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Locus of Uncertainty and the Relationship Between Contractual and Relational Governance in Cross-Border Interfirm Relationships

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The relationship between contractual and relational arrangements in interorganizational relationships has been subject to an ongoing debate. We propose that in the context of cross-border partnerships, the governance mechanisms can be both substitutes and complements depending upon contingencies posed by uncertainties of two different origins: environmental and behavioral. We argue that environmental uncertainty (i.e., instability and unpredictability of the external environment) drives the formal and relational arrangements into a more substitutive relationship by elevating the adaptation complications in which increasing reliance on either form of governance inhibits the effective operation of the other. Contrastingly, behavioral uncertainty (in the form of inadequate common grounds and shared frameworks among collaborating firms) encumbers the understanding of partner behavior and conduct and drives the governance mechanisms into a more complementary relationship in which contractual and relational mechanisms facilitate the effective operation of each other. Empirical results from 205 cross-border partnerships of large U.S. firms support our theorized relationships.

Keywords: *interfirm governance; cross-border alliances; formal contracts; relational governance; behavioral uncertainty; environmental volatility*

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As major mechanisms for governing economic exchanges, formal contracts and relational arrangements are capable of driving a partnership into contrasting tracks of either escalating formality and distance (Beuve & Saussier, 2012; Lumineau & Malhotra, 2011) or reciprocity, cooperativeness, and flexibility (Dyer & Chu, 2011; Katsikeas, Skarmeas, & Bello, 2009). This capacity to determine the nature and outcomes of an exchange has drawn significant research attention to the dynamics between formal and relational arrangements in governing interfirm collaborations (Lui & Ngo, 2004; Poppo & Zenger, 2002; Puranam & Vanneste, 2009; Weber & Mayer, 2011; Zhou & Xu, 2012). Earlier theorizations suggest that formal contracts and relational arrangements are unlikely to coexist due to a bilateral substitution mechanism. Formal contracting undermines relational arrangements by signaling distrust or nonexpectance of reciprocity, which motivates opportunism (Ghoshal & Moran, 1996; Macaulay, 1963). Similarly, presence of relational arrangements tends to marginalize costly and inflexible formal contracting (Dyer, 1997; Macaulay, 1963; Macneil, 1980; Zajac & Olsen, 1993). In comparison, a growing body of theoretical and empirical work has recently started to suggest that relational and contractual mechanisms not only coexist but also enable and complement each other (Goo, Kishore, Rao, & Nam, 2009; Luo, 2002b; Poppo & Zenger, 2002; Ryall & Sampson, 2009). According to this research, firms are unwilling to engage in incomplete contracts in the absence of relational norms and trust (Lorenz, 1999; Poppo & Zenger, 2002). Concurrently, contracting reinforces informal arrangements by establishing the norms of collaboration and enriching partners' understanding of each other's assumptions, expectations, and business processes (Luo, 2002b; Ryall & Sampson, 2009).

The relationship between governance mechanisms, however, does not need to necessarily follow a generic rule and may vary depending upon the characteristics of a partnership. In this case, establishing the contextual factors that set up this complementarity/substitution can be more critical than measuring the overall relationship between governance arrangements (Porter & Siggelkow, 2000). Identifying these contextual factors enables boundary spanners to more prudently adopt appropriate governance mechanisms in order to effectively maneuver transorganizational collaborations. A reasonable approach for identifying these contextual determinants is analyzing the challenges that dominate a partnership since governance arrangements are devised to address those hazards. It is quite plausible to suspect that challenges overwhelming an exchange have the potential to impact the dynamics between governance arrangements.

Uncertainty has been recognized as the major source of complication in economic exchanges (Langlois, 1991) as well as the main driver behind theories of governance (Gulati & Singh, 1998; Hayek, 1945; Williamson, 1975).[1] However, in cross-border collaborations, partners face two different forms of uncertainty, each carrying a distinct set of challenges (Anderson & Gatignon, 1986; Carter & Hodgson, 2006; Zhao, Luo, & Suh, 2004). First, international interfirm arrangements bring together partners from sociocognitively disparate environments. Sociocognitive differences subject the partnership into idiosyncratic institutionalized understandings and expectations (Abdi & Aulakh, 2012; Biggart & Guillen, 1999; Zhang, Cavusgil, & Roath, 2003), obscured assessment of equity and efficiency (Katsikeas et al., 2009; Luo, 2005a), divergent systems of meanings and rules (Dyer & Nobeoka, 2000; Kumar & Andersen, 2000), and degraded common grounds (Geringer, 1988; Sirmon & Lane, 2004; Srikanth & Puranam, 2011). These complicate the assessment of partner behavior and conduct based on readily available measures, inducing behavioral uncertainty (Anderson &

Gatignon, 1986; Zhao et al., 2004). A second form of uncertainty in interfirm collaborations arises from instability and unpredictability of the external environment (Williamson, 1975, 1985). Given bounded rationality, environmental uncertainty overwhelms the anticipation of future conditions surrounding the partnership, furthering concerns about adaptation to the changing environmental circumstances (Bello & Gilliland, 1997; Noordewier, John, & Nevin, 1990), a challenge that is further accentuated for foreign entrants due to their lack of embeddedness in the information network of the host country (Calhoun, 2002; Nickerson, 2000; Zaheer & Mosakowski, 1997).

We argue that the challenges caused by these two forms of uncertainty have intrinsic differences. In the context of our study, these intrinsic differences manifest in the contrasting impact of these uncertainties on framing the relationship between formal and relational arrangements: Whereas behavioral uncertainty impedes understanding of partner behavior and conduct and drives the governance mechanisms into a complementary relationship, environmental uncertainly breeds adaptation complications in which increasing reliance on either form of governance impedes the effective operation of the other.

Our logic is as follows. Coping with behavioral uncertainty requires reorienting partners' assumptions and cognitive frameworks in order to lay down a shared coherent set of understandings. Owing to sociocognitive disparities and lack of common grounds among exchange partners, relational arrangements are unlikely to emerge (or would reflect misunderstanding rather than mutual understanding) without deliberate efforts at the partnership level. Under such circumstances, contracting provides a timely opportunity for the exchange partners to engage in a process of sensemaking in order to sort out their differences, establish common expectations and understandings (Carson, Madhok, & Wu, 2006; Luo, 2007c), define the norms of their exchange (Kessler & Leider, 2012), and determine the pattern of resources exchange/deployment for accomplishing the exchange objectives (Wu, Sinkovics, Cavusgil, & Roath, 2007).

In contrast, adaptation concerns arising due to environmental uncertainty frame bilateral substitutive dynamics between formal and informal mechanisms. Owing to its emphasis on rights and legal enforcement, contractual governance tends to encourage an adversarial right-based approach toward adaptation (Beuve & Saussier, 2012; Lumineau & Malhotra, 2011), which undermines the relational mechanisms of adjustment based on norms of flexibility, cooperativeness, and sharing. Since exchange parties are unlikely to exchange contractual safeguards in a socially optimal way (Furlotti, 2007), high-powered formal incentives usually create entanglements that are likely to undermine the ex post relational adjustments by encouraging "insistence on the literal enforcement of contract" (Williamson, 1991: 273). This safeguarding functionality of formal contracting in dealing with adaptation concerns is quite distinct from its capacity to alleviate the definitional issues underlying behavioral uncertainty. Concurrently, due to their reliance on a distinctive set of behavioral repertoires and their long-term partnering perspective (based on norms of sharing, cooperativeness, and flexibility), relational processes tend to marginalize formal entanglements in dealing with adaptation concerns (Dyer & Singh, 1998; Uzzi, 1997; Zajac & Olsen, 1993).

Our theorized relationships are tested on a sample of 205 cross-border partnerships of large U.S. firms. We find empirical support for our hypotheses that behavioral and environmental uncertainties, respectively, drive the governance arrangements into a more complementary and substitutive relationship. Documenting the contrasting nature of challenges

arising from behavioral and environmental uncertainties in the context of interfirm partnerships, our research suggests these challenges need to be maneuvered differently. This contributes to the emerging literature unpacking different components of uncertainty and their embodied hazards for economic exchanges (e.g., Carson et al., 2006; Luo, 2007a; Ouchi, 1980; Sutcliffe & Zaheer, 1998). Value-generating potential of cross-border partnerships (Morosini, Shane, & Singh, 1998) has drawn significant attention to the antecedents of trust and relationalism in such partnerships (Katsikeas et al., 2009; Robson, Katsikeas, & Bello, 2008). Our research provides evidence that formal contracting (that is intertwined with the evolution of these partnerships from the outset; Ariño & Ring, 2010; Ring & Van de Ven, 1994) carries contrasting implications for the emergence of relationalism and trust depending upon the contingencies surrounding the exchange.

Theory and Hypotheses

Formal contracts are documented arrangements for governing voluntary exchanges in the shadow of law (Macaulay, 1963; Suchman, 2003) and incorporate mutual obligations and administrative and dispute-resolution processes (Hamilton & Nickerson, 2003; Macneil, 1974; Mayer & Teece, 2008). Contracts "establish intricate frameworks of procedures, commitments, rights, and incentives in order to accomplish practical objectives in the governance of human transactions" (Suchman, 2003: 99). In comparison, relational governance refers to the extent to which partnering firms engage in "behavioral routines that facilitate the development of informal self-enforcing safeguards in their relationship" (Sarkar, Aulakh, & Madhok, 2009: 587). Interorganizational relationships occur in the larger context of social interactions (Granovetter, 1985) and over an extended period of time (Gulati, 1995; Heide & Miner, 1992). Embeddedness of the relationship within a larger social context (Granovetter, 1985; Macneil, 1980) along with expectations about future interactions (Heide & Miner, 1992) empowers the presence and self-enforcement of relational norms. Unlike formal contracts in which all contingencies are formalized a priori and remain legalistic in nature (Sobrero & Schrader, 1998), informal governance reflects "a social consensus and reinforcement of specific behaviors and exchange patterns" (Rousseau, 1995: 51).

Due to the capacity of governance mechanisms in setting up the nature of an exchange, their interrelationship has been subject to an ongoing debate. Whereas literature traditionally advocated a substitutive dynamic between the governance arrangements (Ghoshal & Moran, 1996; Malhotra & Murnighan, 2002), more recent research suggests that informal and formal arrangements can reinforce and facilitate each other (Poppo & Zenger, 2002; Ryall & Sampson, 2009). The substitution perspective builds around the notion that formal rules can initiate an escalating spiral of formality and distance, thereby undermining the operation of social norms underlying informal dealings (Larson, 1992; Macaulay, 1963; Sitkin & Roth, 1993). The complementarity perspective, in contrast, argues that the process of formal contracting settles a mutual understanding about a different aspect of the partnership, thereby upholding norms of fairness, trust, and cooperativeness (Ariño & Ring, 2010; Vlaar, Van den Bosch, & Volberda, 2006). Nonetheless, there is little reason to assume the relationship between governance arrangements complies with a universal law irrespective of the challenges surrounding an exchange.

Uncertainty is a key driver for theories of governance (Langlois, 1991) and has been recognized as the "motor behind" the various conceptualizations (Gulati & Singh, 1998: 783).

Existing theory has recognized two different sources of uncertainty in interorganizational relationships, namely, *behavioral* and *environmental* (Carter & Hodgson, 2006; Zhao et al., 2004). These two, respectively, correspond to the focus of two different branches of transaction cost economics (TCE): *measurement* (Alchian & Demsetz, 1972) and *governance*. Whereas the governance branch conceptualizes uncertainty as environmental instability and unpredictability and examines the governance consequences of environmental volatility, the measurement branch of TCE focuses on the metering problems arising due to difficulties in accurately discerning the exchange partner's behavior and performance (Alchian & Demsetz, 1972; Ouchi, 1980).

In the context of cross-border interfirm relationships, existing research suggests that partners from sociocognitively dissimilar environments confront difficulties in accurately evaluating each other's conduct and behavior (Anderson & Gatignon, 1986; Shane, 1994; Zhao et al., 2004), which leads to "interorganizational relational hazards" (Eden & Miller, 2004). Sociocognitive differences inhibit the combination of partners' complementary resources, which seriously degrades the value-generating processes of the partnership (Pothukuchi, Damanpour, Choi, Chen, & Park, 2002; Sarkar, Echambadi, Cavusgil, & Aulakh, 2001; Sirmon & Lane, 2004). This obscures the relationship between each partner's conduct and the overall outcome and makes the assessment of "equity and efficiency unclear and equivocal" (Katsikeas et al., 2009: 137; Simonin, 1999; Williamson, 1985), thus paralleling the problem of indivisibilities in team production and related metering complications (Alchian & Demsetz, 1972; Ouchi, 1977). Since ways of doing business, norms, and systems of meanings differ substantially across sociocognitively different environments, partners from culturally distant countries lack "readily available standards" to evaluate behavior and conduct of their partners (Anderson & Gatignon, 1986; Zhang et al., 2003) and experience a relationship subjected to divergent institutionalized understandings and expectations. These complications have been documented in an extensive stream of work suggesting that partners from sociocognitively distant environments experience more internal tensions (Cartwright & Cooper, 1993; Das & Kumar, 2010; Das & Teng, 2000), conflicts (Lane & Beamish, 1990; Very, Lubatkin, & Calori, 1996), and misunderstandings (Hennart & Zeng, 2002; Katsikeas et al., 2009).

