

SHADOW OF THE CONTRACT: HOW CONTRACT STRUCTURE SHAPES INTERFIRM DISPUTE RESOLUTION

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This paper investigates how contract structure influences interfirm dispute resolution processes and outcomes by examining a unique dataset consisting of over 150,000 pages of documents relating to 102 business disputes. We find that the level of contract detail affects the type of dispute resolution approach that is adopted when conflict arises, and that different approaches are associated with different costs for resolving the dispute. We also find that the effect of contract choice on dispute resolution approach is moderated by the degree of coordination required in the relationship, and that the effect of dispute approach on costs is moderated by the degree of power asymmetry between the parties. Thus, even after controlling for various attributes of the exchange relationship and the dispute, the choice of contracting structure has important strategic implications. Copyright © 2010 John Wiley & Sons, Ltd.

INTRODUCTION

Interfirm relationships such as joint ventures, strategic alliances, and vertical integration have become ubiquitous. Such relationships allow firms to create value and build competitive advantage (Dyer, 1997; Anand and Khanna, 2000). In spite of their increasing importance and use, however, interfirm relationships entail significant risks (Park and Ungson, 2001). In particular, parties to an interfirm relationship face the threat of opportunism by exchange partners (Williamson, 1985), and in cases where such opportunism goes unchecked, the possibility of an estranged relationship or a costly dispute. As has been widely noted,

‘golden opportunities’ for exploitation are ever-present in interorganizational relationships (Nooteboom, 1996), and promises between partners are not always kept (Reich and Mankin, 1986).

Anticipating the potential for opportunism and conflict, firms rely on interfirm governance mechanisms to mitigate relationship risks and facilitate cooperation (Ring and Van de Ven, 1992; Gundlach, Achrol, and Mentzer, 1995; Lusch and Brown, 1996). One such mechanism involves the use of contractual governance as a means of control (Williamson, 1985). Contracts, by carefully delineating rights and responsibilities, allow parties to constrain attempts at exploitation (Brown, Dev, and Lee, 2000). Research in strategy has taken a broader view of the role that contractual governance plays with regard to managing interfirm relationships (Reuer and Ariño, 2007; Hoetker and Mellewigt 2009; Li, Poppo, and Zhou 2010). By looking at contracting decisions as entailing strategic choice, strategy scholars have argued that contracts are not simply tools for the enforcement

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of negotiated agreements but are also elements of strategy that can facilitate value creation and cooperation (Luo, 2002; Lui and Ngo, 2004; Argyres, Bercovitz, and Mayer, 2007).

Most relevant to the current endeavor, prior research reveals that the degree of reliance on contractual governance structures has implications for whether and when disputes will surface in relationships (e.g., Gundlach and Achrol, 1993). Highly contractual relationships entail greater costs associated with structuring and monitoring the relationship, but are effective in avoiding conflict in stable environments where each party's rights and responsibilities are clear and consistent with what was agreed upon in writing (Williamson, 1985). In contrast, less contractual governance structures may be more useful when uncertainty is high, prior agreements and expectations are unlikely to provide clear guidance on appropriate behavior, and the parties are interested in building and leveraging trust and cooperative norms (Macaulay, 1963; Granovetter, 1985; Uzzi, 1997; Malhotra and Murnighan, 2002).

In this paper, we focus on a related, but largely ignored function of contractual governance: the role contracts play *after* a dispute has actually surfaced. We start with the observation that regardless of the extent to which contracts are used to manage interfirm interactions, disputes will occasionally emerge. While it is important to understand whether and when contracts are likely to be effective in preventing conflict, it is also crucial to understand how a reliance on contracts will impact the dispute resolution process and its outcomes. Our paper looks at how the degree of contractual detail influences interfirm behaviors after a conflict has arisen, and when and how contracts will be effective in reducing the costs associated with interfirm conflicts.

In order to examine the means by which contracts impact the interfirm dispute resolution process, we draw upon extant psychological research on dispute frames (Pinkley, 1990; Pinkley and Northcraft, 1994) and work done by Ury, Brett, and Goldberg (1988) on alternative means for resolving disputes. We find that the degree of contractual detail impacts the type of dispute resolution approach that is adopted when conflict arises, and that different approaches are associated with different costs for resolving the dispute. Thus, even after controlling for various attributes of the exchange relationship and of the dispute,

the choice of governance mechanism has important implications for the way in which interacting parties manage conflict.

We leverage a large, unique dataset that consists of more than 150,000 pages of details regarding 102 disputes arising in vertical exchange relationships. We had access to all legal files related to interfirm contract disputes handled by one law firm in the years 1991–2005. The data include a wide range of contractual and exchange characteristics for each relationship, along with thousands of pages of communication between the disputants, thereby enabling us to study in detail the process by which each dispute was resolved. Our article is organized as follows. In the following sections, we present the theoretical background for the study and develop our hypotheses. We then describe the data, methods, and results of our analysis. We conclude with a discussion of the results, limitations, and opportunities for future research.

THEORETICAL DEVELOPMENT

Contractual governance as a means of coordination and control

Mutual cooperation in interfirm relationships, although necessary for value creation, is neither automatic nor easily fostered. A critical barrier to such cooperation is the risk of exploitation by an opportunistic partner (Williamson, 1985). In recognition of the mixed-motive nature of most exchange relationships (Kogut, 1988; Gulati, 1999), firms rely on governance mechanisms to mitigate their risks and promote cooperation (Ring and Van de Ven, 1992; Gundlach *et al.*, 1995; Lusch and Brown, 1996).

Contractual governance provides one such mechanism for fostering cooperation (Dwyer, Schurr, and Oh, 1987; Jap and Ganesan, 2000). Backed by legal authority, formal contracts between firms detail the rights and obligations of parties within an exchange agreement (Lyons and Mehta, 1997). Contractual arrangements also make explicit the unspoken assumptions that underlie the transaction and ensure that the parties have a shared understanding of each side's role in the relationship (Smitka, 1994). By providing firms with the option of going to a third party (e.g., the courts) to sanction an opportunistic trading partner (Dyer, 1997), contracts protect against exploitation, albeit at potentially high cost.

Contracts are ubiquitous in interorganizational relationships in most industries, but they vary widely in their intent and complexity (Crocker and Reynolds, 1993). Some contracts contain a large number of provisions; others seek to codify as little as possible. Some contracts focus heavily on the need to mitigate the risk of opportunism and include a host of provisions that seek to *control* the behavior of each party (Williamson, 1985); others focus above all else on ensuring that the parties have a shared understanding of the relationship so that they can optimally *coordinate* their efforts (Salbu, 1997; Mellewigt, Madhok, and Weibel, 2007).

Despite their prevalence, all contracts are inevitably incomplete (Grossman and Hart, 1986; Williamson, 1996). Some are incomplete out of necessity—that is, it is impossible to delineate all of the contingencies that may arise in a relationship (Simon, 1961; Malhotra and Murnighan, 2002). Others may be incomplete by design: some parties will choose to limit the extent to which they rely on contractual governance structures even when greater contractual detail is possible. There are (at least) three reasons why parties may choose to limit their reliance on contractual governance. First, parties may want to reduce the costs associated with contract development, monitoring, and enforcement (Williamson, 1985). Second, parties may wish to allow for greater strategic flexibility, recognizing that additional information regarding each party's needs, interests, and capacities will be uncovered over time (Bernheim and Whinston, 1998; Malhotra, 2009). Third, parties may wish to encourage the development of mutual trust and cooperative norms, aspects of relational governance that may be 'crowded out' when too much emphasis is placed on contractual governance (Sitkin and Roth, 1993; Tenbrunsel and Messick, 1999; Malhotra and Murnighan, 2002).

