Empirical evidence.' *Journal of Law, Economics and Organization*, 4: 95-117.

Keister, L. A. 2001 'Exchange structures in transition: Lending and trade relations in Chinese business groups.' *American Sociological Review,* 2001: 336-360.

Krishnan, R., Martin, X., and Noorderhaven, N.G. 2006. 'When does trust matter to alliance performance?' *Academy of Management Journal*, 49(5), 894-917.

Larson, A. 1992. 'Network dyads in entrepreneurial settings: A study of the governance of exchange relationships.' *Administrative Science Quarterly*, 37, 76-104.

Li, J.J., Poppo L. and Zhou KZ. 2008 'Do managerial ties in China always produce value? Competition, uncertainty, and domestic vs. foreign firms.' *Strategic Management Journal* 29(4): 383-400.

Li, J.J., Zhou, KZ. and Shao, A. 2009 'Competitive position, managerial ties, and profitability of foreign firms in China: An interactive perspective.' *Journal of International Business Studies*, 40(2): 339-352

Li, S. 2004 'Why is property right protection lacking in China.' *California Management Review*, 46: 100-115.

Li, S., Park, S. and Li, S. 2003 'The great leap forward: The transition from relation-based governance to rule-based governance.' *Organizational Dynamics*, 33: 63-78.

Lubman, S. 1999. *Bird in a Cage: Legal Reform in China after Mao*. Stanford, CA: Stanford University Press.

Luo, Y. 2007 'Are joint venture partners more opportunistic in a more volatile environment?' *Strategic Management Journal*, 28: 39-60.

Lusch, R. F., and Brown, H.R. 1996 'Interdependency, contracting, and relational behavior in marketing channels.' *Journal of Marketing*, 60 (4): 19-38.

Macneil, I. R. 1978 'Contracts: Adjustment of long-term economic relations under classical, neoclassical and relational contract law.' *Northwestern University Law Review*, 72: 854-905.

Mahoney, J.T., 2005. *Economic Foundations of Strategy Research*. CA: Sage Publications.

Malhortra, D. and Murnighan, J.K. 2002 'The effects of contracts on interpersonal trust.' *Administrative Science Quarterly*, 47(3): 534-559.

Masten, S.E. 1993. 'Transaction Costs, Mistakes, and Performance: Assessing the Importance of Governance,' *Managerial and Decision Economics*, 14 (March-April): 119-129.

Mayer, K. L., and Argyres, N. 2004 'Learning to contract: Evidence from the personal computer industry.' *Organization Science*, 15: 394-410.

McMillan, J., and Woodruff, C. 1999 'Interfirm relationships and informal credit in Vietnam.' *Quarterly Journal of Economics*, 114: 1285-1320.

North, D. C. 1990 *Institutions, Institutional Change, and Economic Performance*. Cambridge: Cambridge University Press.

North, D. C. 2005. *Understanding the Process of Economic Change*. Princeton, NJ: Oxford University Press.

Peng, M. W. 2003 'Institutional transitions and strategic choices.' *Academy of Management Review*, 28 (2): 275-296.

Peng, M. W., and Luo, Y. 2000 'Managerial ties and firm performance in a transition economy: The nature of a micro-macro link.' *Academy of Management Journal*, 43 (3): 486-501.

Ping, Robert A. (1995), "A Parsimonious Estimating Technique for Interaction and Quadratic Latent Variables," *Journal of Marketing Research*, 32 (August), 336-347.

Podsakoff, P. M., and Organ, D.W. 1986 'Self-reports in organizational research: Problems and prospects.' *Journal of Management*, 12 (Winter): 531-543.

Poppo, L. and Zenger, T. 2002 'Do formal contracts and relational governance function as substitutes or complements?' *Strategic Management Journal*, 23 (8): 707-725.

Poppo, L., Zhou, KZ. and Ryu, S. 2008 'Alternative origins to interorganizational trust: An interdependence perspective on the shadow of the past and the shadow of the future.' *Organization Science*, 19: 39-55.