A second complication in interorganizational relationships arises from unpredictable environmental changes. Environmental uncertainty about future conditions surrounding a transaction makes the prediction and ex ante planning for various scenarios more precarious (Williamson, 1975), introducing concerns about adaptation to unpredictable environmental changes (Hayek, 1945; Langlois, 1991). In discrete market transactions, competitive forces ensure efficient adjustment into environmental changes by offering the possibility of switching into alternative exchange parties (Rindfleisch & Heide, 1997; Williamson, 1985). In contrast, long-term contractual partnerships lock in the partners into a relationship, undermining their flexibility to adapt unilaterally to environmental changes (Anderson & Gatignon, 1986; Lonsdale, 2005; Noordewier et al., 1990).[2] Due to bounded rationality, environmental uncertainty undermines advance planning for possible contingencies and makes the adaptive adjustments more prone to opportunism (Luo, 2007a; Williamson, 1979). This complication is usually further accentuated for foreign entrants since insufficient embeddedness in local institutional contexts and information networks further undermines the predictions of environmental changes.

We argue that the challenges posed by these two forms of uncertainty (as integral elements of the liability of foreignness and the process of cross-border expansion; Eden & Miller, 2004) have intrinsic differences. In the context of our study, the contrasting nature of behavioral and environmental uncertainties differentially impacts the interplay of the two governance mechanisms. Whereas adaptation problems posed by environmental uncertainty may be addressed through both relational and contractual arrangements, increasing reliance on each type of these governance arrangements tends to undermine the operation of the other. Contrastingly, behavioral uncertainty caused by sociocognitive disparities and lack of common grounds sets up a situation in which governance mechanisms cannot emerge or operate effectively in the absence of the other.

Behavioral Uncertainty and the Relationship Between Governance Mechanisms

Behavioral uncertainty entails ambiguities in interorganizational relationships due to difficulties in accurately understanding partners' behaviors (Katsikeas et al., 2009; Sutcliffe & Zaheer, 1998) or measuring its performance through "objective, readily available" standards (Anderson & Gatignon, 1986: 15). Interorganizational relationships are subject to discontinuities in structure (Doz, 1996; Hoang & Rothaermel, 2005), contexts (Grant, 1996; Kogut & Zander, 1993), expectations (Fey & Beamish, 2001; Rouleau, 2005), culture and interpretive schemes (Parkhe, 1991; Sutcliffe & Huber, 1998), and institutionalized modes of behavior and decision making (Almeida, Grant, & Phene, 2002; Ouchi, 1980), which expose economic exchange to behavioral uncertainty.

Within national boundaries, however, local institutions, such as national culture and economic and political systems, tend to alleviate these ambiguities and facilitate economic exchange in an "enormous variety of ways" (North, 1990: 34). Country-specific sociocognitive institutions lay down a strong platform for economic exchanges by providing a system of agreed-upon principles, shared meanings, norms, priorities, and taken-for-granted frameworks, which together define "how things ought to be" and "how things ought to be done" (Sirmon & Lane, 2004: 309). National culture also upholds collective "administrative heritage" and professional culture (Bartlett & Ghoshal, 1989) across organizations by the virtue of professional associations (DiMaggio & Powell, 1983), educational systems (Calori, Lubatkin, Very, & Veiga, 1997), common administrative processes (Calori et al., 1997; Terpstra & David, 1991), and shared cognitive frameworks (Barr & Glynn, 2004; Busenitz, Gomez, & Spencer, 2000; Kostova, 1997).

Due to the paucity of a shared system of understandings and norms, sociocognitive distance in cross-border partnerships creates a "particularly potent form" of behavioral uncertainty (Anderson & Gatignon, 1986: 17; Gatignon & Anderson, 1988: 311), subjecting the relationship into far more idiosyncrasies and ambiguities (Yang, Su, & Fam, 2012). Several complications contribute to the formation of behavioral uncertainties in cross-border interorganizational relationships. First, sociocognitive dissimilarities among exchange partners distorts the assessment of equity and fairness among exchange partners (Luo, 2005a; Terpstra & David, 1991) since such partners are more likely to have incongruent frames of reference regarding what constitutes an equitable and nonopportunistic exchange (Geringer, 1988; Giacobbe-Miller, Miller, Zhang, & Victorov, 2003). Sociocognitive disparities distort the perception of equity, that is, the main inducer of transaction costs (cf. Ariño & Ring, 2010;

Husted & Folger, 2004; Luo, 2007b; Ouchi, 1980; Ring & Van de Ven, 1994), and "frustrate interpretation and understanding of a partner's behaviors, fueling suspicions of inequity and exploitation" (Katsikeas et al., 2009: 138). Along similar lines, disparate sociocognitive backgrounds lead to divergent understandings and interpretations, which are likely to induce incongruent expectations and behaviors (Das & Kumar, 2010; Hodgson, 2004; Kumar & Andersen, 2000). Second, cross-border sociocognitive differences lead to basic differences in organizational forms and ways of doing business (Biggart & Guillen, 1999; Gooderham, Nordhaug, & Ringdal, 1999) and predefined norms and rules in interfirm cooperations (Dyer & Nobeoka, 2000; Orru, Biggart, & Hamilton, 1991) and deepens the asymmetries in organizational and professional cultures (Pothukuchi et al., 2002; Sirmon & Lane, 2004). These differences deprive the relationship from a mutually shared system of defaults as the basis of assessment of partners' behavior and conduct. Third, sociocognitive differences undermine the interpartner coordination process since, "ultimately, all consciously coordinated action" stands on "common grounds (i.e., knowledge that is shared and known to be shared—to enable reciprocal predictability of action)" (Choi & Lee, 1997; Schelling, 1960; Srikanth & Puranam, 2011: 852). Through systematical downgrade of interpartner common grounds and, therefore, coordination processes, sociocultural differences obscure the relationship between each party's conduct and overall joint outcome, which leads to further behavioral uncertainties.

Under such circumstances, formal contracting operates as a crucial complement for relational arrangements. With excessive behavioral uncertainty among exchange partners, successful collective action stands on reorienting the existing assumptions and cognitive frameworks in order to establish a shared set of understandings (Das & Kumar, 2010; White & Lui, 2005). Relational arrangements and trust are unlikely to emerge without embarking on deliberate, purposeful efforts at the micro level, since sociocognitive disparities have undermined the central inducers of relationalism (such as shared norms, cognitive frameworks, and patterns of behavior) and biased the relationship toward suspicion, misunderstanding, and conflict (Björkman, Stahl, & Vaara, 2007; Lane & Beamish, 1990; Sirmon & Lane, 2004). The downward spiral of aggravated suspicion and misunderstanding coupled with downgraded communication modality (Hennart & Zeng, 2002; Rao & Schmidt, 1998) can be overcome only through proactive stimulated effort of the transaction parties (Park & Ungson, 1997; Reus & Lamont, 2009; Very et al., 1996; Zhang et al., 2003). Only through proactively "sounding off their differences," sociocognitively disparate partners will be able to avoid fatal conflicts (Luo, 2002a: 675) and lay down workable common understandings and principles. In the context of interorganizational relationships, this proactive approach in confrontation with institutional gaps has been shown to be intricately related to the process of formal contracting (Ariño & Ring, 2010; Blomqvist, Hurmelinna, & Seppanen, 2005; Ring & Van de Ven, 1994; Vlaar et al., 2006).

Contracting provides a timely opportunity for the partners to engage in an ex ante process of sensemaking in order to sort out their differences, establish common expectations and understandings (Carson et al., 2006; Luo, 2007c), define the norms of their exchange (Kessler & Leider, 2012), and determine the pattern of resources exchange/deployment for accomplishing the exchange objectives (Wu et al., 2007). In the absence of institutionalized agreed-upon principles and understandings, this constitutes an essential ingredient for the evolution of relational arrangements. Ariño and Ring (2010), for example, illustrated how perceptions

of four different types of fairness and equity (as central elements of relationalism) emerged in the process of contractual negotiation of a cross-border alliance. Along similar lines, Vlaar et al. (2006: 1622) elaborated on different mechanisms through which formal contracting among partners accustomed to disparate cultures and cognitive frameworks "enables, or even forces collaborating parties to engage in sensemaking, helping them to create common ground and achieve mutual understanding." These mechanisms include the impact of contractual governance on focusing participants' attention; provoking articulation, deliberation, and reflection; instigating and maintaining interaction; and reducing biases, judgment errors, and inconsistencies in cognitive representations. Moreover, recent empirical studies (e.g., Yang et al., 2012) suggest that formal contracting can overcome the market ambiguity difficulties faced by foreign entrants (due to institutional differences) by establishing metering references that enable more accurate measurement of productivity and by modifying goals, activities, and interpartner arrangements in advance. These rationales are also consistent with studies suggesting that formal contracting among partners with disparate backgrounds provides a structure "within which on-going relationships can proceed sensibly over time" (Kaghan & Lounsbury, 2006: 260) or "may be used purposefully to increase the mutual understanding" (Blomqvist et al., 2005: 497). In summary, formal contracting contributes to the emergence of relational arrangements among sociocognitively disparate partners through multiple mechanisms.

It is also important to note that relationalism and trust per se (even if emerged without due contracting) are not capable of confronting the challenges arising from behavioral uncertainty (Carson et al., 2006; Poppo, Zhou, & Zenger, 2008). The effective operation of relational arrangements hinges on social sanctioning of inappropriate or opportunistic behavior of the transaction partner. For a given behavior to qualify as inappropriate or opportunistic, "there must be a norm in place, in the sense that the parties share expectations regarding subsequent behavior" (Wathne & Heide, 2000: 40). However, as elaborated earlier, sociocognitive differences introduce substantial equivocality to the exchange (Das & Kumar, 2010; Geringer, 1988; Katsikeas et al., 2009; Luo, 2005a), which undermines the identification and, therefore, relational sanctioning of inappropriate or opportunistic behaviors. With few mutual understandings, shared expectations, and common norms, relational arrangements and trust are more likely to reflect blindness (which is detrimental even in the absence of opportunism; Gargiulo & Ertug, 2006) rather than efficient organizing principles that "allow actors to conserve cognitive resources" (McEvily, Perrone, & Zaheer, 2003: 93). Through ex ante "foreclosing [of] alternative interpretations and understandings of phenomena" (Vlaar et al., 2006: 1622) and laying down "reference points" (Fehr, Hart, & Zehnder, 2011; Hart & Moore, 2008), contractual coverage narrows down the latitude of possible interpretations and complements the relationalism among culturally divergent partners. These rationales are also consistent with emerging empirical findings that relational mechanisms of governance, on their own, are not robust toward behavioral uncertainty (Carson et al., 2006; Poppo et al., 2008). Thus, we hypothesize the following:

Hypothesis 1: Behavioral uncertainty drives the governance mechanisms into a complementary relationship; that is, the higher the behavioral uncertainty, the more formal contracting and relational governance move toward a mutually strengthening relationship.

Environmental Uncertainty and the Relationship Between Governance Mechanisms

Environmental uncertainty refers to the instability and unpredictability of external elements on which the exchange is contingent (Luo, 2007a; Zhao et al., 2004). The "primary consequence" (Rindfleisch & Heide, 1997: 31) of environmental uncertainty is difficulties with adapting the terms of agreement into changing circumstances surrounding the relationship (Bello & Gilliland, 1997; Wathne & Heide, 2000; Williamson, 1975). It overburdens the cognitive capacities of boundedly rational exchange partners and frustrates the possibility of anticipating and spelling out all the contingencies ex ante (Noordewier et al., 1990; Shervani, Frazier, & Challagalla, 2007; Williamson, 1985). Accordingly, in economic exchanges characterized by lock-in (such as long-term contractual relationships; Dutta, Bergen, Heide, & John, 1995; Lonsdale, 2005; Noordewier et al., 1990), environmental uncertainty bring about ex post "tussles for the rents after the fact of a contract" (Langlois, 1991: 103; Williamson, 1985).

As Wathne and Heide (2000) elaborated, these conditions make the exchange conducive to two types of opportunistic behavior. First, the opportunistic party may show "inflexibility or unwillingness to adapt to new circumstances" (Anderson & Weitz, 1986; Wathne & Heide, 2000: 40) and rely "on the letter of contract when the spirit of exchange is emasculated" (Williamson, 1979: 240). For example, in an earlier distribution system of carbonated soft drink producers (e.g., Coca-Cola and Pepsi), some independent bottlers refused to restructure and adjust their agreements according to the shifting market conditions (Muris, Scheffman, & Spiller, 1992). Second, new unforeseen circumstances provide the opportunity for the opportunistic party to renegotiate and extract concessions at the partner's expense. In addition to the concessions extracted, this noncooperative and confrontational process imposes undue haggling and bargaining expenses to the partnership (Ghosh & John, 1999; Wathne & Heide, 2000; Williamson, 1991). In the aforementioned case of soft-drink distribution channels, Muris et al. (1992) noted that many independent bottlers opportunistically extracted concessions from the soft-drink producers in exchange for their adaptation to the changing conditions.

Exchange partners can employ both formal and informal instruments to address the adaptation concerns arising from environmental uncertainty; however, received research alludes to plausible rationales that presence of each type of these adaptation leverages undermines the operation of the other. First, following neoclassical contracting perspective, parties can engage in contractual contingency planning, which refers to the extent to which unanticipated contingencies are accounted for in the contract and rules for handling them are developed (Goldberg, 1976; Luo, 2005b). For example, in the context of international joint ventures, Luo (2005b) reported a positive relationship between contractual governance and volatility in various segments of the host country environment. Similarly, studying cross-sector partnerships of Internet portals, Elfenbein and Lerner (2012) found that the contract's extensiveness is positively dependent on the intensity of environmental uncertainty. Nonetheless, there is strong evidence suggesting that a priori contractual exhaustion of different contingencies undermines the operation of relational norms by promoting adversarial and distributive attitudes toward adaptation (Beuve & Saussier, 2012; Lumineau & Malhotra, 2011).