Contractual and relational governance mechanisms are not mutually exclusive, and many have argued that parties should, ideally, rely on both mechanisms to manage relationship risk (Poppo and Zenger, 2002; Gulati and Nickerson, 2008). We do not take a stand on whether contracts and relational norms can or cannot coexist in harmony. Instead, we take as our point of departure the empirical observation that, in practice, interfirm relationships inevitably rely on multiple mechanisms for coordination and control. In other words, what varies in most interfirm relationships is not

whether contracts are employed but rather the *degree* to which contractual mechanisms are leveraged (Gundlach and Murphy, 1993; Heide, 1994).

While research on interfirm governance has devoted considerable attention to studying how varying degrees of contractual governance impact outcomes, this research has primarily focused on broad measures of performance, such as profitability (Lusch and Brown, 1996) and partnership satisfaction (Poppo and Zenger, 2002). Less well established is how contract choice affects actual interfirm behaviors—that is, how governance structures influence precisely those behaviors they are designed to govern. Furthermore, while the link between governance structure and performance is now well established, what have received far less attention are the processes that intermediate between governance structures and outcomes (Noorderhaven, 2005).

Here we seek to address both issues. We examine how contractual governance structures influence interfirm behaviors and outcomes when the primary objective of governance—to promote cooperation—fails. We also shed light on the psychological and behavioral processes that mediate between governance structure and outcomes. Finally, while previous studies have focused on examining either the antecedents or the consequences of governance structure, we include both in our analysis. This allows us to control for the antecedents of governance structure when we evaluate the efficacy of contractual governance in resolving disputes.

The effect of contractual governance on dispute resolution

Contractual governance affects behavior not only directly by delineating appropriate behaviors but also indirectly by shaping beliefs and expectations. Governance structures help to create norms (Heide and Wathne, 2006), which serve 'to guide, control, or regulate' (Macneil, 1980: 38) the behavior of firms and actors that represent them. In the context of relationship risk, norms specify permissible limits on (self-serving) behaviors (Ouchi, 1979; Rousseau, 1995) and help mitigate deviant behavior (Stinchcombe, 1986). Thus, governance structures create a 'logic of appropriateness' which provides the lens through which firms evaluate each other's behavior, and, in turn, the appropriateness of their own response (March, 1994: viii).

In order to understand the effect that governance structures have on a firm's approach to the dispute resolution process, we rely on the concept of psychological framing (Tversky and Kahneman, 1981; Pinkley, 1990). Framing refers to the cognitive processes by which parties understand and enact their organizational environment (Daft and Weick, 1984; Reger *et al.*, 1994; Fiss and Zajac, 2006). As such, frames consist of cognitive schemas that help individuals make sense of their current situation (Fiske and Taylor, 1991). In the context of interfirm negotiations, such 'sensemaking' processes affect the behaviors that each party considers appropriate for dealing with the dispute (Pinkley and Northcraft, 1994; Ring and Van de Ven, 1994; Vlaar, Van den Bosch, and Volberda, 2006).

Because the same dispute can be framed in different ways (Brewer and Kramer, 1986; Pinkley, 1990; McCusker and Carnevale, 1995), any analysis of the likely approach a disputant will adopt must include an assessment of which frame, if any, will dominate. As with schema formation generally (Fiske and Taylor, 1991), dispute framing is influenced by past experiences as well as contextual stimuli (Pinkley and Northcraft, 1994; Schweitzer and DeChurch, 2001). In interfirm relationships, one critical (and often salient) contextual stimulus is the governance structure within which the firms' experiences have been shaped. Thus, the degree of reliance on contractual detail is likely to influence the (cognitive) dispute frame adopted by each party, and in turn, the (behavioral) approach they will employ in resolving the dispute.

Here we focus on two common approaches for resolving interfirm disputes: the rights-based approach and the interest-based approach (Brett, Goldberg, and Ury, 1990).¹ According to Brett *et al.* (1990), the rights-based approach is primarily distributive, adversarial, and competitive. This approach relies 'on some independent standard with perceived legitimacy or fairness to determine who is right' (Ury *et al.*, 1988: 7). Parties adopting a rights-based approach to dispute resolution are likely to focus on arguments that portray

their own position as legitimate and defensible, while portraying the other's claims and demands as invalid and unsupported by the standards that govern the relationship. In contrast, the interest-based approach is integrative, consensual, and problem solving (Ury *et al.*, 1988). Parties adopting an interest-based approach are likely to share information regarding each party's perspective and underlying interests, and to emphasize mutually acceptable alternatives to escalating the conflict.

Which approach, if either, is likely to dominate depends in part on the psychological frame(s) adopted by the disputants. Pinkley (1990) argues that a critical dimension along which conflicts (e.g., interfirm disputes) are likely to be framed is the 'cooperate vs. win' dimension. A 'cooperate' frame entails beliefs regarding mutual responsibility for the conflict and leads to behaviors aimed at achieving a mutually desirable outcome. Thus, a cooperative frame will lead to an interest-based approach for dispute resolution. In contrast, a 'win' frame entails a zero-sum approach in which only one side is likely to—or even ought to—prevail (Malhotra, 2010). This is consistent with a rights-based approach to resolving the conflict.

Importantly, it is possible that *both* of these psychological frames will be activated within the same dispute (Fiske and Taylor, 1991). This is especially likely when the conflict is drawn out or complex, when there are areas of agreement as well as disagreement, and when multiple individuals are involved; all of these features are common in interfirm disputes.

The rights-based approach and the interest-based approach are not mutually exclusive; most disputes involve a reliance on both (Ury *et al.*, 1988). As such, in our hypotheses and analyses, we separately evaluate the degree to which each approach is used without assuming that one will necessarily crowd out the other. For example, disputants may leverage the strength of their legal arguments (right-based) while simultaneously discussing whether an alternative to litigation is possible (interest-based). Adair and Brett (2005) demonstrate that while either approach may dominate in a particular dispute, or at a particular stage in a dispute, disputants typically iterate between approaches. Lytle *et al.* (1999) suggest, however, that which of the approaches dominates can have important consequences for whether—and how—the dispute is resolved.

¹ While Ury *et al.* (1988) also discuss a third approach for resolving disputes (the power-based approach), subsequent research has found that the rights- and interest-based approaches may account for the vast majority of behaviors observed in the dispute resolution process (Lytle, Brett, and Shapiro, 1999). Moreover, in the current study, most power-based tactics will entail legal maneuvers that would be subsumed under the rights-based approach (Ury *et al.*, 1988).

Contractual governance and adoption of a rights-based approach

We argue that increasing reliance on contractual governance, because of its explicit emphasis on rights, prohibitions, and legal sanctions, will be more likely to result in a win-lose framing of the conflict (Pinkley, 1990) and thus encourage a rights-based approach to dispute resolution. Contractual governance not only allows, but can encourage the parties to consider their rights and potential liabilities. Furthermore, because contracts typically contain explicit provisions regarding the sanctions that can be imposed on the offending party, this creates incentives for each side to defend its behavior and question the appropriateness of the other's actions. Because parties in conflict typically interpret events and motivations in a self-serving manner (Miller and Ross, 1975; Bazerman and Moore, 2008), the 'who is right and who is wrong' approach can escalate, with each side increasingly evaluating its own rights-based actions as appropriate and the other's rights-based actions as aggressive and deserving of retaliation (De Dreu, Nauta, and Van de Vliert, 2006). Thus, an emphasis on the contractual side of governance can support a coercive approach and reliance on adversarial dispute resolution. More formally:

Hypothesis 1: The more contractual the governance structure, the greater will be the reliance on a rights-based approach to resolve subsequent interfirm disputes.

Contractual governance and adoption of an interest-based approach

The effect of contractual governance on interest-based negotiation is less straightforward. This is because interfirm contracts serve (at least) two distinct purposes: control and coordination (Salbu, 1997; Gulati, Lawrence, and Puranam, 2005). First, as previously discussed at length, contracts promote cooperation by placing limits on the behavior of each party, thereby mitigating the risk of exploitation by the other party (Williamson, 1985). Second, even if neither party intends to behave opportunistically, contracts promote cooperation by helping the parties coordinate their efforts (Mellewig *et al.*, 2007). Thus, in addition to fulfilling the traditional role of constraining overly self-serving behavior, contracts can help exchange partners in defining and aligning their

expectations (Woolthuis, Hillebrand, and Nootboom, 2005). Because different relationships will differ in the degree to which the parties are concerned about coordination issues, the relative level of control vs. coordination provisions will vary across contracts.