Poppo, L., Zhou, KZ. and Zenger, T. 2008 'Examining the conditional limits of relational governance: Specialized assets, performance ambiguity, and long-standing ties.' *Journal of Management Studies*, 45(7): 1195-1216.

Reurer, J. and Arino, A. 2007 'Strategic alliance contracts: Dimensions and determinants of contractual complexity.' *Strategic Management Journal*, 28: 313-330.

Ring, P. S., and Van de Ven, A.H. 1994 'Development processes of cooperative interorganizational relationships.' *Academy of Management Review*, 19: 90-118.

Rousseau, D.S., Burt, S.R. and Camerer, C. 1998. Not so different after all: a cross-discipline view of trust. *Acad. Management Rev.* **23** (3) 393–404.

Sheng, S., J. R. Brown, C. Y. Nicholson, and L. Poppo. 2006. Exchange hazards and relational governance: An empirical test of the role of communication. *International Journal of Research in Marketing*, 23:63-77.

Suchman, M. 1995 'Managing Legitimacy: Strategic and Institutional Approaches.' *Academy of Management Review*, 20(3): 571-610.

Verbeke, A. 2003. 'The evolutionary view of the MNE and the future of internalization theory', *Journal of International Business Studies*, 34(6): 498-504.

Verbeke, A. and Greidanus, N. 2009. 'The end of the opportunism versus trust debate: Bounded reliability as a new envelope-concept in research on MNE governance'. *Journal of International Business Studies,* advance online publication.

Visser 'T Hooft, W.M. 2002 *Japanese Contract and Anti-Trust Law: A Sociological and Comparative Study*. London: Routledge Curzon.

Uzzi, B. 1997 'Social structure and competition in interfirm networks: The paradox of embeddedness.' *Administrative Science Quarterly*, 42, 35-67.

Williamson, O. E. 1996 *The Mechanisms of Governance*. Oxford: Oxford University Press.

Woolthuis, R.K., Hillebrand, B., Nooteboom, B. 2005 'Trust, Contract and Relationship Development.' *Organization Studies*, 26(6): 813-840.

Xin, K. R., and Pearce, J.L. 1996 'Guanxi: Connections as substitutes for formal institutional support.' *Academy of Management Journal*, 39 (6): 1641-1658.

Zaheer, A., McEvily, B. and Perrone, V. 1998. 'Does trust matter? Exploring the effects of interorganizational and interpersonal trust on performance.' *Organization Science* 9: 141-159.

Zaheer A, Harris J. 2005. Interorganizational trust. In *Handbook of Strategic Alliances*, Shenkar O, Reurer JJ (eds). Sage Publications, Thousand Oaks, CA, 169-197.

Zajac, E. and Olsen, C. 1993. 'From transaction cost to transactional value analysis: Implications for the study of interorganizational strategies,' *Journal of Management Studies*, 30, 131-144.

Zhou, K.Z., Su, C. and Bao, Y. 2002 'A paradox of price-quality and market efficiency: A comparative study of the U.S. and China markets,' *International Journal of Research in Marketing*, 19 (4): 349-65.

Zhou, K.Z., Tse, D.K., and Li, J. 2006 'Organizational change in emerging economies: Drivers and consequences', *Journal of International Business Studies*, 37(2): 248-263.

Zhou, X., Zhao, X., Li, Q., and Qiang, H. 2003 'Embeddedness and contractual relationships in China's transitional economy.' *American Sociological Review*, 68: 75-102.