First, as suggested by Williamson (1985: 48), absent opportunism, adaptation to unanticipated environmental changes can be achieved through "general rules of dividing the benefits

according to the pre-specified ratio" in order to remain loyal to the "spirit of the exchange" rather than undue insistence on the contract enforcement. Under relational arrangements, the partnership is governed by norm of flexibility and sharing (Macneil, 1978, 1980), which include the "shared expectation that the parties will adapt to changing circumstances" and "the outcome of relevant adaptations should not produce inequalities" (Wathne & Heide, 2000: 40). Ex ante contractual coverage can induce entanglements that impede the efficient operation of relational adaptations based on flexibility and cooperativeness. For example, Lumineau and Malhotra (2011: 536) found that contractual governance, due to "its explicit emphasis on rights, prohibitions, and legal sanctions," encourages a right-based approach toward the adaptation (which is "primarily distributive, adversarial, and competitive" and based on a win-lose framing). This contrasts with relational norms of flexibility and cooperativeness that are more interest based (i.e., integrative, cooperative, and consensual; Lumineau & Malhotra, 2011) and imply "that costs as well as benefits will be divided between the parties rather than assigned or shifted to any particular one" (Wathne & Heide, 2000: 40). This dynamic has been supported by empirical findings that adoption of high-powered contractual incentives motivates "the parties to trade safeguards in a socially inefficient way" (Furlotti, 2007: 69), which undermines the ex post relational processes by encouraging "insistence on the literal enforcement of contract" (Williamson, 1991: 273). For example, Corts and Singh (2004: 231) reported that careful crafting and "enumerating many contingencies and detailing the specifications ex ante, makes it very costly to change the specifications once the project is underway." Corroborating, Antia and Frazier (2001: 69) found that environmental volatility increases the possibility that distribution channel members use contract enforcement in "a manner best suited to their local needs" that "may adversely affect the performance of the channel system." Similarly, Carson et al. (2006) provide empirical evidence that formal contracting induces a positive relationship between environmental volatility and opportunism (which is known to undermine the operation of relational norms and channel the partnership into a defensive orientation). This logic also parallels studies arguing that increasing reliance on contractual governance undermines strategic flexibility (Bernheim & Whinston, 1998; Malhotra, 2009), which is achievable through relational arrangements.

Second, if relational arrangements, similar to internalization, enable ex post sequential adaptation through norms of flexibility and sharing, striving to exhaust environmental contingencies through costly ex ante contractual planning sends a detrimental signal that a partner would not adapt to environmental changes unless elaborated in the contract. This initiates an escalating spiral of formality and rigidity (Anderson & Weitz, 1992; Ferguson, Paulin, & Bergeron, 2005; Gulati, Khanna, & Nohria, 1994; Klein, Frazier, & Roth, 1990) since expectance of reciprocity is essential to the evolution of forbearance and flexibility (Heide, 1994; Luo, 2007c).

Alternatively, exchange partners can rely on relational arrangements and close relationships as a mechanism for attenuating the adaptation concerns (Heide & John, 1990; Macneil, 1981; Noordewier et al., 1990). Partners imbued in socially embedded relationships are unlikely to exhibit opportunistic behavior as each will pass short-term gains in favor of long-term interests in the partnership (Aulakh, Kotabe, & Sahay, 1996; Axelrod, 1986). That is, unlike the mutual hostage situations or "tit for tat" possibility (Parkhe, 1993), where the ability of partner firms to behave opportunistically is curbed, in relational governance, the motivation for opportunistic behavior is minimized because "behavioral repertoires are biased

toward cooperation, rather than opportunism" (Hill, 1990: 511). Therefore, unlike contractual arrangements, which must be rolled back and renegotiated (promoting conflict and defensive behavior), relational norms provide effective frameworks for coping with adaptation concerns through bilateral problem solving and mutual adjustments on the fly. Due to their superior robustness against environmental uncertainty and reliance on distinct behavioral orientation, there are good reasons to believe that relational arrangements are likely to marginalize formal contracts as mechanisms for adaptation to change (Dyer & Singh, 1998; Macneil, 1980; Sako, 1992; Uzzi, 1997; Zajac & Olsen, 1993).[3] Prior empirical evidence also corroborates these rationales. For example, Dekker (2004) finds that relational arrangements attenuate the relationship between environmental uncertainty and formal controls. This substitution logic is also consistent with studies documenting reduced contracting in the face of elevated environmental uncertainty (e.g., Arino & Reuer, 2004), which would be justifiable if contractual coverage is marginalized by relational mechanisms of adaptation. Thus, we hypothesize the following:

Hypothesis 2: Environmental uncertainty drives the governance mechanisms into a substitutive relationship; that is, the higher the environmental uncertainty, the more formal contracting and relational governance move toward a mutually weakening relationship.

Data and Method

Data

Primary data for this study were collected through a mail survey of Fortune 500 U.S. industrial firms. We tested our theorized hypotheses in the context of foreign market entry partnerships of U.S. firms. Specifically, we focused on licensing and distribution arrangements as major modes of foreign market entry in which internationalizing firms transfer product and know-how to foreign markets. Success of these "unilateral contractual arrangements" (Oxley, 1997: 392) depends on the ability to manage the relationship with local partners who contribute value in the form of marketing or producing the product in the host market (Aulakh et al., 1996; Hagedoorn & Hesen, 2007). The essence of effectively combining the complementary resources of partners (technology and know-how with local knowledge and adaptation) accentuates the governance mechanisms upholding these partnerships (Sirmon & Lane, 2004). This international setting with cooperating firms residing in diverse institutional settings also allows us to clearly identify separable dimensions of uncertainty with origins internal and external to the relationship. In particular, past research has shown how sociocognitive distance between the home countries of cooperating firms subject the relationship into idiosyncratic institutionalized understandings, expectations, frames of reference, and norms, inducing internal uncertainty and tensions.

Formation of international cooperative relationships entail considerable a priori effort by partnering firms due to high levels of economic, political, and administrative distances (Ghemawat, 2001), and the process of partner selection and relationship formation constitutes relationship-specific investments. Moreover, in our specific context of licensing and distribution partnerships, the local partner invests around the technology/products in terms of manufacturing plants, machineries, facilities, and human resources. These investments are specific to the project because the physical investment and marketing infrastructure are

designed or set up to support the particular technology/products. On the other side, the licensor or manufacturer makes specific investment in the partnerships, though it may not be involved in capital investment (Martin & Salomon, 2003). The foreign firm must be able to identify the different conditions in which its technology/products will be used, which vary across licensees'/distributors' conditions (Nelson & Winter, 1982); determine a partner's readiness to absorb the technology-/product-related knowledge, depending on its strengths and weaknesses, and modify its efforts accordingly (Arrow, 1969; Leonard-Barton, 1992); and adapt these to fit the needs of the local market. Thus, the design of the technology/product process is specific to the foreign partnership (Teece, 1976). In sum, initiating cross-national distribution and licensing partnerships entails substantial relationship-specific investments by both partners, which tend to lock in the partners into the relationship (Anderson & Gatignon, 1986; Zhao et al., 2004).

Appropriate informants for our primary data collection were identified through an initial participation request stage. CEOs/presidents of the Fortune 500 firms were contacted through an introductory participation request letter that detailed the purpose of the study, promised to share the findings and provide benchmark results, and asked them to provide the names and addresses of executives who managed the firms' foreign operations. This process resulted in identification of 652 potential informants introduced as executives responsible for the respective firms' international operations. Questionnaires were then mailed to the identified executives along with a personalized cover letter that explained the nature of the study and informed the respondents that their names had been provided by their respective company heads. The managers were asked to choose an ongoing partnership of their firm that they "are most familiar with and knowledgeable about" and to respond to all questions with respect to the relationship with that focal foreign partner. After two follow-up letters, 205 questionnaires with complete information regarding the variables in this study were received (for a response rate of 30%), of which 117 questionnaires corresponded to a distribution partnership and the remaining 88 reported on a licensing arrangement. Respondents held upper-management positions (president, director, vice president, area manager/general manager) and had, on average, 11.7 years of experience working with their current firm and 8.2 years of experience in making decisions in the foreign country they had selected. These characteristics suggest that the respondents are likely to be familiar with their firm's foreign operations and would be involved in the decision making about the selected foreign partnerships.

To assess the nonresponse bias, we followed the procedure suggested by Armstrong and Overton (1977). The *t* tests performed to compare early and late respondents on key variables demonstrated no significant differences between early and late respondents on firm size. The 205 respondents who filled out the questionnaires represented 137 different Fortune 500 firms. Thus, we received more than one response for some firms. However, for these firms, the responses were from different affiliates and represent distinct foreign relationships and are, therefore, considered as separate data points. To validate the appropriateness of pooling the data at the firm level, we used the Breusch-Pagan Lagrangian multiplier test (Breusch & Pagan, 1980), which refuted the necessity of modeling the firm-level clusters (unlike the country-level clusters). Therefore, at the firm level, data can be pooled without consistency concerns. This is aligned with our expectation as the data are only slightly clustered at the firm level: 76% percent of the sampled firms are represented by only one observation, and no firm is represented with more than two observations.

Table 1
Distribution of Sample (Vis-à-Vis Fortune 500 Firms) Across One-Digit SIC Codes

	SIC Code (One Digit)									
Variable	0	1	2	3	4	5	6	7	8	9
Percentage in Fortune 500	.01	.03	.26	.21	.20	.15	.09	.03	.01	.01
Percentage in the sample	.02	.04	.30	.43	.02	.08	.04	.03	.03	.00

Note: SIC = Standard Industrial Classification.

Table 2
Distribution of Sample (Vis-à-vis Fortune 500 Firms) Across the Fortune 500 Ranks

	Revenue Rank in the Fortune List				
Variable	1-100	101-200	201-300	301-400	401-500
Number of sampled firms	40	30	22	22	23

Parent firm's characteristics (such as size, international experience, and degree of internationalization) remain constant across the partnerships of a given firm's affiliates. So we capitalized on this subsample (of firms represented twice with partnerships of their distinct affiliates) to examine the interrater reliability of the collected firm-level information (rather than partnership level). We compared the assessment of the same-firm raters (from different affiliates) to examine the interrater reliability on the parent firm characteristics. Interrater reliability (in the form of intraclass correlation coefficient; LeBreton & Senter, 2008; Shrout & Fleiss, 1979) for the parent firm's size, international experience, and degree of internationalization were, respectively, .81, .91, and .79, suggesting that our informants have provided reliable information.

Tables 1 and 2 compare our sample with the population of Fortune 500 firms in terms of their industrial origins (one-digit Standard Industrial Classification [SIC] code) and size (ranking in the list). To statistically examine the degree to which our sample is a proportionate representation of the Fortune 500 population, we employed a chi-square goodness-of-fit test that compared the distribution of our sample versus the distribution of the Fortune 500 population across the one-digit SIC codes and the revenue ranks in the list. Our chi-square goodness-of-fit test did not indicate a statistically significant divergence between the distribution of our sample and the Fortune 500 population in terms of standing in the rank (i.e., revenue based). With respect to the one-digit SIC codes, however, the distribution of firms in our sample is significantly different from that of the Fortune 500 companies, and the chi-square statistics turned out significant at $p = .01$. Further examination shows that this difference mainly originates from the underrepresentation of SIC Code 4 and overrepresentation of SIC Code 3 in our sample (without these divergences, the value of chi-square statistics drops below the critical value of $p = .05$). However, these two divergences are anticipatable given the subject of our survey (i.e., foreign entry partnerships): SIC Code 4 encompasses industries that are local in nature, such as railroad transportation (two-digit SIC: 40), local

and suburban transit (41) and freight transportation (42), U.S. postal services (43), water transportation (44), pipelines (46), transportation services (47), communications (48), and electric, gas, and sanitary services (49). Due to their local nature and limited international exposure, it is quite reasonable to expect these industries to be underrepresented in the study of foreign entry partnerships. In contrast, manufacturing industries (SIC Code 3) are more globally oriented and are expected to be further represented in the study of foreign entry partnerships compared to an average member of the population.

We took procedural precautions to avoid, and ex post statistical tests to examine the presence of common method bias in our data (Chang, van Witteloostuijn, & Eden, 2010; Podsakoff, MacKenzie, & Podsakoff, 2012). First, to minimize the effects of consistency artifacts, we interspersed open-ended questions throughout the instrument and varied the anchors for scales for certain constructs (i.e., we use Likert and semantic differential scales as well as indices). Second, having collected the data, we conducted Harman's one-factor test to assess the presence of common method variance. If there were a serious bias in our data, a single factor should have emerged from the factor analysis, or one general factor should have accounted for most of the covariance in the independent and criterion variables (Podsakoff et al., 2012). However, no general factor is apparent in our factor analysis, and items related to perceptual measures load to distinct factors with eigenvalues exceeding 1. Finally, the nature of our theorization (which hypothesizes moderations) ensures robustness against common method bias (Kotabe, Martin, & Domoto, 2003; Reinholt, Pedersen, & Foss, 2011) since such complicated relationships are "in all likelihood, not part of the respondents' theory-in-us" (Chang et al., 2010: 180). As Siemsen, Roth, and Oliveira (2010: 470) statistically demonstrated, "there is no reason that common method bias would create an artificial interaction effect," and therefore, interaction effects "cannot be artifacts of it [common method variance]" (Podsakoff et al., 2012: 543).