Thus, on the one hand, *less* contractual governance should be more likely to encourage the adoption of an interest-based approach. This is because a reduced emphasis on contractual detail, by design, forces the parties to rely upon and build mutual understanding, trust, and reciprocity even before a dispute emerges (Macneil, 1980; Heide and John, 1992), whereas greater contractual detail achieves reduction of risk by obviating the need for trust (Malhotra and Murnighan, 2002). Accordingly, we hypothesize the following main effect of contractual governance on interest-based negotiations:

Hypothesis 2a: The more contractual the governance structure, the less will be the reliance on an interest-based approach to resolve subsequent interfirm disputes.

On the other hand, in situations where the contracting process is heavily focused on promoting interfirm coordination, *greater* contractual detail may more effectively promote interest-based bargaining. There are two reasons to expect this. First, when emphasis on coordination is high, the contracting process—and the contracts themselves—will create a precedent for (coordination-driven) information exchange and cooperation. When a dispute emerges, coordinating provisions of the contract may lay the groundwork for more productive communication and information sharing between the parties. Thus, we hypothesize:

Hypothesis 2b: For a given level of contractual detail, the more coordination-focused the contract, the greater will be the reliance on an interest-based approach to resolve subsequent interfirm disputes.

In addition to this direct effect of coordination provisions on interest-based negotiation, we suggest coordination efforts and contractual detail will interact, such that when coordination focus is high, greater contractual detail will facilitate (rather than inhibit, as in Hypothesis 2a) interest-based negotiation. This is because an emphasis on

coordination during the contracting phase, when sufficiently prominent, is likely to direct attention more generally toward ‘the positive (what we want to achieve and how) than on the negative (which legally enforceable measure we put in place to safeguard property or knowledge)’ (Woolthuis *et al.*, 2005: 835). This suggests the following hypothesis regarding the prospects for interest-based dispute resolution:

Hypothesis 2c: When emphasis on coordination is high, the more contractual the governance structure, the greater will be the reliance on an interest-based approach to resolve subsequent interfirm disputes.

The cost of dispute resolution

Interfirm disputes can be tremendously costly, especially when conflict escalates to the point where litigation is a possibility. The costs depend on various factors, such as the stakes involved in the dispute, the likelihood of continued appeals, and the degree to which egos and emotions are involved (Malhotra, Ku, and Murnighan, 2008). The cost of the dispute is also likely to be influenced by the way in which the parties approach dispute resolution (Ury *et al.*, 1988). As argued above, both the interest-based and the rights-based approach are expected to play a role in each dispute; what will differ across disputes is the extent to which each approach is leveraged.

A large body of research dating back at least three decades, has lauded the interest-based approach as the ‘low cost’ option for dispute resolution (Fisher, Ury, and Patton, 1981). However, most arguments in favor of the interest-based approach (and against the rights-based approach) associate ‘interest-based’ with ‘alternative dispute resolution’ (ADR)—for example, settlement via negotiation, mediation, and so forth—whereas the rights-based approach is typically associated with settlement through litigation. Not surprisingly, ADR has been found to be considerably less costly than litigation (Brett, Barsness, and Goldberg, 1996).

We explore a less substantiated, but perhaps more interesting possibility: that even when the type of resolution mode is controlled for (i.e., through private resolution or through court ordering), a rights-based approach will be more costly

than an interest-based approach. There are a number of reasons to expect this. First, the primary objective of the rights-based approach—to determine which party is right and which party is wrong—is often difficult to achieve. While some rights are formalized in law or contract, others are based on normative standards that the parties may disagree about after conflict has erupted. Ury *et al.* (1988: 7) point out that ‘there are often different—and sometimes contradictory—standards that apply. Reaching agreement on rights, where the outcome will determine who gets what, can often be exceedingly difficult, frequently leading the parties to turn to a third party to determine who is right.’ Thus, the rights-based approach is likely to result in a heavier involvement of lawyers, thereby driving up costs. Moreover, as argued by Adair and Brett (2005), parties in a dispute tend to reciprocate the approach used by the other. When one adopts the zero-sum logic of ‘right vs. wrong,’ an escalation of the dispute and its costs may result.

Meanwhile, interest-based negotiation leads to a consideration of a broader set of potential solutions than does the rights-based approach (Fisher *et al.*, 1981; Lax and Sebenius, 1986; Malhotra and Bazerman, 2007), which makes it more likely that a low-cost resolution will be found. Furthermore, interest-based negotiation emphasizes information exchange and cooperation, which makes it more likely that an acceptable resolution will be found quicker. This discussion suggests the following hypotheses:

Hypothesis 3a: The greater the reliance on a rights-based approach, the higher will be the cost of resolving the dispute, controlling for whether the dispute is resolved in court.

Hypothesis 3b: The greater the reliance on an interest-based approach, the lower will be the cost of resolving the dispute, controlling for whether the dispute is resolved in court.

In addition to the predicted main effects of dispute resolution approach on cost (à la Hypotheses 3a and 3b), we also consider a moderating effect of power asymmetry (White, Joplin, and Salama, 2007). Interfirm relationships vary considerably in the degree to which the parties have outside options, deep pockets, or other means by which to sustain some level of independence from their

counterpart. Emerson (1962) argues that power is a function of the criticality and availability of resources: power increases when the resource a party controls is more highly demanded and less widely available. Thus, power is the inverse of dependence. Likewise, negotiation scholars (Fisher *et al.*, 1981; Raiffa, 1982; Thompson, 1991) argue that power is a function of a party's alternatives to reaching agreement, but may also be a function of the resources that a party can mobilize when attempting to coerce the other side (Lax and Sebenius, 2006). In our analysis, we consider both potential sources of power: alternatives and resources.

Considerable evidence suggests that the nature of the negotiation process is influenced by the relative power of the parties involved (Fouraker and Siegel, 1963; Gaski, 1984; McAlister, Bazerman, and Fader, 1986). The near-consensus appears to be that symmetry results in more cooperative interactions and a lower likelihood of dispute, whereas asymmetry leads to a greater divergence in perspectives and more self-serving cognitions and behaviors (Dwyer and Walker, 1981). Consistent with this, when there is symmetry of power, parties are likely to 'avoid extreme actions that could prompt retaliation by their partners' (Dwyer and Walker, 1981: 105) and a costly escalation of conflict. Meanwhile, Lin and Germain (1998: 182) argue that 'unbalanced power relations provide an incentive to less integrative behavior.' McAlister *et al.* (1986) demonstrate that less value is created in negotiations when there is an asymmetry of power because power imbalances lead negotiators to focus too much on the exercise of or defense against power, and too little on information exchange and joint problem solving.

While asymmetric relationships appear more likely than symmetric relationships to result in conflict, it is less obvious how symmetric vs. asymmetric interfirm relationships differ with regard to the costs of resolving conflicts *after* they have erupted. For example, asymmetry may actually *reduce* dispute costs when the parties have adopted a 'win-lose' frame and are relying on the rights-based approach. If asymmetry leads to a pronounced tendency for the dominant party to negotiate aggressively (Lin and Germain, 1998) or impose a solution on the other (Ury *et al.*, 1988), this will lead to a quicker and cheaper (albeit not mutually satisfying) resolution. In contrast, when asymmetry decreases (i.e., when the parties have

close to equal power), a rights-based conflict may continue to escalate as each party attempts to prevail over the other and neither backs down. This suggests the following hypothesis regarding rights-based negotiation:

Hypothesis 4a: The detrimental effect of a rights-based approach on dispute costs will be lessened when power asymmetry increases.