Zucker, L. 1986. 'Production of Trust: Institutional Sources of Economic Structure, 1840-1920.' In *Research in Organizational Behavior*. Straw, B.M., Cummings, L.L. (eds). JAI Press Inc., Greenwich, CT, **8**, 53-111.
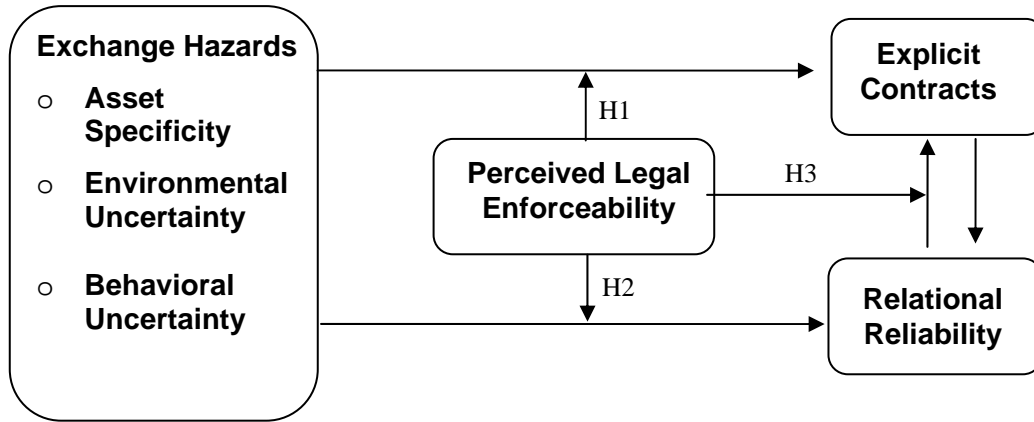
FIGURE 1