Measures

Relational governance has been found to develop along different dimensions consisting of behaviors that concern the expectations of mutuality of interest, essentially prescribing stewardship behavior, and that are designed to enhance the well-being of the relationship as a whole (Carter & Hodgson, 2006; Heide & John, 1992; Macneil, 1980). These include flexibility, which reflects partners' willingness to jointly adapt into upcoming unforeseen events (Heide & John, 1992); solidarity, which provides a basis for joint problem solving and commitment toward forming a shared understanding about the environment; and trust, which refers to the "willingness of a party to be vulnerable to the actions of another based on the expectation that the other will perform a particular action important to the trustor, irrespective of the ability to monitor or control other party" (Mayer, Davis, & Schoorman, 1995: 217). Following Heide and John (1992) and Aulakh et al. (1996), we operationalized this concept along the aforementioned underlying dimensions (5-point Likert scale; responses ranging from *strongly disagree* to *strongly agree*): (a) Our business relationship with this partner is characterized by high levels of trust; (b) In this partnership, our firm and our foreign partner expect to be able to make adjustments in the ongoing relationship to cope with changing circumstances; (c) Over the years, our relationship with this partner is more and more guided by informal rules and procedures; and (d) Our firm and the foreign partner are very committed to each other (Cronbach's alpha = .77).

Contractual governance refers to the degree to which different aspects of the relationship and relevant issues are specified in the form of written agreements and the extent to which exchange partners rely upon these written agreements. In accordance with Mayer (2006), contractual governance was measured using a three-item 5-point Likert scale (*strongly disagree* to *strongly agree*): (a) Most aspects of our relationship with this foreign partner are guided by formal written rules; (b) Most aspects of our agreement with this foreign partner are clearly specified in the contract; and (c) If our foreign partner firm fails to achieve the specified targets specified in the contract, we penalize it (Cronbach's alpha = .74).

Environmental uncertainty refers to the rate and unpredictability of environmental changes over time, which creates uncertainty about future conditions surrounding the relationship. We selected to employ a perceptual measure to quantify the environmental uncertainty since the managerial perception of uncertainty (rather than objective uncertainty itself) drives the firm's strategy adoption (see Globerman & Nielsen, 2007).[4] We used a four-item 5-point semantic differential scale to measure the environmental uncertainty in the operational environment of the licensee or distributor (i.e., the operational environment in which partnership's objectives are to realize). Consistent with Katsikeas et al. (2009), Heide and John (1990), and Klein et al. (1990), we included two items quantifying the unpredictability of future demand conditions in the foreign country (*very low* to *very high*): (a) How do you evaluate the stability of sales forecast in this foreign country? and (b) How do you evaluate the stability of market share in this foreign country? Paralleling Kim and Hwang (1992) and Luo (2001), a third item was included to operationalize the industry life cycle since industries in earlier stages of their life cycle experience faster and less predictable changes (introduction to decline). As per Luo (2001, 2005b), we complemented these with a fourth item (*very low* to *very high*) quantifying the "frequency of change in government regulations" in the foreign country as another major aspect of environmental uncertainty in cross-border business relations (Cronbach's alpha = .60).

Behavioral uncertainty refers to the extent to which partnership is subject to idiosyncratic understandings, expectations, frames of reference, and norms. The measurement branch of transaction economics focuses on difficulties of observing, measuring, and discerning the partner performance given the constraints on information availability. In international collaborations, behavioral uncertainty is further accentuated by the sociocognitive disparities that undermine the presence of mutually agreed-upon norms of conduct (Dyer & Nobeoka, 2000; Shenkar & Zeira, 1992) and fairness (Katsikeas et al., 2009; Luo, 2005a), thereby elevating incongruent expectations and assumptions (Hennart & Zeng, 2002; Sirmon & Lane, 2004), ambiguity (Simonin, 1999), separateness (Luo, 2005a; Watson, Kumar, & Michaelsen, 1993), and internal tensions (Das & Kumar, 2010). We used a four-item 5-point Likert scale to operationalize the extent of behavioral uncertainty among partners (*strongly disagree* to *strongly agree*): (a) There is a high level of uncertainty in our relationship with this partner; (b) Our unit and our foreign partner keep each other well informed (reverse-coded); (c) Our unit closely monitors the extent to which the foreign partner follows established procedures (reverse-coded); and (d) Our unit works very closely with this foreign partner in all aspects of the business (reverse-coded). The Cronbach's alpha for this scale was .71.

Instrumental Variables

Since both governance mechanisms are endogenously determined, we used instrumental variables to isolate exogenous variation. We further elaborate on our estimation procedure later in the estimation and results section.

Table 3
Descriptive Statistics and Zero-Order Correlations

Variable	*M*	*SD*	1	2	3	4	5	6	7	8	9	10	11	12
1. Size (ln of hundred employees)	6.5	2.6												
2. International experience (square root)	5.7	1.9	.30											
3. Degree of international diversification	0.3	0.1	−.02	.13										
4. Dependency to the partner (percentage)	72.8	36.3	−.05	−.04	.07									
5. Asset specificity	3.3	0.9	.18	.11	.18	.19								
6. Prior performance	3.6	0.8	−.05	.02	−.03	.06	.30							
7. Opportunism	3.0	0.7	−.11	−.01	.18	−.08	−.12	−.33						
8. Behavioral uncertainty	2.5	0.8	−.04	−.02	.04	−.15	−.43	−.41	.50					
9. Environmental uncertainty	2.9	0.6	.02	−.05	.09	−.17	−.16	−.14	−.03	.08				
10. Intensity of social interactions	3.3	1.0	.06	.03	.14	.10	.43	.24	−.12	−.43	−.01			
11. Relational governance	3.7	0.6	.03	.04	−.02	.19	.39	.49	−.56	−.68	−.11	.35		
12. Propensity to contract	3.4	0.9	.07	−.08	.00	.02	.13	.08	−.04	−.08	−.09	.01	.00	
13. Contractual governance	2.9	0.7	.00	.12	−.04	−.11	.06	.03	.10	−.09	−.03	.00	−.09	.18

Note: Means and standard deviations are for unstandardized values. Correlations >|.13| and >|.17| are significant at $p < .05$ and $p < .01$.

Intensity of social interactions was used as the identifying instrument for relational governance. Social interaction among exchange partners is a critical determinant for the development of relational arrangements since relational norms tend to develop in the course of social interaction (Lewicki, McAllister, & Bies, 1998; Macneil, 1978, 1980; Zucker, 1986). Despite the availability of the data, we chose to not use relationship duration as the instrument since the relationship between longevity and relational governance turned out to be weak. This weak relationship probably originates from the international (i.e., geographically scattered) context of our study, which increases the importance of the relationship's quality and associated social interactions in contrast with its length. However, our results are robust to the addition of relationship longevity as an instrument for relational governance. Zero-order correlations (Table 3) confirm the appropriateness of social interactions intensity as instrument for relational governance since it correlates significantly with relational governance (.35 at $p = .01$) but not with contractual governance. Intensity of social interactions was measured using a three-item 5-point Likert scale (*strongly disagree* to *strongly agree*): (a) We often have social meetings where our unit's managers and the foreign partner's managers interact with each other; (b) Our business unit managers make frequent trips to this foreign country to meet with our foreign partner; and (c) Our foreign partner managers make frequent trips to the United States and visit our business headquarters (Cronbach's alpha = .76).

Firm's overall *contracting propensity* (Argyres & Mayer, 2007) was used to identify the contractual governance of the focal relationship. Firms have systematic differences in the

extent to which they employ contractual mechanisms to manage their partnerships irrespective of the characteristics of a given relationship. These systematic differences partially stem from differential contract design capabilities among firms (i.e., capabilities and skills necessary for aligning the contractual terms with transaction and partner attributes; cf. Argyres & Mayer, 2007), differences in behavioral tendencies of managers (similar to the heterogeneity in propensity to trust among trustors; e.g., Mayer et al., 1995; as an alternative source of confidence creation; Das & Teng, 1998), and distinctive mental models and cognitive tendencies toward forming a well-adjusted contract as a concrete basis for cooperation. Since these systematic differences in contracting are a characteristic of the organization and are, by definition, independent from the other relationship-level characteristics, they are an ideal candidate for identifying contractual governance. Zero-order correlations (Table 3) also indicate firm's contracting propensity as an appropriate instrument for identifying contractual governance in the given relationship since contracting propensity correlates significantly with contractual governance (.18 at $p = .01$) but not with relational governance. Firm's contracting propensity was measured using a two-item 5-point Likert scale (*strongly disagree* to *strongly agree*): (a) We try to adapt the terms of the contract in each foreign country, and (b) We try to adapt the terms of the contract to fit our foreign partners' needs (Cronbach's alpha = .72).

Control Variables

In addition to the constructs in our theoretical model, a number of organizational- and relationship-level factors are likely to influence the employment of alternative modes of governance. At the firm level, we controlled for firm size, international experience, degree of international diversification, and industry-specific factors based on their likelihood to influence employment of alternative modes of governance. *Firm size* and *international experience* were respectively operationalized by firm's number of employees (natural logarithm) and number of years it performed international business (square root). Following Lu and Beamish (2004), *degree of international diversification* was operationalized by a composite measure that averages the percentage of firm's total revenue sourced from foreign sales (normalized by division to the sample maximum) and the number of foreign countries in which the firm has operations (normalized by division to the sample maximum). We controlled for *industry-specific effects* using dummy variables respectively representing engagement in one of these five industries: raw materials, intermediate goods, consumer durable goods, consumer nondurable goods, and capital/industrial goods.

At the relationship level, asset specificity, dependency on the partner, partnership's prior performance, and opportunism were incorporated into our model. *Asset specificity* refers to the extent to which the investments made to support a particular transaction will be undervalued if redeployed for any other purpose (Williamson, 1975). A four-item 5-point Likert scale was used to measure the extent of asset specificity (*strongly disagree* to *strongly agree*): (a) Our business unit has made significant investments that are specific to our relationship with this partner; (b) Our products/technologies are tailored to meet the requirement of this partner; (c) It will be very costly for us to replace this foreign partner; and (d) It will be very costly for this foreign partner to replace our business unit (Cronbach's alpha = .70). *Partner dependency* was operationalized as the percentage of the firm's sales in the foreign country

handled by that foreign partner. *Prior performance* was measured using a three-item 5-point semantic differential scale in which respondents evaluated the sales growth, achieved market share, and overall performance of the foreign partner in contrast with other competitors in that focal market (ranging between *very little* and *very much* or *much lower* and *much higher*): (a) How satisfied are you with the business performance of this foreign partner? (b) Compared to competitors in this foreign market, the market share achieved by this partner is . . . ; and (c) Compared to competitors in this foreign market, the sales growth of this foreign partner is . . . (Cronbach's alpha = .80). *Opportunism* was quantified using a five-item 5-point Likert scale (*strongly disagree* to *strongly agree*): (a) Sometimes, our foreign partner alters the facts in order to get concessions from us; (b) Our foreign partner has sometimes promised to do things without actually doing them later; (c) Our foreign partner often conducts a business in a manner which is contrary to the terms of the contract; (d) Sometimes, our foreign partner compromises on the quality of products; and (e) Whenever possible, our foreign partner withholds important market information from us (Cronbach's alpha = .78). Our model also includes two dummy variables distinguishing equity partnerships (from nonequity partnerships; Sheng, Zhou, & Li, 2011) and licensing arrangements (from distribution arrangements; LeBreton & Senter, 2008).

Estimation and Results

Our hypothesis testing requires simultaneous estimation of relational and contractual governance. Since both governance arrangements are determined endogenously, their independent estimation will produce biased estimates. A three-stage (or two-stage) least square estimator is capable of handling this endogeneity issue (Greene, 2012: 329-331; Hamilton & Nickerson, 2003). Since our data include multiple observations related to each country, it cannot be estimated using the generic three-stage model that assumes independent error terms across observations. To deal with the multilevel nature of our data, we cluster the error terms of observations related to each country in all three stages of the estimation (Gelman & Hill, 2007). This leads to a three-stage hierarchical regression model that is similar to the approach employed by Slotegraaf, Moorman, and Inman (2003) and Poppo et al. (2008).

Following Cassiman and Veugelers (2006), to avoid multicollinearity artifacts (and effect attribution difficulties raised by three-way interactions), we examine the partners' adoption decisions (rather than their consequences) to seek the contextual factors determining complementarity/substitution of governance arrangements. However, partnership's past performance is controlled for in our estimation process. The first stage of our estimation procedure computes the instrumented (fitted) values of the endogenous variables based on the generalized least squares estimation of the reduced-form equations (in which endogenous variables are eliminated from the right-hand side):

$$\mathrm{RelGov}_{it} = \alpha_1 + \beta_{11}\mathrm{SocInt}_{it} + \beta_{12}\mathrm{IntUnc}_{it} + \beta_{13}\mathrm{EnvUnc}_{it} + \sum_{k=4}^{13}\beta_{1k}\mathrm{ContVar}_{kit} + u_{it} + \varepsilon_i,$$

$$\mathrm{ContGov}_{it} = \alpha_2 + \beta_{21}\mathrm{ContTend}_{it} + \beta_{22}\mathrm{IntUnc}_{it} + \beta_{23}\mathrm{EnvUnc}_{it} + \sum_{k=4}^{13}\beta_{2k}\mathrm{ContVar}_{kit} + v_{it} + \delta_i$$

(to obtain $\text{RelGov}_{\text{instrumented}}$ and $\text{ContGov}_{\text{instrumented}}$ equal to predicted values from the regression equations),

where indices i and t, respectively, refer to ith observation in tth country; v_{it} and u_{it} (following the multilevel modeling procedure) represent the country-specific portion of the error term; and ε_i and δ_i contain the error attributable to each individual observation.