Meanwhile, the interest-based approach (which helps to reduce costs, à la Hypothesis 3b) may be especially beneficial when power asymmetry increases. Asymmetry results in less perspective taking among those who are in the position of power (Galinsky *et al.*, 2006), thus disrupting information exchange and making it unlikely that the parties will understand each other's interests. Power asymmetry also encourages the use of threats, which makes cooperative interaction less likely (De Dreu, 1995). These are precisely the barriers to effective dispute resolution that the interest-based approach is designed to overcome. Thus, interest-based negotiation may be most useful in mitigating the cost of conflict when power asymmetry is high. This suggests the following hypothesis regarding interest-based negotiation:

Hypothesis 4b: The beneficial effect of an interest-based approach on dispute costs will be enhanced when power asymmetry increases.

In our analyses of the role of power asymmetry, we control for the level of mutual dependence that exists in the relationship. Building on Emerson's (1962) seminal work on power relations, Casciaro and Piskorski (2005) and others (e.g., Piskorski and Casciaro, 2006; Gulati and Sytch, 2007) have argued that the effects of power imbalance may differ across conditions of high vs. low mutual dependence. The level of mutual dependence may be a function of the alternatives each party has (cf., Emerson, 1962) or, as suggested by Williamson's (1985) discussion of asset specificity, a function of 'bilateral dependencies' created during the exchange, or both (Casciaro and Piskorski, 2005). Thus, our analyses include measures of mutual dependence based on exchange alternatives as well as asset specificity.²

² Interactions between power asymmetry and mutual dependence are beyond the scope of this paper as such predictions would

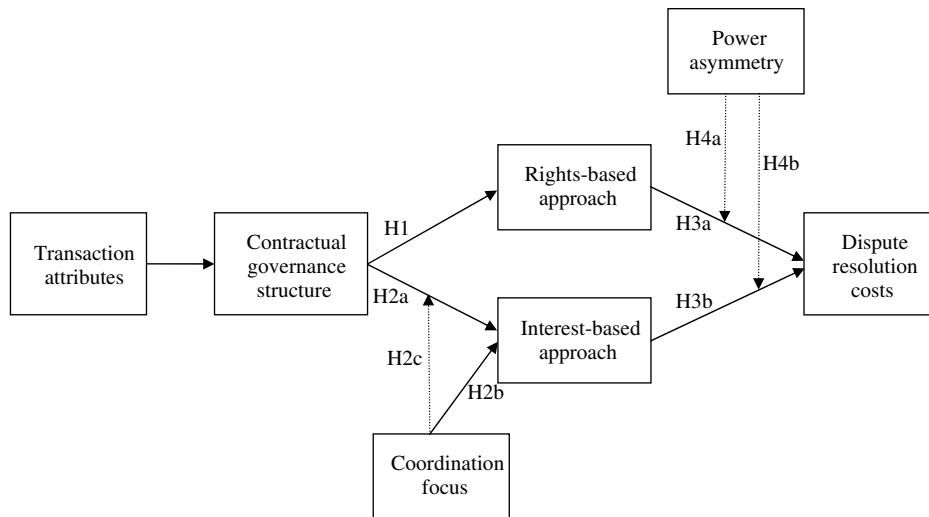


Figure 1. General model

Figure 1 summarizes our general model and hypotheses:

DATA AND METHODS

Data collection

We were granted access to all legal files concerning contract disputes handled by one law firm in Western Europe between 1991 and 2005. The law firm is a mid-sized company that was founded in the late 1980s. We restricted our sample to all two-party disputes involving vertical relationships; these represented 80 percent of the two-party disputes handled by the firm.

Of the 102 cases (i.e., disputes) in our sample, 99 involved only European firms; each of the other three involved at least one non-European firm. Because some companies were repeat clients of the law firm and involved in more than one dispute, the sample contained 178 different firms.³ To check for potential selection bias, differences between included and excluded firms and files were examined. We found no significant differences between files/firms included vs. excluded from the sample on any dimension we examined (e.g., governance structure, size, etc.).

involve complex three-way interactions between dispute resolution approach, power asymmetry, and mutual dependence.

³ The results were unchanged when a 'repeat client' control variable was included in the analyses.

Because all of the interfirm relationships we studied involved legal disputes, it is important to also consider the representativeness of our sample and whether our results would generalize to the broader universe of interfirm relationships. To address this issue, we conducted a series of analyses to assess the degree to which key characteristics of our sample—at the contract level, the firm level, and the relationship level—compare with available benchmarks in datasets that do not involve disputing firms. At the contract level, we compared the contractual complexity of our sample with contracts described in prior research. Specifically, on Parkhe's (1993: 829) unweighted index of complexity, our sample's score (4.37) is situated comfortably between the score (3.69) for Reuer and Ariño's (2002; 2007) sample of 88 alliances that involve Spanish firms (of various sizes from a variety of industries) and the score (5.05) of Reuer, Ariño, and Mellewig's (2006) sample of 66 alliances in the German telecommunications industry. At the firm level, we compared the revenue of firms in our sample with revenue data on 123,595 comparable firms provided in the AMADEUS database managed by the Bureau van Dijk, which is a pan-European database of financial information on over 11 million public and private companies. Comparing firms by industry (using the two-digit Standard Industrial Classification code) revealed no clear pattern of differences. Finally, at the relationship level, we compared the percentage of prior ties between parties in

our data (32.4 percent) with interfirm relationships described in prior research. Gulati (1995) reports that 12 percent of firms in his sample had a previous direct tie; Reuer and Ariño (2002) report that 20 percent of firms in their sample had previously engaged with the same partner in a different venture; Hagedoorn and Hesen (2009) report that 53 percent of their sample included a prior relationship between the contracting parties. The level of prior ties in our relationship is comfortably within the range implied by prior research. Taken together, these analyses suggest that our sample appears, *a priori*, to consist of contracts, firms, and relationships, that do not differ significantly from the larger universe of (non-dispute) datasets on dimensions that we can identify. While such analyses cannot entirely eliminate the possibility of selective representation, they do seem to mitigate the concern.

The law firm provided extensive and detailed information on the 102 disputes that we analyzed. Each legal file contained between 800 and 5,000 pages and included: (a) the original contract, along with any contract revisions that had been made prior to the dispute; and (b) all documents exchanged during the dispute-resolution process. In addition to providing us with legal documents, the lawyers in each case obtained from the clients all potentially relevant information related to the initial context of the relationship, the origins of the conflict, and its evolution over time. In total, over 150,000 pages of documents were analyzed for this study.

Data collection took place over four months. This period of immersion enabled us to speak extensively with the lawyers and administrative staff of the firm. In addition, 17 structured interviews, lasting between one and three hours each, were conducted with lawyers at the firm and with law professors specializing in contract law. These discussions and interviews were used, as needed, to clarify our understanding of legal procedures, validate the distinction between contractual functions, and check our interpretation of clauses. Due to the highly confidential character of the data, it was not possible to speak directly with the disputing firms.

A dispute prototype

Although the dataset consists of more than 100 disputes that vary on multiple dimensions (as further

described below), it may be helpful to provide an example of a dispute from our study.