The Conceptual Model

TABLE 1

Basic Descriptive Statistics of the Constructs

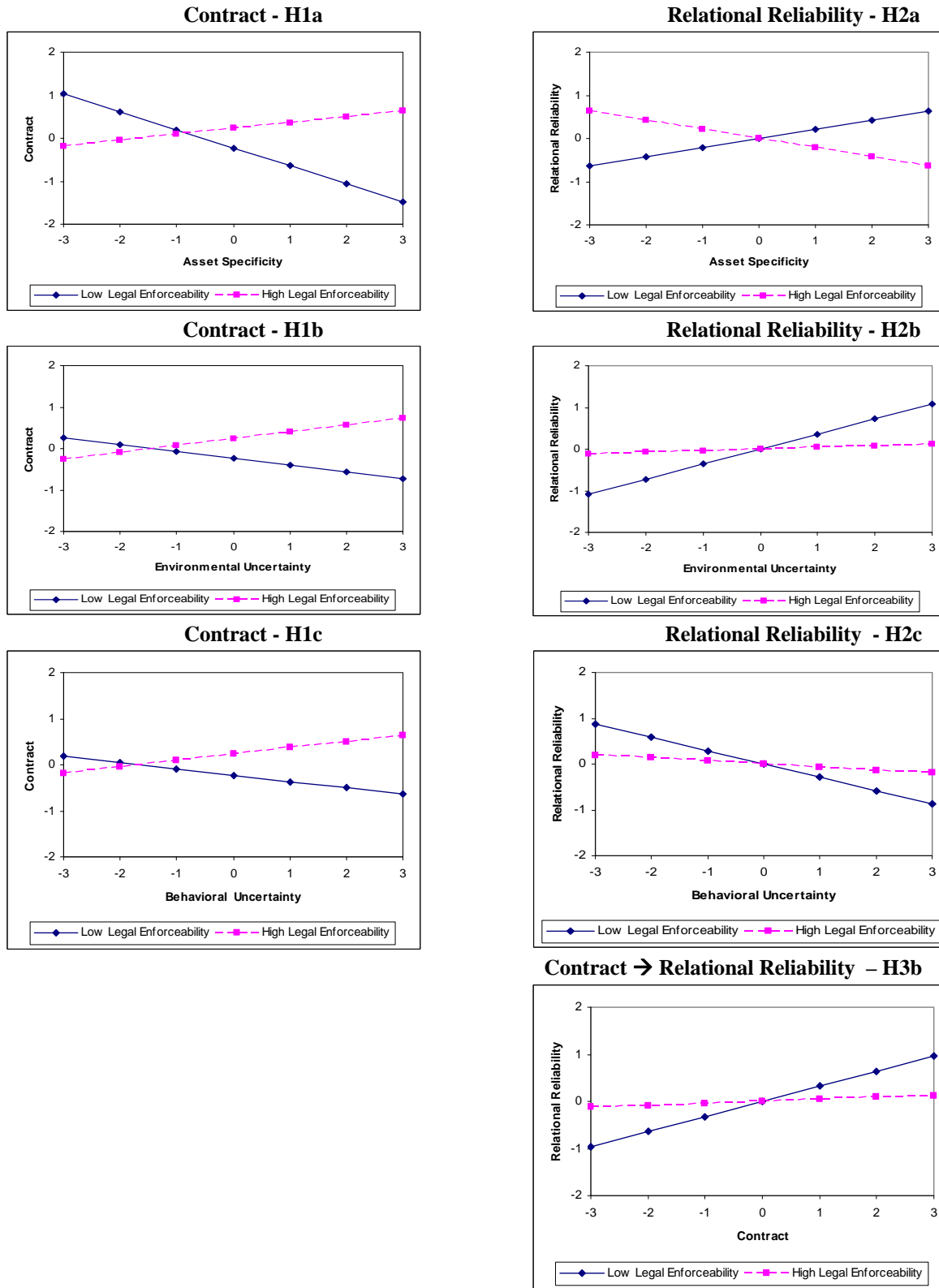| Construct	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1. Asset specificity	1.00														
2. Environmental uncertainty	.32**	1.00													
3. Behavioral uncertainty	.17**	.27**	1.00												
4. Legal enforceability	.16**	.08	.08	1.00											
5. Relational reliability	.08	.10*	-.29**	.15**	1.00										
6. Explicit contracts	-.12*	.01	-.04	.18**	.24**	1.00									
7. Exchange duration	.05	-.03	-.26**	.10*	.31**	.08	1.00								
8. Foreign ownership	-.06	.01	-.06	.07	.16**	.14**	.04	1.00							
9. Business group	.17**	.05	-.25**	.11*	.41**	-.06	.36**	.21**	1.00						
10. Firm size	.01	.09	-.11*	.01	.02	.03	.13**	.12*	.10*	1.00					
11. Mechanics	.03	-.01	.12*	-.14*	-.04	-.08	.01	.04	-.01	-.03	1.00				
12. Heavy	.02	-.06	-.09	-.02	.08	.12*	.01	-.04	.08	-.04	-.33**	1.00			
13. Electronics	.05	.07	.01	.11*	.03	.03	-.03	.15**	.00	.21**	-.24**	-.22**	1.00		
14. Urban location	-.07	-.03	.04	.12*	-.08	-.03	-.13**	.13**	-.06	-.03	.00	-.16**	.17**	1.00	
15. Political ties	.34**	.11*	.26**	.37**	.09	-.02	.09	.04	.13**	-.06	.08	-.03	-.04	-.06	1.00
Mean	3.19	3.91	3.84	4.39	4.94	5.08	1.43	.42	.39	5.20	.27	.23	.14	.48	3.94
S.D.	1.39	1.09	1.28	1.26	1.07	1.19	.56	.49	.49	.99	.44	.42	.35	.50	1.45

Notes: n = 399.
** $p < .01$; * $p < .05$ (two-tailed).

TABLE 2

Standardized Estimates (t-value) of Structural Equation Modeling

Independent Variables	Explicit Contracts M1			Relational Reliability M2		
		b	t-value		b	t-value
Control Variables						
Exchange duration		—	—		.11*	(2.30)
Foreign ownership		.16**	(2.92)		—	—
Business group		-.07	(-.77)		.31**	(5.06)
Firm size		-.01	(-.10)		-.07	(-1.52)
Mechanics		-.03	(-.57)		.02	(.34)
Heavy		.10	(1.54)		.05	(.90)
Electronics		.08	(1.24)		.03	(.51)
Urban location		.02	(.30)		.00	(.02)
Political ties		-.08	(-1.44)		.10	(1.50)
Direct Effects						
Asset specificity (AS)		-.22**	(-3.12)		-.01	(-.42)
Environmental uncertainty (EU)		.10	(1.24)		.16**	(2.85)
Behavioral uncertainty (BU)		-.09	(-.85)		-.26**	(-4.59)
Legal enforceability (LE)		.19**	(3.08)		-.03	(-.48)
Contract		—	—		.14*	(2.06)
Relational reliability		.25**	(3.14)		—	—
Interactions						
AS × LE	**H1a:**	.22**	(3.32)	**H2a:**	-.17**	(-3.18)
EU × LE	**H1b:**	.13*	(2.33)	**H2b:**	-.15**	(-3.10)
BU × LE	**H1c:**	.13*	(2.34)	**H2c:**	.11*	(2.26)
Contract × LE		—	—	**H3b:**	-.14*	(2.13)
Relational reliability × LE	**H3a:**	.06	(.99)		—	—
pseudo-R^2		.21			.39	