The second stage estimates the full-form equations with the right-hand-side endogenous variables replaced with their instrumented values obtained in Stage 1:

$$\text{RelGov}_{it} = \alpha_3 + \beta_{31}\text{ContGov}_{\text{instrumented\_}it} + \beta_{32}\text{SocInt}_{it} + \beta_{33}\text{IntUnc}_{it} + \beta_{34}\text{EnvUnc}_{it} + \sum_{k=5}^{14}\beta_{3k}\text{ContVar}_{kit} + u_{it} + \varepsilon_i,$$

$$\text{ContGov}_{it} = \alpha_4 + \beta_{41}\text{RelGov}_{\text{instrumented\_}it} + \beta_{42}\text{ContTend}_{it} + \beta_{43}\text{IntUnc}_{it} + \beta_{44}\text{EnvUnc}_{it} + \sum_{k=5}^{14}\beta_{4k}\text{ContVar}_{kit} + v_{it} + \delta_i$$

(to obtain residual values: $\text{RelGov}_{\text{res}} = \text{RelGov} - \text{RelGov}_{\text{predicted}}$, and $\text{ContGov}_{\text{res}} = \text{ContGov} - \text{ContGov}_{\text{predicted}}$, where predicted values are computed based on the second stage regressions).

The third stage uses the estimated residuals from the second stage (i.e., governance arrangement free from the influence of the other form of governance) as indicators for the right-hand-side endogenous variables (and also in constructing their interaction terms with behavioral and environmental uncertainties).

$$\text{RelGov}_{it} = \alpha_5 + \beta_{51}\text{ContGov}_{\text{res\_}it} + \beta_{52}\text{ContGov}_{\text{res\_}it} \times \text{IntUnc}_{it} + \beta_{53}\text{ContGov}_{\text{res\_}it} \times \text{EnvUnc}_{it} + \beta_{54}\text{SocInt}_{it} + \beta_{55}\text{IntUnc}_{it} + \beta_{56}\text{EnvUnc}_{it} + \sum_{k=7}^{16}\beta_{5k}\text{ContVar}_{kit} + u_{it} + \varepsilon_i, \quad (1)$$

$$\text{ContGov}_{it} = \alpha_4 + \beta_{61}\text{RelGov}_{\text{res\_}it} + \beta_{62}\text{RelGov}_{\text{res\_}it} \times \text{IntUnc}_{it} + \beta_{63}\text{RelGov}_{\text{res\_}it} \times \text{EnvUnc}_{it} + \beta_{64}\text{ContTend}_{it} + \beta_{65}\text{IntUnc}_{it} + \beta_{66}\text{EnvUnc}_{it} + \sum_{k=7}^{16}\beta_{6k}\text{ContVar}_{kit} + v_{it} + \delta_i. \quad (2)$$

The third stage of the generic three-stage estimator (Greene, 2012: 329-331) employs the asymptotic covariance matrix (computed in previous stages) to cluster the equations associated with each observation (specifying different dependent variables associated with that observation) and reestimates the equations using the seemingly unrelated relations (SUR) estimator. Our third stage of estimation, in contrast, conducts the clustering at the country level to recognize the hierarchical nature of our data and also due to the unavailability of a properly ranked asymptotic covariance matrix (required for clustering the seemingly unrelated relations). This occurs since the impact of our endogenous variables on each other is moderated and the moderation terms cannot be computed from the outset of the estimation procedure (since their values still carry endogeneity). The calculation of these moderation terms should be postponed to the end of the second stage, when residuals obtained from the

second stage (i.e., endogeneity-free values) start to represent the endogenous variables. But absence of the interaction terms in the first and second stages of estimation precludes the computation of a properly ranked asymptotic covariance matrix, which is necessary for clustering the seemingly unrelated relations.

Table 4 summarizes the results of our three-stage hierarchical estimation of governance arrangements. To examine our hypothesized relationships, we proceed through three consecutive models (with increasing *R*-square and chi-square statistics) where moderation terms of governance arrangements with behavioral and environmental uncertainty are gradually inserted to our estimation. Please note that Equations 1 and 2 (above) specify our full regression equations (Model 3) in which all interaction relationships are being tested. Earlier models do not test all moderations and therefore do not include all interaction terms annotated in Equations 1 and 2. Additionally, to deal with potential multicollinearity between interaction terms and their constituting components, interaction terms are computed based on mean-centered values (Aiken & West, 1991).

Our base model (Model 1) examines the relationship between governance mechanisms in the absence of the moderation terms. This model supports a generally substitutive relationship between governance mechanisms, which contrasts with some findings of received research (e.g., Poppo & Zenger, 2002). Interaction terms of governance mechanisms with behavioral and environmental uncertainty are respectively inserted into the estimation procedure in Models 2 and 3 to form the fully specified regression equation. The moderating role of behavioral uncertainty in the relationship between governance mechanisms (Hypothesis 1) is tested using Model 2 (and Model 3). The interaction of behavioral uncertainty and contractual governance has a significantly positive impact on relational governance (b = .17 [.15] in Model 3a [2a], significant at p = .01 [.05]). Reciprocally, the interaction of behavioral uncertainty and relational governance positively influences the contractual governance (b = .26 [.29] in Model 3b [2b], significant at p = .05). These support our Hypothesis 1 that behavioral uncertainty drives the governance mechanisms into a more complementary (i.e., less substitutive) relationship.

Moderation of the governance mechanisms' relationship by environmental uncertainty (Hypothesis 2) is tested using Model 3. The interaction of contractual governance and environmental uncertainty has a significantly negative impact on relational governance (b = –.22, significant at p = .01 in Model 3a). Similarly, the interaction of relational governance and environmental uncertainty has a significant negative impact on contractual governance (b = –.21, significant at p = .1 in Model 3b). These support our Hypothesis 2 that environmental uncertainty drives the governance mechanisms into a more substitutive relationship. The interaction effects are graphically shown in Figures 1 and 2.

Discussion

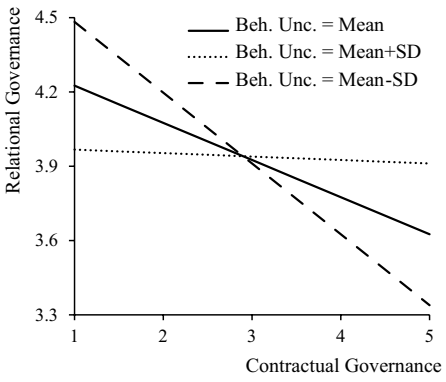
We examined the contingent nature of the interplay between relational and contractual arrangements in cross-border interfirm relationships. Our empirical findings show that behavioral and environmental uncertainties, respectively, stimulate complementary and substitutive dynamics between governance arrangements, driving them into mutually strengthening or mutually debilitating relationships. Our study contributes to the existing literature in three different ways.

Table 4
Three-Stage Hierarchical Estimation of Governance Arrangements

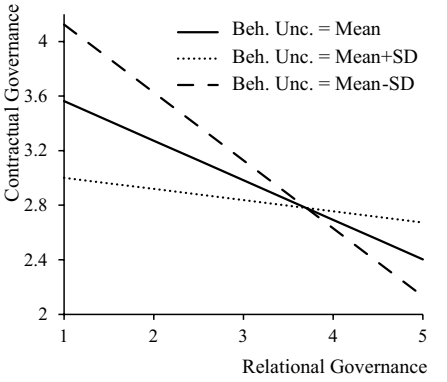
	Determinants of Relational Governance			Determinants of Contractual Governance		
Variable	Model 1a	Model 2a	Model 3a	Model 1b	Model 2b	Model 3b
Control variables						
Firm size (ln)	−.02	−.01	−.01	.00	.01	.01
	(.02)	(.02)	(.02)	(.02)	(.02)	(.02)
International experience (square root)	−.01	−.01	−.01	.05†	.06†	.05†
	(.02)	(.02)	(.02)	(.03)	(.03)	(.03)
Degree of internationalization	.24	.27	.24	−.12	−.09	−.06
	(.19)	(.18)	(.18)	(.25)	(.24)	(.24)
Dependency to partner	.00	.00	.00	−.00*	−.00*	−.00*
	(.00)	(.00)	(.00)	(.00)	(.00)	(.00)
Asset specificity	.06	.05	.07	−.01	.01	−.00
	(.06)	(.06)	(.06)	(.08)	(.08)	(.08)
Prior performance	.16**	.15**	.14**	.02	.01	.02
	(.05)	(.05)	(.05)	(.07)	(.06)	(.06)
Opportunism	−.32**	−.31**	−.31**	.25**	.26**	.28**
	(.05)	(.05)	(.05)	(.07)	(.07)	(.07)
Licensing (vs. distribution) dummy	−.11	−.11	−.12	.19†	.16	.14
	(.08)	(.08)	(.08)	(.11)	(.11)	(.11)
Equity (vs. nonequity) partnerships dummy	−.04	−.08	−.12	−.18	−.16	−.16
	(.09)	(.09)	(.09)	(.11)	(.11)	(.11)
Behavioral uncertainty	−.40**	−.42**	−.40**	−.25**	−.20*	−.21**
	(.06)	(.06)	(.06)	(.08)	(.08)	(.08)
Environmental uncertainty	−.06	−.09	−.08	−.03	−.03	−.02
	(.05)	(.05)	(.05)	(.07)	(.07)	(.07)
Contractual governance	−.15**	−.17**	−.15**			
	(.05)	(.05)	(.05)			
Relational governance				−.27**	−.31**	−.29**
				(.10)	(.10)	(.10)
Instrumental variables						
Intensity of social interactions	.12*	.12*	.13*			
	(.06)	(.06)	(.06)			
Propensity to contract				.15*	.15*	.14*
				(.07)	(.07)	(.07)
Hypothesized relationships						
Contractual Governance × Behavioral Uncertainty		.15*	.17**			
		(.06)	(.06)			
Contractual Governance × Environmental Uncertainty			–.22**			
			(.08)			
Relational Governance × Behavioral Uncertainty					.29*	.26*
					(.12)	(.12)
Relational Governance × Environmental Uncertainty						–.21†
						(.11)
χ^2	365.5**	380.6**	402.2**	48.9**	56.1**	60.1**
$\Delta\chi^2$		15.1**	21.6**		7.2**	4.0*
R^2	66.2	67.2	68.5	20.1	23.2	24.5

Note: Unstandardized regression coefficients are shown, with standard errors in parentheses.
†$p < .10$
*$p < .05$
**$p < .01$ (all two-tailed tests; $n = 205$)

Figure 1
Behavioral Uncertainty and the Relationship Between Governance Mechanisms (Hypothesis 1)

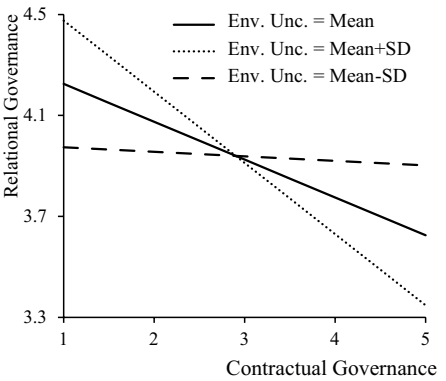


a: Behavioral Uncertainty and Impact of Contractual on Relational Arrangements

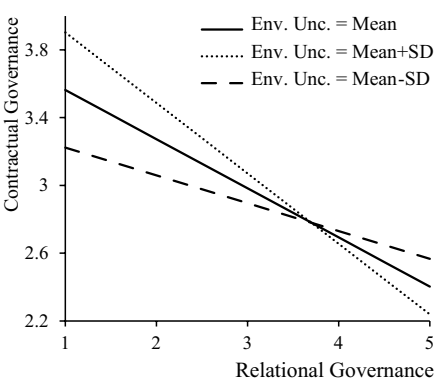


b: Behavioral Uncertainty and Impact of Relational on Contractual Arrangements

Figure 2
Environmental Uncertainty and the Relationship Between Governance Mechanisms (Hypothesis 2)



a: Environmental Uncertainty and Impact of Contractual on Relational Arrangements



b: Environmental Uncertainty and Impact of Relational on Contractual Arrangements

First, in cross-national settings, empirical support for the complementarity argument of Poppo and Zenger (2002) has been explained as "mixed" (Zhou & Xu, 2012: 4). For

example, studying international channel relationships of large U.S.-based manufacturers, Cavusgil, Deligonul, and Chun (2004) found no empirical support for their theorized complementary relationship between contractual and relational arrangements. This mixed support for the complementarity argument is consistent with the conjecture of Poppo and Zenger that their findings in a domestic context may be nongeneralizable to cross-national partnerships. To our knowledge, empirical support for the complementarity argument in international settings is limited to two studies focusing on the Chinese operational environment: Luo (2002b), who studied international joint ventures operating in China, and Zhou and Xu (2012), who examined the relationship among Chinese local suppliers and foreign firm subsidiaries (both sides, at least partially, embedded in the Chinese context). Embracing a variety of institutional and operational contexts, our theory and empirical findings suggest that the "mixed" findings of previous studies may be due to the moderated nature of the relationship between contractual and relational arrangements.