Sample dispute

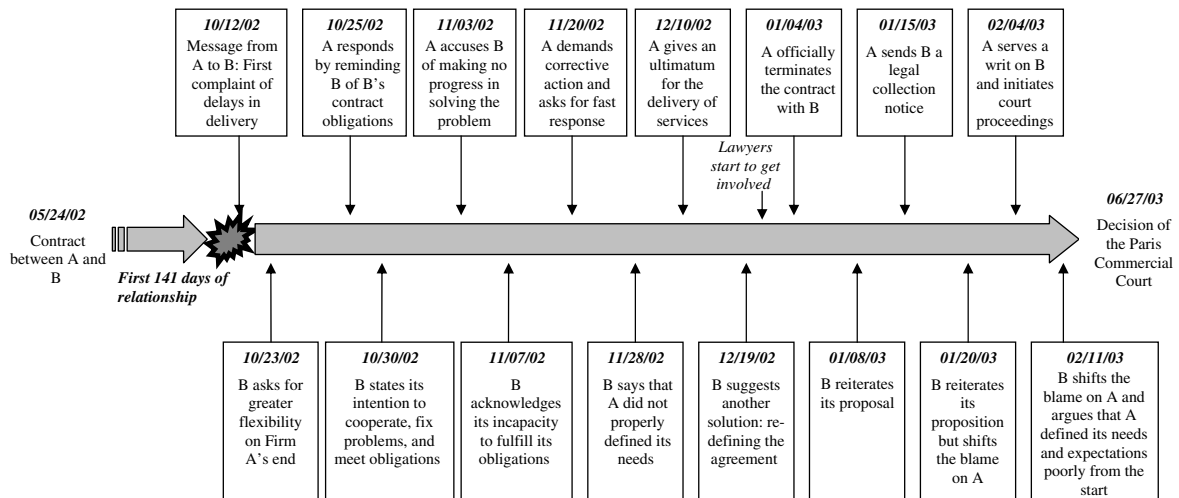
In May, 2002, a mid-sized German firm in the automotive industry (Firm A) contracted with a large French firm in the information technology industry (Firm B). The contract called for Firm B to be paid €320,000 over the length of the relationship, during which time Firm B was to develop and implement specific software for Firm A. As time went on, Firm A became increasingly disgruntled with Firm B's performance. One hundred forty-one days after the contract was signed, Firm A accused Firm B of having repeatedly missed delivery deadlines. After a number of e-mails failed to resolve the problem, managers at Firm A decided to engage the services of a law firm. This took place 82 days after Firm A had voiced its initial complaint. In response, Firm B hired the law firm that eventually provided us with our data. The dispute continued for another 176 days, at which point it was resolved in court. The legal costs added up to €14,720 (for Firm B). A total of 16 messages were exchanged between the two firms during the course of the dispute. We had access to all messages, even those exchanged prior to the involvement of the law firm.

Figure 2 presents a timeline of the key events associated with this sample case.

Variables and measurements

Cost of dispute resolution

Dispute resolution costs were estimated using legal fees; that is, the (log) amount of money paid by the client to the law firm (in thousands of inflation-adjusted Euros). While these figures clearly underestimate the total costs associated with the dispute (e.g., we only measure fees paid by one disputant and we cannot measure non-legal costs incurred by either party), our interest in this study is to compare dispute costs across situations involving different governance structures and/or different approaches used to resolve disputes. For this purpose, underestimation (if unbiased) is not likely to be problematic. Because all of our data comes from the same law firm, we have no reason to suspect any bias in the data that would interact with our hypotheses. Throughout the period examined, the



Note: Each box represents a message that was exchanged between the parties and was coded in our analysis.

Figure 2. Timeline of sample dispute

law firm maintained one uniform invoicing process.

Governance structure

The analysis of governance structure is based on an examination of the actual formal contracts signed by the firms. We measured the level of contractual detail governing the relationship at the time the dispute arose. We relied upon a set of indicators developed by Parkhe (1993) that help to evaluate various provisions in the formal contract. Parkhe conducted a computer-aided search of the relevant legal literature and arrived at the following eight provisions that might be included in a formal contract:

'(1) periodic written reports of all relevant transactions; (2) prompt written notice of any departures from the agreement; (3) the right to examine and audit all relevant records through a firm of CPAs; (4) designation of certain information as proprietary and subject to confidentiality provisions of the contract; (5) non-use of proprietary information even after termination of agreement; (6) termination of agreement; (7) arbitration clauses; (8) lawsuit provisions' (Parkhe, 1993: 829).

Based on Parkhe (1993), and following the precedent of Deeds and Hill (1999) and Reuer and Ariño (2007), our measure of the degree of

contractual governance is based on the number of Parkhe's (1993) provisions represented in the contract (ranging from zero to eight). The contractual detail score provides a measure of the degree of contractual governance, ranging from zero to eight, with higher scores representing a greater reliance on contractual governance.⁴

Coordination focus

Reuer and Ariño (2007: 322) argue that the first three provisions of Parkhe's eight-item index relate to coordination between the contracting parties, and may thus be used as a proxy for the degree to which the parties focus on coordinating their expectations and behaviors. In our examination of these three types of provisions, however, we find that Parkhe's (1993: 829) clause category #3 ('the right to examine and audit all relevant records through a firm of CPAs') may arguably have more to do with 'enforcement' (cf., Reuer and Ariño, 2007), than coordination.⁵ Meanwhile, clause categories #1 and #2 appear to focus more clearly on coordination. We therefore measure coordination

⁴ We use an unweighted composite index of contractual detail because Lui and Ngo (2004: 477) suggest that the relative importance of contractual provisions is unclear and because Barthélemy and Quélin (2006: 1785) have shown that weighted and unweighted measures of contractual complexity are very highly correlated ($\beta = 0.96$, $p < 0.01$). See also Reuer and Ariño (2007).

⁵ We thank an anonymous reviewer for guidance on this point.

focus as the ratio of coordination-related clauses included in the contract—that is, clause 1 and/or 2 from Parkhe (1993)—to the total number of clauses in the contract. By controlling for the total number of clauses, the ratio measure mitigates concerns that coordination provisions were included incidentally—that is, due to institutional factors that promote greater contractual detail, rather than to deal with coordination issues. Moreover, by assessing the percentage of the contract devoted to coordination, the measure seeks to capture the extent to which a focus on coordination motivated the contracting process.

We also conducted two sets of robustness checks with regard to our measure of coordination focus. In the first, we measured coordination focus using all three provisions identified as ‘coordination provisions’ by Reuer and Ariño (2007: 322). The findings were almost identical to those reported below, with no change in the results of our hypotheses tests. In the second analysis, we again started with all three types of coordination provisions. A rater then evaluated each coordination provision in the entire dataset, along with the context in which the clause was embedded, and eliminated all seemingly ambiguous provisions. A second rater evaluated 10 randomly selected clauses for each type of provision; the level of agreement between raters was 93.3 percent. This process created a more conservative measure of coordination by eliminating 5.96 percent of provisions. Analyses based on this measure of coordination focus again produced identical results. Below, we report on analyses that measured coordination focus based on whether clause categories #1 and #2 were included in the contracts.

Type of resolution approach

To assess the degree to which interest-based and rights-based approaches were employed, every document exchanged between the disputing firms during the entire resolution process was analyzed. Each communication by one firm to the other was counted as a message. Following the methodology used to test signaling theories (e.g., Spence, 1974; Harms, 2004), the choice *not* to reply to a communication by the other party was also coded as a (‘no reply’) message. In total, 2,293 messages were studied (of which only 132 were coded as ‘no reply’). A scheme for categorizing interest- vs.

rights-based statements was constructed to evaluate each message. Prior studies have shown that some communications contain mixed or dual messages (e.g., Lewicki, McAllister, and Bies, 1998). As such, we allowed each message to be coded as pursuing neither, one, or both of the approaches. The ratio of rights-based messages to total messages was calculated and served as a measure of the degree to which the rights-based approach was pursued. Likewise, the ratio of interest-based messages to total messages served as a measure of the degree to which the interest-based approach was pursued. Thus, consistent with our hypotheses, we separately coded for rights-based and interest-based messages, making it possible for a particular dispute to be coded as high (or low) in both approaches. For example, consider a dispute that has a total of 32 messages, with 14 interest-based and 21 rights-based (clearly, some messages are coded as both). The score for the interest-based approach would then be $14/32 = 0.437$; the score for the rights-based approach would be $21/32 = 0.656$.