Model Fit: $\chi^2(539) = 1144$, $p < .001$; GFI = .90, CFI = .92, IFI = .92; RMSEA = .053, p(close fit) = .12

** $p < .01$, * $p < .05$, † $p < .10$ (two-tailed).

Figure 2 Decomposing the Interaction Effects

Contract - H1a

Relational Reliability - H2a

Contract - H1b

Relational Reliability - H2b

Contract - H1c

Relational Reliability - H2c

Contract → Relational Reliability – H3b

Note: The scales were mean-centered.

Appendix: Measurement Items and Validity Assessment*

	Factor loading
Asset specificity: CR = .938, AVE = .752, HSV = .150	

Your firm may have made investments in time, energy, and/or money specifically to accommodate this supplier and its products. These investment would be lost if your firm switched to another supplier. Please indicate the extent to which your firm has made investments or changes *specifically to accommodate* this supplier (1 = none, 7 = a great deal).

	Factor loading
1. Just for this supplier, we have changed our product's features.	.804
2. Just for this supplier, we have changed our personnel.	.862
3. Just for this supplier, we have changed our inventory and distribution.	.891
4. Just for this supplier, we have changed our marketing strategy.	.905
5. Just for this supplier, we have changed our capital equipment and tools.	.870
Environmental uncertainty: CR = .872, AVE = .582, HSV = .150	
In this supply market, the following factors are changing (1 = very infrequently, 7 = very frequently).	.551
1. Pricing.	.817
2. Product feature and specifications.	.844
3. Vendor support services.	.867
4. Technology used by suppliers.	.690
5. Product supply.	
Behavioral uncertainty: CR = .886, AVE = .662, HSV = .112	
1. It is difficult to measure the collective performance of this supplier.	.881
2. Evaluating the performance of this supplier requires extensive incoming inspection.	.821
3. It is difficult to evaluate if this supplier follows our recommended operating procedures.	.881
4. We have accurate reports about this supplier's activities. (r)	.651
5. Our evaluation of this supplier is based on quite accurate information. (r)	**
Relational reliability: CR = .859, AVE = .611, HSV = .112	
1. This supplier is trustworthy.	.830
2. This supplier has always been evenhanded in its negotiation with us.	.891
3. This supplier never uses opportunities that arise to profit at our expense.	.821
4. We are not hesitant to transact with this supplier when the specifications are vague.	.535
Explicit contracts: CR = .913, AVE = .725, HSV = .092	
In dealing with this supplier, our contracts precisely defines	
1. the role of each party.	.825
2. the responsibilities of each party.	.917
3. how each party is to perform.	.920
4. what will happen in the case of event occurring unplanned.	.730
5. how disagreements will be resolved.	.816
Legal enforceability: CR = .896, AVE = .744, HSV = .032	
In our business operations:	.750
1. The legal system protects our interests.	.983
2. The legal system ensures customers pay.	.839
3. The legal system ensures we can get our money back.	

Model Fit: $\chi^2(393) = 676.95$, $p < .001$; GFI = .92, CFI = .95, IFI = .95; RMSEA = .049, p(close fit) = .61

Notes: CR = composite reliability; AVE = average variance extracted; HSV = highest shared variance with other constructs; r = reverse-coded
* All the scales, unless otherwise specified, were measured with a seven-point scale (1 = strongly disagree, 7 = strongly agree).
**Item deleted from further analysis due to low factor loading.