Second, due to their value-generating potential, successful interfirm cooperation among sociocognitively distant partners has received ongoing interest. Such partnerships bring together a "diverse set of routines and repertoires embedded in national cultures" (Morosini et al., 1998: 137) and, therefore, are likely to provide access into complementary capabilities (Reus & Lamont, 2009) and spatially bounded knowledge (Almeida, 1996; Almeida et al., 2002), contribute to organizational learning and capability development (Bartlett & Ghoshal, 1989; Hitt, Hoskisson, & Kim, 1997), and facilitate penetration into untapped markets (Kogut, 1991). However, sociocognitive disparities concurrently degrade the combination of partners' complementary resources and expose the partnership into multiple governance difficulties. Value-generation potential along with governance difficulties inherent in such collaborations has drawn attention to governance mechanisms facilitating the combination of complementary resources and infusing these partnerships with relational norms. While relational norms (Zhang et al., 2003; Zhou & Xu, 2012) and integrated social communities (Björkman et al., 2007; Reus & Lamont, 2009; Verbeke, 2010) are known to facilitate the combination of complementary resources in these difficult-to-manage partnerships, sociocognitive distances usually suffocate evolution and development of much-desired informal arrangements (Das & Kumar, 2010; Katsikeas et al., 2009; Luo, 2002a). Our study provided theoretical reasoning and empirical evidence that contractual arrangements are capable of infusing cross-cultural partnerships with relational norms by evoking a process of a priori sensemaking among exchange partners (Sirmon & Lane, 2004; Vlaar et al., 2006). Interestingly enough, managers seem to be typically oblivious to the contribution of formal contracting for setting up relationalism with sociocognitively dissimilar partners, as behavioral uncertainty does not produce a positive impact on firms' contracting effort (in any of Table 4's models).

Third, our results, on average, are more supportive of an overall substitutive relationship between contractual and relational arrangements (within one standard deviation neighborhood of moderators' average, i.e., behavioral and environmental uncertainties, the relationships are downward; Figures 1 and 2). One possible implication of this overall substitutive relationship (with the caveats of level of analysis) is lending support to the related literature on "motivation crowding theory" in economics (Bénabou & Tirole, 2006; Bowles, 2008; Frey & Jegen, 2001; Frey & Oberholzer-Gee, 1997; Sliwka, 2007) and psychology (Deci, Koestner, & Ryan, 1999). According to this theory (known as "one of the most important

anomalies in economics"; Frey & Jegen, 2001: 590), extrinsic motivations (e.g., contractual incentives, although operationalized at the individual level of analysis), once in place, tend to undermine (i.e., crowd out) intrinsic motivations (such as cooperativeness and reciprocity) and gain the locus of control even when intrinsic motives are stimulating the same behavior. Building on this conceptualization, laboratory experiments provided empirical evidence that contractual arrangements (or lack thereof) as extrinsic motive structures tend to crowd out (or crowd in) intrinsic motives, such as cooperativeness, reciprocity (Fehr & Gächter, 2001; Zanella, 1998), trust (Bohnet, Frey, & Huck, 2001; Malhotra & Murnighan, 2002; Sliwka, 2007), and relational norms (Bénabou & Tirole, 2006). Since partners are unlikely to trade contractual safeguards in a socially optimal way a priori (Corts & Singh, 2004; Furlotti, 2007), this crowding-out (crowding-in) dynamic between contractual and relational arrangements is expected to be stronger and more detrimental when sequential adaptations to unpredicted environmental changes becomes imperative (Antia & Frazier, 2001; Carson et al., 2006). Even though contractual motives can guide a limited range of adjustment scenarios, they tend to dwindle the intrinsic motives for cooperativeness and reciprocity, which are capable of handling a broad domain of adjustment complications. In this respect, our findings that formal and informal mechanisms can be both substitutes and complements (depending on the exchange contingencies) suggest a middle ground between the contradictory empirical findings of motivation crowding theory and the complementarity literature in organizational theory (Luo, 2002b; Poppo & Zenger, 2002; Ryall & Sampson, 2009).

Our study illustrated that formal and informal governance mechanisms can be both substitutes and complements depending upon the hazards to which the partnership is exposed. We focused on uncertainty as the cause for "most problems of economic exchange" (Hayek, 1945; Williamson, 1975). Future studies can examine other characteristics of economic exchange that have the potential to alter the interplay of governance arrangements. Similar to most research on interfirm relationships (Arino, 2003), our study is constrained to the perspective of only one side of the partnership (i.e., the parent U.S. firms) and one informant from the parent firm (which precludes the assessment of interrater reliability for all our measures). Collecting data from both sides of the partnership and comparing the evolution of governance arrangements from their lenses can be a fruitful future research endeavor. Owing to the cross-sectional nature of our research design, we were unable to connect the interplay of governance arrangements to their future performance consequences (we merely controlled for the past exchange performance). Examining the alteration of performance consequence of this interplay (depending on the contextual contingencies) can further advance our understanding of the governance mechanisms and their interdependencies (also see Schepker, Oh, Martynov, & Poppo, 2014). In terms of the generalizability of our findings, we focused on the Fortune 500 companies as our sampling frame due to the data collection convenience and sufficient exposure of this population to cross-border markets and partnerships. Probing the dependency of this interplay on contextual determinants (embedded in different settings) especially on the regulatory focus of a partnership (Das & Kumar, 2011; Weber & Mayer, 2011) can be a worthwhile research endeavor. Our study showed that behavioral uncertainty and environmental uncertainty have a contrasting impact on framing the relationship between governance arrangements. Another avenue for future research can be examining the differential consequences of behavioral and environmental uncertainties for administering economic activity and governance structures capable of coping with these challenges. We hope our

study contributes to further fine-grained research on unpacking the distinct implications carried by different forms of uncertainty for governance structures.

Notes

1. As Langlois (1991) elaborated, absent uncertainty and change, even boundedly rational partners can overcome the problems of asset specificity over the long run through learning that would be transferable to the future transactions.

2. In cross-border licensing and distribution arrangements (i.e., our research setting), multiple extracontractual mechanisms reinforce this lock-in dynamic: These partnerships require the local partner's investment in manufacturing plants, machineries, facilities, and human resources (which are specific to the relationship) on one side and the foreign firm's partnership-specific adjustments of the product/technology (Teece, 1976), which involves identifying the different conditions under which its technology/products will be used, which vary across licensees' and distributors' conditions (Nelson & Winter, 1982); determining a partner's readiness to absorb the technology/product related knowledge, depending on its strengths and weaknesses (Arrow, 1969; Leonard-Barton, 1992); and adapting these to fit the needs of the local market. Transfer of intangible assets and technological adjustments inherent in these partnerships along with local partners' investments, and possible exclusivity rights, further lock in the partners into their exchange undermining unilateral adaptations.

3. We are thankful to an anonymous reviewer for reminding about research conceptualizing a temporal separation between governance arrangements (e.g., Nielsen, 2010). According to this work, formal contracts come first (attuned to exchange conditions and anticipations of future) and relational arrangements are employed subsequently to modify or adapt the relationship over time. However, in the context of recurrent and repeated relationships, such as distribution or licensing, contractual and relational arrangements are less likely to be temporally isolated (e.g., Argyres, Bercovitz, & Mayer, 2007; Mayer & Argyres, 2004) since formal contracts are subject to change over recurrences. It is also noteworthy that the degree of insistence on formal mechanisms (as a behavioral tendency) could be as dynamic as relationalism (Corts & Singh, 2004) and therefore not chronologically separated from relationalism.

4. Our results are robust to the employment of secondary measures of country-level socioeconomic uncertainty, such as macroeconomic uncertainty data, provided in the country risk briefing of the Economist Intelligence Unit, and socioeconomic uncertainty, compiled in the International Country Risk Guide of Political Risk Group.

References

Abdi, M., & Aulakh, P. S. 2012. Do country-level institutional frameworks and interfirm governance arrangements substitute or complement in international business relationships. *Journal of International Business Studies*, 43: 477-497.

Aiken, L. S., & West, S. G. 1991. *Multiple regression: Testing and interpreting interactions*. Newbury Park, CA: Sage.

Alchian, A. A., & Demsetz, H. 1972. Production, information costs, and economic organization. *American Economic Review*, 62: 777-795.

Almeida, P. 1996. Knowledge sourcing by foreign multinationals: Patent citation analysis in the U.S. semiconductor industry. *Strategic Management Journal*, 17: 155-165.

Almeida, P., Grant, R., & Phene, A. 2002. Knowledge acquisition through alliances: Opportunities and challenges. In M. J. Gannon & K. Newman (Eds.), *The Blackwell handbook of cross-cultural management*: 67-77. Oxford, UK: Wiley-Blackwell.

Anderson, E., & Gatignon, H. 1986. Modes of foreign entry: A transaction cost analysis and propositions. *Journal of International Business Studies*, 17: 1-26.

Anderson, E., & Weitz, B. 1992. The use of pledges to build and sustain commitment in distribution channels. *Journal of Marketing Research*, 29: 18-34.

Anderson, E., & Weitz, B. A. 1986. Make-or-buy decisions: Vertical integration and marketing productivity. *Sloan Management Review*, 27(3): 3-19.

Antia, K. D., & Frazier, G. L. 2001. The severity of contract enforcement in interfirm channel relationships. *Journal of Marketing*, 65(4): 67-81.

Argyres, N., Bercovitz, J., & Mayer, K. J. 2007. Complementarity and evolution of contractual provisions: an empirical study of IT services contracts. *Organization Science*, 18: 3-19.

Argyres, N., & Mayer, K. J. 2007. Contract design as a firm capability: An integration of learning and transaction cost perspectives. *Academy of Management Review*, 32: 1060-1077.

Arino, A. 2003. Measures of strategic alliance performance: An analysis of construct validity. *Journal of International Business Studies*, 34: 66-79.

Arino, A., & Reuer, J. J. 2004. *Alliance contractual design*. Working paper, IESE Business School, Barcelona.

Ariño, A., & Ring, P. S. 2010. The role of fairness in alliance formation. *Strategic Management Journal*, 31: 1054-1087.

Armstrong, J. S., & Overton, T. S. 1977. Estimating nonresponse bias in mail surveys. *Journal of Marketing Research*, 14: 396-402.

Arrow, K. 1969. Classificatory notes on the production and transmission of technical knowledge. *American Economic Review*, 59: 29-49.

Aulakh, P. S., Kotabe, M., & Sahay, A. 1996. Trust and performance in cross-border marketing partnerships: A behavioral approach. *Journal of International Business Studies*, 27: 1005-1032.

Axelrod, R. 1986. An evolutionary approach to norms. *American Political Science Review*, 80: 1095-1111.

Barr, P. S., & Glynn, M. A. 2004. Cultural variations in strategic issue interpretation: Relating cultural uncertainty avoidance to controllability in discriminating threat and opportunity. *Strategic Management Journal*, 25: 59-67.

Bartlett, C., & Ghoshal, S. 1989. *Managing across borders: The transnational solution*. Boston: Harvard Business School Press.

Bello, D. C., & Gilliland, D. I. 1997. The effect of output controls, process controls, and flexibility on export channel performance. *Journal of Marketing*, 61(1): 22-38.

Bénabou, R., & Tirole, J. 2006. Incentives and prosocial behavior. *American Economic Review*, 96: 1652-1678.

Bernheim, B. D., & Whinston, M. D. 1998. Incomplete contracts and strategic ambiguity. *American Economic Review*, 88: 902-932.

Beuve, J., & Saussier, S. 2012. Interfirm cooperation in strategic relationships: The role of formal contract. *Industrial and Corporate Change*, 21: 811-836.

Biggart, N. W., & Guillen, M. F. 1999. Developing difference: Social organization and the rise of the auto industries of South Korea, Taiwan, Spain, and Argentina. *American Sociological Review*, 64: 722-747.

Björkman, I., Stahl, G. K., & Vaara, E. 2007. Cultural differences and capability transfer in cross-border acquisitions: The mediating roles of capability complementarity, absorptive capacity, and social integration. *Journal of International Business Studies*, 38: 658-672.

Blomqvist, K., Hurmelinna, P., & Seppanen, R. 2005. Playing the collaboration game right—balancing trust and contracting. *Technovation*, 25: 497-504.

Bohnet, I., Frey, B. S., & Huck, S. 2001. More order with less law: On contract enforcement, trust, and crowding. *American Political Science Review*, 95: 131-144.

Bowles, S. 2008. Policies designed for self-interested citizens may undermine "the moral sentiments": Evidence from economic experiments. *Science*, 320: 1605-1609.

Breusch, T. S., & Pagan, R. 1980. The LM test and its applications to model specification in econometrics. *Review of Economic Studies*, 47: 239-254.

Busenitz, L. W., Gomez, C., & Spencer, J. W. 2000. Country institutional profiles: Unlocking entrepreneurial phenomena. *Academy of Management Journal*, 43: 994-1003.

Calhoun, M. A. 2002. Unpacking liability of foreignness: Identifying culturally driven external and internal sources of liability for the foreign subsidiary. *Journal of International Management*, 8: 301-321.

Calori, R., Lubatkin, M., Very, P., & Veiga, J. F. 1997. Modelling the origins of nationally-bound administrative heritages: A historical institutional analysis of French and British firms. *Organization Science*, 8: 681-696.

Carson, S. J., Madhok, A., & Wu, T. 2006. Uncertainty, opportunism, and governance: The effects of volatility and ambiguity on formal and relational contracting. *Academy of Management Journal*, 49: 1058-1077.

Carter, R., & Hodgson, G. M. 2006. The impact of empirical tests of transaction cost economics on the debate on the nature of the firm. *Strategic Management Journal*, 27: 461-476.

Cartwright, S., & Cooper, C. L. 1993. The role of culture compatibility in successful organizational marriage. *Academy of Management Executive*, 7: 57-70.

Cassiman, B., & Veugelers, R. 2006. In search of complementarity in innovation strategy: Internal R&D and external knowledge acquisition. *Management Science*, 52: 68-82.