Coding of messages was done by two researchers, following Weber’s (1990) protocol. Drawing upon Ury *et al.*’s (1988) and Brett *et al.*’s (1990) definitions of rights-based and interest-based approaches, the team developed a list of relevant preliminary response categories to use for information coding. We first applied our coding scheme to four cases. Second, we assessed the sample coding and slightly revised the coding rules as a result. (See Appendix for the final list of response categories used to code messages.) Third, all documents exchanged by the parties were independently read and coded by each coder. We proceeded with an item selection and classification process (Jauch, Osborn, and Martin, 1980) with a systematic computer-based analysis of the data using Concordance™ software. Fourth, we assessed the reliability of coding: the percent of agreement between the raters (98% for rights-based and 97% for interest-based) and the correlation between the ratings ($\beta = 0.969$, $p < 0.01$ for rights-based and $\beta = 0.928$, $p < 0.1$). Any disagreements on ratings were solved by discussion.

Asymmetry

Power asymmetry between the parties was measured using two different proxies for firm strength (Emerson, 1962; Brass, 1984; Lax and Sebenius,

2006; Gulati and Sytch, 2007): firm revenues and an estimate of the number of alternatives to dealing with the other party.

Asymmetry of revenues was measured as:

$$\log [\text{ABS} [(\text{revenue of Firm A}) - (\text{revenue of Firm B})]]$$

Revenue was measured in thousands of inflation-adjusted Euros for the year when the contract was signed. These data were obtained from the Bureau van Dijk's ORBIS database.

To approximate the number of alternatives each party may have to dealing with the other, we did a content analysis of the communications between parties to look for mentions of alternative options and/or alternative partners (e.g., 'You know that if you continue to deny the facts, we will turn to [Firm X] to supply this part'; 'If we aren't able to put this relationship on the right track, we will produce the [part] ourselves'). Because the text did not allow us to calculate the precise number of alternatives that each party had, we estimated the strength of one's alternatives based on the frequency with which the party mentioned alternatives.

Asymmetry of alternatives was measured as:

$$[\text{ABS} [(\# \text{ of references to alternatives by Firm A}) - (\# \text{ of references to alternatives by Firm B})]]$$

Control variables

Type of settlement: We controlled for the type of resolution that was eventually pursued (litigation vs. private settlement) because the anticipation of this eventuality may have influenced the parties' choice of interest-based vs. rights-based approach. Type of settlement takes the value of 0 if the dispute was eventually settled through litigation and the value of 1 if the dispute was eventually settled via private negotiation.

Dispute resolution clause: As some contracts explicitly included a dispute resolution provision (e.g., 'Any dispute arising out of or in connection with this Agreement shall be settled without recourse to the courts...'), we included a dummy variable to indicate the presence (=1) of such a clause in the contract.

National vs. international: As less information tends to be known about foreign firms than domestic firms, and because international disputes may

vary on multiple dimensions, we included a variable to indicate whether or not the transaction was a cross-border relationship (Reuer *et al.*, 2006: 315). We created a dummy variable with a value of 0 for relationships between firms from the same country and 1 for international relationships.

Sum of alternatives: Building on Emerson's (1962) seminal work, Casciaro and Piskorski (2005), among others (e.g., Gulati and Sytch, 2007) have highlighted the need to control for the level of 'mutual dependence' when assessing the effects of power asymmetry. We used a proxy for 'mutual dependence' by including a measure of the sum of alternatives that each party had to dealing with the other. A higher value on this measure, indicating that the parties have strong alternatives to dealing with each other, would indicate a lower degree of mutual dependence.

Sum of revenues: Because larger firms (e.g., those with internal legal departments) may be more inclined toward pursuing litigation, we controlled for firm sizes through the summation of firm revenue (logarithmic value). This measure is necessarily calculated at the dyad level because our dependent variable (cost of resolution) is a dyadic outcome.

Number of messages: Finally, we controlled for the number of messages sent during the dispute. Variance in the number of messages may reflect differences in the type, complexity, or extent of the dispute, or in the nature of the relationship, all of which may impact the approach adopted and the costs incurred. We observed an average of 22 messages per conflict.

Instrumental variables: antecedents of governance structure

A number of our hypotheses predict differential effects (e.g., on dispute costs) resulting from the degree of contractual detail. However, governance structures are not randomly assigned to interfirm relationships; they are typically chosen (or negotiated) at the outset of the relationship. This creates a potential endogeneity problem and may result in biased coefficient estimates and/or interpretation errors if the actual antecedents of our dependent variables are omitted from our model (Hamilton and Nickerson, 2003; Bascle, 2008). We thus include in our model those factors that may impact governance decisions. In so doing, we use three-stage least square regressions generating

reduced-form estimates of governance choices. We then include predicted values from these equations as instruments in a second-stage equation estimating the impact of governance structure. Following prior research (e.g., Casciaro, 2003; Reuer and Ariño, 2007), governance choice was estimated as follows:

$$\begin{aligned} \text{Governance choice} = & a_0 + a_1 \times \text{prior} \\ & \text{relationship length} + a_2 \times \text{technical detail} + \\ & a_3 \times \text{time bound} + a_4 \times \text{asset specificity} \\ & + a_5 \times \text{type of transaction} + e \end{aligned}$$

We included each of these variables in our model as follows:

Prior relationship length: As the history between the partners is likely to influence the degree of contractual detail (Mayer and Argyres, 2004), we looked at the duration of the prior relationship between the partners. Based on the information provided in the case files, we counted the number of days from the start of any previous exchange between the parties to the date that the current transaction began.

Technical detail: The level of complexity of a transaction may affect the governance structure that is needed or chosen. We controlled for the level of technical detail of the contract as measured by the degree to which technical specifications of the transaction were specified in the contract (Ryall and Sampson, 2009). This variable was calculated as the logarithm of the number of pages of technical details included in the contract or in its appendix.

Time bound: Deadlined vs. open-ended contracts might also be expected to affect choice of governance. For example, parties with short-term contracts may envision a small ‘shadow of the future’ (Axelrod, 1984; Heide and Miner, 1992), and may choose to rely more extensively on contractual provisions (Poppo, Zhou, and Ryu, 2008). We included a dummy variable to control for whether the contract specified a predefined length of time or whether it described an open-ended relationship (Reuer and Ariño, 2007: 323). If the contract contained a deadline, the time bound variable took the value 1; open-ended contracts took the value 0.

Asset specificity: Asset specificity refers to the degree to which the assets used in support of

the transaction can be redeployed to ‘alternative uses and by alternative users without sacrifice of productive value’ (Williamson, 1991: 281). An increase in asset specificity limits the ability of firms to redeploy assets, thereby increasing dependency and contracting hazards (Williamson, 1985). We measured the level of asset specificity (Williamson, 1985; David and Han, 2004) with a content analysis of each legal file to code for references to relationship-specific assets in the following categories: (a) *human assets* (i.e., knowledge specific to a particular partner, specialized skills and training); (b) *physical assets* (i.e., specialized production equipment and interorganizational systems such as those that link buyer and supplier production); and (c) *site specificity* (i.e., idiosyncratic investments in facilities dedicated to the relationship). We created an index of asset specificity by summing across these categories (0 = no evidence of such asset specificity; 1 = such asset specificity is described) to get an integer variable between zero and three.

Type of transaction: Because different types of transactions may be subject to different normative or technical constraints when it comes to picking a governance structure (Saussier, 2000), we included a variable to control for this. The types of transactions involved in the contracts we analyzed were coded as distribution contracts (35.3%), production supply contracts (29.4%), information technology contracts (26.5%), and contracts for consulting or other services (8.8%).⁶

RESULTS

Interfirm relationships in our sample varied in the degree to which they relied on contractual governance. On our measure of governance structure (Parkhe, 1993), which ranges from a minimum of zero (weakly contractual) to eight (extremely contractual), the mean level of contractual detail was 4.37.

Table 1 provides summary statistics and Pearson correlations for the variables used in our analysis.