Cavusgil, S. T., Deligonul, S., & Chun, Z. 2004. Curbing foreign distributor opportunism: An examination of trust, contracts, and the legal environment in international channel relationships. *Journal of International Marketing*, 12(2): 7-27.

Chang, S.-J., van Witteloostuijn, A., & Eden, L. 2010. From the editors: Common method variance in international business research. *Journal of International Business Studies*, 41: 178-184.

Choi, C. J., & Lee, S. H. 1997. A knowledge-based view of cooperative interorganizational relationships. In P. Beamish & J. Killings (Eds.), *Cooperative strategies: European perspectives*: 33-58. San Francisco: New Lexington Press.

Corts, K. S., & Singh, J. 2004. The effect of repeated interaction on contract choice: Evidence from offshore drilling. *Journal of Law, Economics, and Organization*, 20: 230-260.

Das, T. K., & Kumar, R. 2010. Interpartner sensemaking in strategic alliances: Managing cultural differences and internal tensions. *Management Decision*, 48: 17-36.

Das, T. K., & Kumar, R. 2011. Regulatory focus and opportunism in the alliance development process. *Journal of Management*, 37: 682-708.

Das, T. K., & Teng, B.-S. 1998. Between trust and control: Developing confidence in partner cooperation in alliances. *Academy of Management Review*, 23: 491-512.

Das, T. K., & Teng, B.-S. 2000. Instabilities of strategic alliances: An internal tensions perspective. *Organization Science*, 11: 77-101.

Deci, E. L., Koestner, R., & Ryan, R. M. 1999. A meta-analytic review of experiments examining the effects of extrinsic rewards on intrinsic motivation. *Psychological Bulletin*, 125: 627-668.

Dekker, H. C. 2004. Control of inter-organizational relationships: Evidence on appropriation concerns and coordination requirements. *Accounting, Organizations and Society*, 29: 27-49.

DiMaggio, P. J., & Powell, W. W. 1983. The iron cage revisited: Institutional isomorphism and collective rationality in organizational fields. *American Sociological Review*, 48: 147-160.

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

Dutta, S., Bergen, M., Heide, J. B., & John, G. 1995. Understanding dual distribution: The case of reps and house accounts. *Journal of Law Economics and Organization*, 11: 189-204.

Dyer, J. H. 1997. Effective interfirm collaboration: How firms minimize transaction costs and maximize transaction value. *Strategic Management Journal*, 18: 535-556.

Dyer, J. H., & Chu, W. 2011. The determinants of trust in supplier-automaker relationships in the US, Japan, and Korea. *Journal of International Business Studies*, 42: 10-27.

Dyer, J. H., & Nobeoka, K. 2000. Creating and managing a high-performance knowledge-sharing network: The Toyota case. *Strategic Management Journal*, 21: 345-367.

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

Eden, L., & Miller, S. R. 2004. Distance matters: Liability of foreignness, institutional distance and ownership strategy. In M. A. Hitt & J. Cheng (Eds.), *Advances in international management*: 187-221. Greenwich, CT: JAI Press.

Elfenbein, D. W., & Lerner, J. 2012. Exclusivity, contingent control rights, and the design of Internet portal alliances. *Journal of Law, Economics, and Organization*, 28: 45-76.

Fehr, E., & Gächter, S. 2001. *Do incentive contracts crowd out voluntary cooperation?* Working Paper No. 34, Institute for Empirical Research in Economics, University of Zurich.

Fehr, E., Hart, O., & Zehnder, C. 2011. Contracts as reference points—experimental evidence. *American Economic Review*, 101: 493-525.

Ferguson, R. J., Paulin, M. l., & Bergeron, J. 2005. Contractual governance, relational governance, and the performance of interfirm service exchanges: The influence of boundary-spanner closeness. *Journal of the Academy of Marketing Science*, 33: 217-234.

Fey, C. F., & Beamish, P. W. 2001. Organizational climate similarity and performance: International joint ventures in Russia. *Organization Studies*, 22: 853-882.

Frey, B. S., & Jegen, R. 2001. Motivation crowding theory. *Journal of Economic Surveys*, 15: 589-611.

Frey, B. S., & Oberholzer-Gee, F. 1997. The cost of price incentives: An empirical analysis of motivation crowding-out. *American Economic Review*, 87: 746-755.

Furlotti, M. 2007. There is more to contracts than incompleteness: A review and assessment of empirical research on inter-firm contract design. *Journal of Management and Governance*, 11: 61-99.

Gargiulo, M., & Ertug, G. 2006. The dark side of trust. In R. Bachmann & A. Zaheer (Eds.), *Handbook of trust research*: 165-186.

Gatignon, H., & Anderson, E. 1988. The multinational corporation's degree of control over foreign subsidiaries: An empirical test of a transaction cost explanation. *Journal of Law, Economics, and Organization*, 4: 305-336.

Gelman, A., & Hill, J. 2007. *Data analysis: Using regression and multilevel/hierarchical models*. Cambridge, UK: Cambridge University Press.

Geringer, J. M. 1988. *Joint venture partner selection: Strategies for developed countries*. Westport, CT: Quorum Books.

Ghemawat, P. 2001. Distance still matters: The hard reality of global expansion. *Harvard Business Review*, 79(8): 137-147.

Ghosh, M., & John, G. 1999. Governance value analysis and marketing strategy. *Journal of Marketing*, 63(4): 131-145.

Ghoshal, S., & Moran, P. 1996. Bad for practice: A critique of the transaction cost theory. *Academy of Management Review*, 21: 13-47.

Giacobbe-Miller, J. K., Miller, D. J., Zhang, W., & Victorov, V. I. 2003. Country and organizational-level adaptation to foreign workplace ideologies: A comparative study of distributive justice values in China, Russia and the United States. *Journal of International Business Studies*, 34: 389-406.

Globerman, S., & Nielsen, B. B. 2007. Equity versus non-equity international strategic alliances involving Danish firms: An empirical investigation of the relative importance of partner and host country determinants. *Journal of International Management*, 13: 449-471.

Goldberg, V. 1976. Toward an expanded economic theory of contract. *Journal of Economic Issues*, 10: 45-61.

Goo, J., Kishore, R., Rao, H. R., & Nam, K. 2009. The role of service level agreements in relational management of information technology outsourcing: An empirical study. *MIS Quarterly*, 33: 119-145.

Gooderham, P. N., Nordhaug, O., & Ringdal, K. 1999. Institutional and rational determinants of organizational practices: Human resource management in European firms. *Administrative Science Quarterly*, 44: 507-531.

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

Grant, R. M. 1996. Toward a knowledge-based theory of the firm. *Strategic Management Journal*, 17: 109-122.

Greene, W. 2012. *Econometric analysis* (7th ed.). Upper Saddle River, NJ: Prentice Hall.

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

Gulati, R., Khanna, T., & Nohria, N. 1994. Unilateral commitments and the importance of process in alliances. *Sloan Management Review*, 35(3): 61-69.

Gulati, R., & Singh, H. 1998. The architecture of cooperation: Managing coordination costs and appropriation concerns in strategic alliances. *Administrative Science Quarterly*, 43: 781-814.

Hagedoorn, J., & 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: 342-366.

Hamilton, B. H., & Nickerson, J. A. 2003. Correcting for endogeneity in strategic management research. *Strategic Organization*, 1: 51-78.

Hart, O., & Moore, J. 2008. Contracts as reference points. *Quarterly Journal of Economics*, 123: 1-48.

Hayek, F. 1945. The use of knowledge in society. *American Economic Review*, 35: 519-530.

Heide, J. B. 1994. Interorganizational governance in marketing channels. *Journal of Marketing*, 58(1): 71-85.

Heide, J. B., & John, G. 1990. Alliances in industrial purchasing: The determinants of joint action in buyer-supplier relationships. *Journal of Marketing Research*, 27: 24-36.

Heide, J. B., & John, G. 1992. Do norms matter in marketing relationships. *Journal of Marketing*, 56(2): 32-44.

Heide, J. B., & Miner, A. S. 1992. The shadow of the future: Effects of anticipated interaction and frequency of contact on buyer-seller cooperation. *Academy of Management Journal*, 35: 265-291.

Hennart, J.-F., & Zeng, M. 2002. Cross-cultural differences and joint venture longevity. *Journal of International Business Studies*, 33: 699-716.

Hill, C. W. L. 1990. Cooperation, opportunism, and the invisible hand: Implications for transaction cost theory. *Academy of Management Review*, 15: 500-513.

Hitt, M. A., Hoskisson, R. E., & Kim, H. 1997. International diversification: Effects on innovation and firm performance in product-diversified firms. *Academy of Management Journal*, 40: 767-798.

Hoang, H., & Rothaermel, F. T. 2005. The effect of general and partner-specific alliance experience on joint R&D project performance. *Academy of Management Journal*, 48: 332-345.

Hodgson, G. M. 2004. Opportunism is not the only reason why firms exist. *Industrial and Corporate Change*, 13: 401-417.

Husted, B. W., & Folger, R. 2004. Fairness and transaction costs: The contribution of organizational justice theory to an integrative model of economic organization. *Organization Science*, 15: 719-729.

Kaghan, W. N., & Lounsbury, M. D. 2006. Artifacts, articulation work, and institutional residue. In A. Rafaelli & M. G. Pratt (Eds.), *Artifacts and organizations*: 259-278. Mahwah, NJ: Lawrence Erlbaum.

Katsikeas, C. S., Skarmeas, D., & Bello, D. C. 2009. Developing successful trust-based international exchange relationships. *Journal of International Business Studies*, 40: 132-155.

Kessler, J. B., & Leider, S. 2012. Norms and contracting. *Management Science*, 58: 62-77.

Kim, W. C., & Hwang, P. 1992. Global strategy and multinationals' entry mode choice. *Journal of International Business Studies*, 23: 29-53.

Klein, S., Frazier, G. L., & Roth, V. J. 1990. A transaction cost analysis model of channel integration in international markets. *Journal of Marketing Research*, 27: 196-208.

Kogut, B. 1991. Joint ventures and the option to expand and acquire. *Management Science*, 37: 19-33.

Kogut, B., & Zander, U. 1993. Knowledge of the firm and the evolutionary theory of the multinational corporation. *Journal of International Business Studies*, 24: 625-645.

Kostova, T. 1997. Country institutional profiles: Concepts and measurement. In *Academy of Management proceedings*: 180-184. Boston: Academy of Management.

Kotabe, M., Martin, X., & Domoto, H. 2003. Gaining from vertical partnerships: Knowledge transfer, relationship duration, and supplier performance improvement in the US and Japanese automotive industries. *Strategic Management Journal*, 24: 293-316.

Kumar, R., & Andersen, P. H. 2000. Inter firm diversity and the management of meaning in international strategic alliances. *International Business Review*, 9: 237-252.

Lane, H. W., & Beamish, P. W. 1990. Cross-cultural cooperative behavior in joint ventures in LDCs. *Management International Review*, 30: 87-102.

Langlois, R. N. 1991. Transaction-cost economics in real time. *Industrial and Corporate Change*, 1: 99-127.

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

LeBreton, J. M., & Senter, J. L. 2008. Answers to 20 questions about interrater reliability and interrater agreement. *Organizational Research Methods*, 11: 815-852.

Leonard-Barton, D. 1992. Core capabilities and core rigidities: A paradox in managing new produce development. *Strategic Management Journal*, 13: 111-126.

Lewicki, R. J., McAllister, D. J., & Bies, R. J. 1998. Trust and distrust: New relationships and realities. *Academy of Management Review*, 23: 438-458.

Lonsdale, C. 2005. Post-contractual lock-in and the UK Private Finance Initiative (PFI): The cases of national savings and investments and the Lord Chancellor's department. *Public Administration*, 83: 67-88.

Lorenz, E. 1999. Trust, contract and economic cooperation. *Cambridge Journal of Economics*, 23: 301-315.

Lu, J. W., & Beamish, P. W. 2004. International diversification and firm performance: The S-curve hypothesis. *Academy of Management Journal*, 47: 598-609.

Lui, S. S., & Ngo, H.-Y. 2004. The role of trust and contractual safeguards on cooperation in non-equity alliances. *Journal of Management*, 30: 471-485.

Lumineau, F., & Malhotra, D. 2011. Shadow of the contract: How contract structure shapes interfirm dispute resolution. *Strategic Management Journal*, 32: 532-555.

Luo, Y. 2001. Determinants of entry in an emerging economy: A multilevel approach. *Journal of Management Studies*, 38: 443-472.

Luo, Y. 2002a. Building trust in cross-cultural collaborations: Toward a contingency perspective. *Journal of Management*, 28: 669-694.

Luo, Y. 2002b. Contract, cooperation, and performance in international joint ventures. *Strategic Management Journal*, 23: 903-919.

Luo, Y. 2005a. How important are shared perceptions of procedural justice in cooperative alliances? *Academy of Management Journal*, 48: 695-709.

Luo, Y. 2005b. Transactional characteristics, institutional environment and joint venture contracts. *Journal of International Business Studies*, 36: 209-230.

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

Luo, Y. 2007b. The independent and interactive roles of procedural, distributive, and interactional justice in strategic alliances. *Academy of Management Journal*, 50: 644-664.

Luo, Y. 2007c. An integrated anti-opportunism system in international exchange. *Journal of International Business Studies*, 38: 855-877.

Macaulay, S. 1963. Non-contractual relations in business: A preliminary study. *American Sociological Review*, 28: 55-67.

Macneil, I. R. 1974. The many futures of contracts. *Southern California Law Review*, 47: 696-815.