⁶ In addition to the three-stage least squares regression analyses reported in the Results section, we also ran all of our analyses using simple regressions, in which the four instrumental variables were included as control variables. All of the results of our hypotheses tests were consistent across these two methodologies, which provided confidence in the robustness of the findings.

Table 1. Descriptive statistics and correlations

Variables	Mean	Min.	Max.	S.D.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	
1. External resolution costs (log)	1.68	0.11	2.33	0.51																					
2. Contractual governance structure	4.37	0	8	1.64	-0.64***																				
3. Interest-based	0.38	0	1	0.28	-0.84***	0.69***																			
4. Rights-based	0.40	0	0.91	0.21	0.22*	0.35**	-0.06																		
5. Coordination focus	0.19	0	1	0.19	-0.59***	0.38**	0.70**	-0.24*																	
6. Judicial resolution	0.40	0	1	0.49	-0.12	0.21*	0.13	0.10	0.01																
7. Dispute resolution clause	0.49	0	1	0.50	-0.38**	0.50***	0.39***	0.04	0.33**	0.27**															
8. International	0.46	0	1	0.50	-0.01	-0.07	0.06	-0.11	0.08	0.08	-0.04														
9. Asymmetry of revenues	7.66	5.16	10.28	0.96	0.03	0.01	-0.07	0.00	-0.01	0.14	0.00	-0.16†													
10. Sum of revenues	7.90	5.85	10.31	0.83	-0.00	-0.02	-0.10	-0.00	-0.03	0.11	0.01	-0.16	0.95***												
11. Asymmetry of alternatives	1.18	0	5	1.27	0.05	-0.00	-0.06	0.02	-0.09	-0.13	0.02	0.00	0.09	0.08											
12. Sum of alternatives	1.51	0	8	1.65	-0.02	0.03	0.02	-0.05	-0.02	-0.14	0.03	-0.01	0.03	0.02	0.82***										
13. Number of messages	22.48	5	55	11.18	-0.10	0.10	0.10	0.04	0.09	-0.14	0.03	-0.09	0.01	0.01	0.05	0.12									
14. Prior rel. length	298.76	0	5621	811.59	0.10	-0.28**	-0.11	-0.07	-0.06	-0.01	-0.21*	0.12	-0.04	0.03	0.02	0.04	-0.00								
15. Technical detail (log)	1.18	-0.69	4.8	1.40	-0.34**	0.52***	0.36**	0.13	0.20*	0.05	0.19†	0.13	0.09	0.09	-0.01	-0.06	-0.07	-0.09							
16. Time bound	0.65	0	1	0.47	-0.15	0.24*	0.24*	0.02	0.07	0.00	-0.28**	-0.11	-0.02	-0.05	-0.13	-0.03	0.12	-0.16	0.03						
17. Asset specificity	1.22	0	3	0.99	-0.35**	0.51***	0.42**	0.27**	0.20*	-0.16†	0.15	0.06	0.03	0.00	0.16†	0.18†	0.16†	-0.04	0.47**	0.16†					
18. Distribution	0.35	0	1	0.48	-0.02	-0.08	-0.05	-0.00	0.00	-0.01	-0.06	-0.02	0.02	0.03	0.16†	0.15	0.06	0.12	0.11	-0.07	0.05				
19. Services	0.08	0	1	0.28	0.10	-0.11	-0.11	0.00	-0.10	-0.11	-0.09	-0.07	0.04	-0.00	0.06	-0.01	0.00	-0.00	-0.11	-0.06	-0.10	-0.22*			
20. IT	0.26	0	1	0.44	-0.04	0.10	0.02	-0.06	0.01	-0.12	0.12	0.02	-0.08	-0.07	-0.00	0.06	0.00	-0.01	0.08	0.01	0.13	-0.44***	-0.18†		
21. Other	0.29	0	1	0.45	0.00	0.05	0.09	0.06	0.05	0.21*	0.01	0.05	0.02	0.03	-0.21*	-0.21*	-0.07	-0.11	-0.12	0.10	-0.12	-0.47**	-0.20*	-0.38**	

N = 102; †p < 0.10; * p < 0.05; ** p < 0.01; *** p < 0.001.

Because some variables were significantly correlated, we checked for potential multicollinearity. The variance inflation factors (VIF) were all well below 10 (with the maximum being 4.11), suggesting that multicollinearity was not a concern.

As the first step in our analysis, we ran a regression to test the effects of transaction attributes on (choice of) governance structure; this analysis would serve as the first-stage model of our subsequent three-stage model analysis of hypotheses. The results reveal that, consistent with prior research (e.g., Reuer and Ariño, 2007), governance was likely to be relatively more contractual when technical detail was high ($\beta = 0.42$, $p < 0.001$), asset specificity was high ($\beta = 0.53$, $p < 0.001$), and the relationship was time-bound ($\beta = 0.47$, $p < 0.10$). The 'type of transaction' variables were not significant predictors of governance structure.

Hypothesis 1 predicted that contractual governance would encourage greater reliance on a rights-based approach than would relational governance. As predicted (see Table 2, Model 2), controlling for attributes of the relationship, the transaction, and the dispute, the higher the level of contractual detail, the more likely it was that the parties would use the rights-based approach to resolve the conflict ($\beta = 0.05$, $p < 0.01$).⁷

Hypothesis 2a predicted that the more contractual the governance structure, the lower the reliance on an interest-based approach. Contrary to our prediction (see Table 2, Model 4), we see that contractual governance tends to increase the use of an interest-based approach ($\beta = 0.13$, $p < 0.001$), although as the results of Hypothesis 2c demonstrate, this is especially the case when coordination focus is high.

Hypothesis 2b, which predicted that an increasing emphasis on coordination would result in a greater reliance on interest-based negotiation, was supported ($\beta = 0.76$, $p < 0.001$; Table 2, Model 5). Hypothesis 2c, which also focused on the interest-based approach, predicted an interaction between governance structure and coordination focus. As hypothesized (see Table 2, Model 6), the greater the emphasis on coordination in the relationship—as measured by a higher percentage of the contract terms being focused on coordination rather than control—the more likely it

was that greater contractual detail would lead to an increased use of the interest-based approach ($\beta = 0.20$, $p < 0.01$).⁸ In other words, if contracts are aimed more at coordination than control, they are more likely to foster the use of an interest-based approach if and when a dispute arises. We plot the interaction result to illustrate this moderating effect of coordination focus in Figure 3. For purposes of illustration, we create a dummy variable to distinguish cases with high (1) vs. low (0) coordination focus. To do so, we execute a median-split of the sample so that there are close to equal numbers of 'high' ($N = 47$) and 'low' ($N = 55$) focus-on-coordination relationships; based on the median split, high coordination relationships are those in which coordination provisions account for 20 percent or more of the contractual detail.

Hypothesis 3a predicted that relying on the rights-based approach would lead to higher costs associated with the resolution of the dispute; Hypothesis 3b predicted that interest-based negotiation would reduce costs. Both hypotheses were supported (see Table 3, Model 3): costs increased with a greater reliance on the rights-based approach ($\beta = 0.63$, $p < 0.001$), but decreased with a greater reliance on the interest-based approach ($\beta = -1.15$, $p < 0.001$). It is worth emphasizing that this analysis controls for the type of settlement reached (i.e., private vs. court-ordered).

Hypotheses 4a and 4b predicted that the effect of rights-based and interest-based negotiation on dispute costs would be moderated by the degree of power asymmetry between the two firms (see Table 3, Model 4a). In testing this prediction, we controlled for the level of mutual dependence in the relationship as measured by the 'sum of alternatives' and used two different measures of power asymmetry: one based on firm revenue and the other based on alternatives to dealing with the other party. We found no effects of power asymmetry using our measure of 'alternatives,' so we focus here on the results of our revenue-based measure. Hypothesis 4a, which predicted that the effect of a rights-based approach on higher costs would be mitigated when asymmetry was high, was not supported ($\beta = -0.04$, not significant); Hypothesis 4b, which predicted that the effect of interest-based negotiation on reducing costs would

⁷ For robustness, we conducted additional analyses controlling for interest-based approach (when testing Hypothesis 1), and for rights-based approach (when testing Hypotheses 2a–c). Results were unchanged.