Macneil, I. R. 1978. Contracts: Adjustment of long-term economic relations under classical, neoclassical, and relational contract law. *Northwestern University Law Review*, 72: 854-906.

Macneil, I. R. 1980. *The new social contract: An inquiry into modern contractual relations*. New Haven, CT: Yale University Press.

Macneil, l. R. 1981. Economic analysis of contractual telations: Its shortfalls and the need for a rich classificatory apparatus. *Northwestern Law Review*, 75: 1018-1063.

Malhotra, D. 2009. When contracts destroy trust. *Harvard Business Review*, 87(5): 25.

Malhotra, D., & Murnighan, J. K. 2002. The effects of contracts on interpersonal trust. *Administrative Science Quarterly*, 47: 534-559.

Martin, X., & Salomon, R. 2003. Knowledge transfer capacity and its implications for the theory of the multinational corporation. *Journal of International Business Studies*, 34: 356-373.

Mayer, K. J. 2006. Spillovers and governance: An analysis of knowledge and reputational spillovers in information technology. *Academy of Management Journal*, 49: 69-84.

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

Mayer, K. J., & Teece, D. J. 2008. Unpacking strategic alliances: The structure and purpose of alliance versus supplier relationships. *Journal of Economic Behavior and Organization*, 66: 106-127.

Mayer, R. C., Davis, J. H., & Schoorman, F. D. 1995. An integrative model of organizational trust. *Academy of Management Review*, 20: 709-734.

McEvily, B., Perrone, V., & Zaheer, A. 2003. Trust as an organizing principle. *Organization Science*, 14: 91-103.

Morosini, P., Shane, S., & Singh, H. 1998. National cultural distance and cross-border acquisition performance. *Journal of International Business Studies*, 29: 137-158.

Muris, T. J., Scheffman, D. T., & Spiller, P. T. 1992. Strategy and transaction costs: The organization of distribution in the carbonated soft drink industry. *Journal of Economics and Management Strategy*, 1: 83-128.

Nelson, R. R., & Winter, S. G. 1982. *An evolutionary theory of economic change*. Cambridge, MA: Harvard University Press.

Nickerson, R. S. 2000. Null hypothesis significance testing: A review of an old and continuing controversy. *Psychological Methods*, 5: 241-301.

Nielsen, B. B. 2010. Strategic fit, contractual, and procedural governance in alliances. *Journal of Business Research*, 63: 682-689.

Noordewier, T. G., John, G., & Nevin, J. R. 1990. Performance outcomes of purchasing arrangements in industrial buyer-vendor relationships. *Journal of Marketing*, 54(4): 80-93.

North, D. C. 1990. *Institutions, institutional change, and economic performance*. Cambridge, UK: Cambridge University Press.

Orru, M., Biggart, N. W., & Hamilton, G. G. 1991. Organizational isomorphism in East Asia. In W. W. Powell & P. J. DiMaggio (Eds.), *The new institutionalism in organizational analysis*: 361-389. Chicago: University of Chicago Press.

Ouchi, W. G. 1977. The relationship between organizational structure and organizational control. *Administrative Science Quarterly*, 22: 95-113.

Ouchi, W. G. 1980. Markets, bureauracies, and clans. *Administrative Science Quarterly*, 25: 129-141.

Oxley, J. E. 1997. Appropriability hazards and governance in strategic alliances: A transaction cost approach. *Journal of Law*, *Economics, and Organizations*, 13: 387-409.

Park, S. H., & Ungson, G. R. 1997. The effect of national culture, organizational complementarity, and economic motivation on joint venture dissolution. *Academy of Management Journal*, 40: 279-307.

Parkhe, A. 1991. Interfirm diversity, organizational learning, and longevity in global strategic alliances. *Journal of International Business Studies*, 22: 579-601.

Parkhe, A. 1993. Strategic alliance structuring: A game theoretic and transaction cost examination of interfirm cooperation. *Academy of Management Journal*, 36: 794-829.

Podsakoff, P. M., MacKenzie, S. B., & Podsakoff, N. P. 2012. Sources of method bias in social science research and recommendations on how to control it. *Annual Review of Psychology*, 63: 539-569.

Poppo, L., & Zenger, T. 2002. Do formal contracts and relational governance function as substitutes or complements? *Strategic Management Journal*, 23: 707-725.

Poppo, L., Zhou, K. Z., & Zenger, T. R. 2008. Examining the conditional limits of relational governance: Specialized assets, performance ambiguity, and long-standing ties. *Journal of Management Studies*, 4: 1195-1216.

Porter, M., & Siggelkow, N. 2000. Contextuality within activity systems. *Academy of Management Proceedings, BPS*: F1-F5.

Pothukuchi, V., Damanpour, F., Choi, J., Chen, C. C., & Park, S. H. 2002. National and organizational culture differences and international joint venture performance. *Journal of International Business Studies*, 33: 243-265.

Puranam, P., & Vanneste, B. S. 2009. Trust and governance: Untangling a tangled web. *Academy of Management Review*, 34: 11-31.

Rao, A., & Schmidt, S. M. 1998. A behavioral perspective on negotiating international alliance. *Journal of International Business Studies*, 29: 665-693.

Reinholt, M. I. A., Pedersen, T., & Foss, N. J. 2011. Why a central network position isn't enough: The role of motivation and ability for knowledge sharing in employee networks. *Academy of Management Journal*, 54: 1277-1297.

Reus, T. H., & Lamont, B. T. 2009. The double-edged sword of cultural distance in international acquisitions. *Journal of International Business Studies*, 40: 1298-1316.

Rindfleisch, A., & Heide, J. B. 1997. Transaction cost analysis: Past, present, and future applications. *Journal of Marketing*, 61(4): 30-54.

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

Robson, M. J., Katsikeas, C. S., & Bello, D. C. 2008. Drivers and performance outcomes of trust in international strategic alliances: The role of organizational complexity. *Organization Science*, 19: 647-665.

Rouleau, L. 2005. Micro-practices of strategic sensemaking and sensegiving: How middle managers interpret and sell change every day. *Journal of Management Studies*, 42: 1413-1441.

Rousseau, D. M. 1995. *Psychological contracts in organizations: Understanding written and unwritten agreements*. Thousand Oaks, CA: Sage.

Ryall, M. D., & Sampson, R. C. 2009. Formal contracts in the presence of relational enforcement mechanisms: Evidence from technology development projects. *Management Science*, 55: 906-925.

Sako, M. 1992. *Prices, quality and trust*. Cambridge, UK: Cambridge University Press.

Sarkar, M. B., Aulakh, P. S., & Madhok, A. 2009. Process capabilities and value generation in alliance portfolios. *Organization Science*, 20: 583-600.

Sarkar, M. B., Echambadi, R., Cavusgil, S. T., & Aulakh, P. S. 2001. The influence of complementarity, compatibility, and relationship capital on alliance performance. *Journal of the Academy of Marketing Science*, 29: 358-373.

Schelling, T. 1960. *The strategy of conflict*. Cambridge, MA: Harvard University Press.

Schepker, D. J., Oh, W.-Y., Martynov, A., & Poppo, L. 2014. The many futures of contracts: Moving beyond structure and safeguarding to coordination and adaptation. *Journal of Management*, 40: 193-225.

Shane, S. 1994. The effect of national culture on the choice between licensing and direct foreign investment. *Strategic Management Journal*, 15: 627-642.

Sheng, S. B., Zhou, K. Z., & Li, J. J. 2011. The effects of business and political ties on firm performance: Evidence from China. *Journal of Marketing*, 75(1): 1-15.

Shenkar, O., & Zeira, Y. 1992. Role conflict and role ambiguity of chief executive officers in international joint ventures. *Journal of International Business Studies*, 23: 55-75.

Shervani, T. A., Frazier, G., & Challagalla, G. 2007. The moderating influence of firm market power on the transaction cost economics model: An empirical test in a forward channel integration context. *Strategic Management Journal*, 28: 635-652.

Shrout, P. E., & Fleiss, J. L. 1979. Intraclass correlations: Uses in assessing rater reliability. *Psychological Bulletin*, 86: 420-428.

Siemsen, E., Roth, A., & Oliveira, P. 2010. Common method bias in regression models with linear, quadratic, and interaction effects. *Organizational Research Methods*, 13: 456-476.

Simonin, B. L. 1999. Ambiguity and the process of knowledge transfer in strategic alliances. *Strategic Management Journal*, 20: 595-623.

Sirmon, D. G., & Lane, P. J. 2004. A model of cultural differences and international alliance performance. *Journal of International Business Studies*, 35: 306-319.

Sitkin, S. B., & Roth, N. L. 1993. Explaining the limited effectiveness of legalistic remedies for trust/distrust. *Organization Science*, 4: 367-392.

Sliwka, D. 2007. Trust as a signal of a social norm and the hidden costs of incentive schemes. *American Economic Review*, 97: 999-1012.

Slotegraaf, R. J., Moorman, C., & Inman, J. J. 2003. The role of firm resources in returns to market deployment. *Journal of Marketing Research*, 40: 295-309.

Sobrero, M., & Schrader, S. 1998. Structuring inter-firm relationships: A meta-analytic approach. *Organization Studies*, 19: 585-615.

Srikanth, K., & Puranam, P. 2011. Integrating distributed work: Comparing task design, communication, and tacit coordination mechanisms. *Strategic Management Journal*, 32: 849-875.

Suchman, M. C. 2003. The contract as social artifact. *Law and Society Review*, 37: 91-142.

Sutcliffe, K. M., & Huber, G. P. 1998. Firm and industry as determinants of executive perceptions of the environment. *Strategic Management Journal*, 19: 793-807.

Sutcliffe, K. M., & Zaheer, A. 1998. Uncertainty in the transaction environment: An empirical test. *Strategic Management Journal*, 19: 1-23

Teece, D. J. 1976. *The multinational corporation and the resource cost of international technology transfer*. Cambridge, MA: Ballinger.

Terpstra, V., & David, K. 1991. *The cultural environment of international business* (3rd ed.). Cincinnati, OH: South-Western.

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

Verbeke, A. 2010. International acquisition success: Social community and dominant logic dimensions. *Journal of International Business Studies*, 41: 38-46.

Very, P., Lubatkin, M., & Calori, R. 1996. A cross-national assessment of acculturative stress in recent European mergers. *International Studies of Management and Organization*, 26: 59-86.

Vlaar, P. W. L., Van den Bosch, F. A. J., & Volberda, H. W. 2006. Coping with problems of understanding in interorganizational relationships: Using formalization as a means to make sense. *Organization Studies*, 27: 1617-1638.

Wathne, K. H., & Heide, J. B. 2000. Opportunism in interfirm relationships: Forms, outcomes, and solutions. *Journal of Marketing*, 64(4): 36-51.

Watson, W. E., Kumar, K., & Michaelsen, L. K. 1993. Cultural diversity's impact on interaction process and performance: Comparing homogeneous and diverse task groups. *Academy of Management Journal*, 36: 590-602.

Weber, L., & Mayer, K. J. 2011. Designing effective contracts: Exploring the influence of framing and expectations. *Academy of Management Review*, 36: 53-75.

White, S., & Lui, S. 2005. Distinguishing costs of cooperation and control in alliances. *Strategic Management Journal*, 26: 913-932.

Williamson, O. E. 1971. Vertical integration of production: Market failure considerations. *American Economic Review*, 61: 112-127.

Williamson, O. E. 1975. *Markets and hierarchies, analysis and antitrust implications: A study in the economics of internal organization*. New York: Free Press.

Williamson, O. E. 1979. Transaction cost economics—governance of contractual relations. *Journal of Law & Economics*, 22: 233-261.

Williamson, O. E. 1985. *The economic institutions of capitalism*. New York: Free Press.

Williamson, O. E. 1991. Comparative economic organization: The analysis of discrete structural alternatives. *Administrative Science Quarterly*, 36: 269-296.

Wu, F., Sinkovics, R. R., Cavusgil, S. T., & Roath, A. S. 2007. Overcoming export manufacturers' dilemma in international expansion. *Journal of International Business Studies*, 38: 283-302.

Yang, Z., Su, C., & Fam, K.-S. 2012. Dealing with institutional distances in international marketing channels: Governance strategies that engender legitimacy and efficiency. *Journal of Marketing*, 76(3): 41-55.

Zaheer, S., & Mosakowski, E. 1997. The dynamics of the liability of foreignness: A global study of survival in financial services. *Strategic Management Journal*, 18: 439-463.

Zajac, E. J., & Olsen, C. P. 1993. From transaction cost to transactional value analysis: Implications for the study of interorganizational srategies. *Journal of Management Studies*, 30: 131-145.

Zanella, B. 1998. *Verdrängung von Reziprozität durch Anreizverträge*. Institute for Empirical Economic Research, Universtity of Zurich.

Zhang, C., Cavusgil, S. T., & Roath, A. S. 2003. Manufacturer governance of foreign distributor relationships: Do relational norms enhance competitiveness in the export market? *Journal of International Business Studies*, 34: 550-566.

Zhao, H., Luo, Y., & Suh, T. 2004. Transaction cost determinants and ownership-based entry mode choice: A meta-analytical review. *Journal of International Business Studies*, 35: 524-544.

Zhou, K. Z., & Xu, D. 2012. How foreign firms curtail local supplier opportunism in China: Detailed contracts, centralized control, and relational governance. *Journal of International Business Studies*, 43: 677-692.

Zucker, L. G. 1986. Production of trust: Institutional sources of economic structure, 1840-1920. In B. M. Staw & L. L. Cummings (Eds.), *Research in organizational behavior*: 53-111. London: JAI Press.