⁸ All interaction terms were mean-centered using Aiken and West's technique (1991: 28–45).

Table 2. The effect of governance structure on dispute resolution approach

	Type of resolution approach					
	Rights-based		Interest-based			
	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
Contractual governance structure		0.05** (0.01)		0.13*** (0.02)	0.10*** (0.01)	0.61*** (0.08)
Coordination focus					0.76*** (0.09)	0.62*** (0.07)
Governance * Coordination focus						0.20** (0.06)
Judicial resolution	0.05 (0.04)	0.03 (0.04)	0.01 (0.05)	-0.01 (0.04)	0.03 (0.03)	0.05 (0.05)
Dispute resolution clause	0.00 (0.04)	-0.08† (0.05)	0.22*** (0.05)	0.03 (0.05)	-0.02 (0.04)	-0.08 (0.06)
International	-0.05 (0.04)	-0.04 (0.04)	0.04 (0.05)	0.06 (0.04)	0.01 (0.03)	0.03 (0.05)
Asymmetry of revenues	-0.00 (0.07)	-0.04 (0.06)	0.09 (0.09)	-0.00 (0.07)	-0.03 (0.05)	-0.13 (0.17)
Sum of revenues	-0.01 (0.08)	0.03 (0.07)	-0.13 (0.10)	-0.01 (0.08)	0.01 (0.06)	0.07 (0.17)
Asymmetry of alternatives	0.04 (0.03)	0.05† (0.02)	-0.05 (0.03)	-0.03 (0.02)	-0.01 (0.02)	-0.07 (0.09)
Sum of alternatives	-0.03 (0.02)	-0.04† (0.02)	0.03 (0.02)	0.02 (0.02)	0.01 (0.01)	0.11 (0.09)
Number of messages	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	-0.00 (0.00)	0.01 (0.05)
Constant	0.50* (0.23)	0.23 (0.22)	0.54† (0.28)	-0.09 (0.23)	-0.09 (0.17)	-0.07 (0.05)
R ²	0.053	0.193	0.209	0.461	0.714	0.734
χ ²		13.63*		86.02***	256.41***	301.76***
<i>Instrumental variables on governance structure</i>						
Prior relationship length		-0.00** (0.00)		-0.00* (0.00)	-0.00** (0.00)	-0.18* (0.07)
Technical detail		0.42*** (0.09)		0.41*** (0.09)	0.41*** (0.09)	0.35*** (0.08)
Time bound		0.47† (0.26)		0.48† (0.26)	0.48† (0.26)	0.14* (0.07)
Asset specificity		0.53*** (0.14)		0.55*** (0.13)	0.56*** (0.13)	0.32*** (0.08)
Distribution		-0.46 (0.30)		-0.47 (0.30)	-0.49 (0.30)	-0.14 (0.08)
Services		-0.37 (0.46)		-0.39 (0.46)	-0.37 (0.45)	-0.06 (0.07)
IT		-0.13 (0.32)		-0.18 (0.32)	-0.18 (0.32)	-0.05 (0.08)
Constant		3.23*** (0.32)		3.23*** (0.31)	3.23*** (0.31)	-0.00 (0.07)
R ²		0.461		0.505	0.461	0.459
χ ²		86.57***		92.50***	86.10***	85.86***

N = 102; †p < 0.10; * p < 0.05; ** p < 0.01; *** p < 0.001. Standards errors are in parentheses.

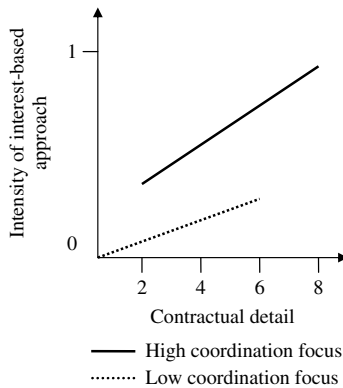


Figure 3. The effect of governance structure on interest-based negotiation

be enhanced when asymmetry was high, was supported ($\beta = -0.12$, $p < 0.01$). In other words, the interest-based approach may be most useful (from a cost-reduction perspective) when the disputants are least likely, as a result of power asymmetry, to naturally engage in cooperative interaction.⁹

Supplementary analysis: mediation model

As a supplementary analysis, we looked at whether the effect of governance structure on dispute costs is mediated by the dispute resolution approach adopted by the two parties. To test this mediation model, we followed the procedure outlined by Baron and Kenny (1986). First (see Table 3, Model 2), we regressed our dependent variable (dispute resolution costs) on our independent variable (governance structure) and found a significant effect of governance on costs ($\beta = -0.18$, $p < 0.001$). Second (see Table 2, Models 2 and 4), we established that governance structure was a significant predictor of our proposed mediators: rights-based ($\beta = 0.05$, $p < 0.01$) approach and interest-based ($\beta = 0.13$, $p < 0.001$) approach. Finally (see Table 3, Model 4), we found that when we simultaneously regress the dependent variable (costs) on the independent (governance) and mediating variables (rights and interests), the mediating variables are still significant predictors ($\beta = 0.25$, $p < 0.01$ and $\beta = -0.65$, $p < 0.001$, respectively), but governance is no longer significant. This suggests that the effect of governance on costs is mediated by

⁹ Notably, firms were not any more likely to use the interest-based approach when asymmetry of revenues was high rather than low.

the dispute resolution approach adopted by the parties.

DISCUSSION

The paper leveraged a unique dataset consisting of over 150,000 pages of documents related to 102 interfirm disputes in order to examine a heretofore unexamined consequence of managing interfirm relationships using contractual governance structures. When disputes arise, heavy (vs. light) contractual structures lead to different approaches to resolve the dispute. In turn, these approaches result in different costs associated with dispute resolution. Furthermore, the results suggest that the effect of governance structures on interest-based negotiation is moderated by the degree of emphasis on coordination in the relationship: contractual governance is more likely to result in interest-based negotiation when the focus on coordination is high and the contract is being used to coordinate the firms' expectations and behaviors. We also find that the effect of interest-based negotiation on costs is moderated by the degree of power asymmetry (as measured by firm revenues) between the parties: the greater the asymmetry, the more useful is interest-based negotiation. We also confirm previous findings regarding the antecedents of contractual detail (Reuer and Ariño, 2007; Ryall and Sampson, 2009).

An unexpected finding regarding the positive effect of contractual detail on interest-based negotiation merits further discussion. One possible explanation is that time spent drafting the contract, even when its primary purpose is to guard against opportunism, allows the parties to better understand each other's interests and to establish working rules and habits for how to amicably resolve points of contention. This suggests that the contracting process may do more than influence the psychological frame that parties adopt; a greater emphasis on contracting may also encourage parties to take the task of resolving conflict more seriously, regardless of the approach they will adopt. Clearly, additional research on this is warranted.

This paper sought to bridge two streams of research from two different disciplines. On the one hand, the study of interfirm governance, based largely in the strategy and transaction cost economics research traditions, has focused on studying

Table 3. The effect of governance structure and dispute resolution approach on costs

	External resolution costs					
	Model 1	Model 2	Model 3	Model 4a	Model 4b	Model 4c
Contractual governance structure		-0.18*** (0.03)	-0.06 (0.04)	-0.19 (0.14)	-0.18 (0.15)	-0.19 (0.14)
Rights-based approach			0.63*** (0.17)	0.25** (0.07)	0.26*** (0.07)	0.25** (0.07)
Interest-based approach			-1.15*** (0.19)	-0.65*** (0.10)	-0.66*** (0.10)	-0.65*** (0.10)
Asymmetry of revenues × rights-based				-0.04 (0.04)		-0.02 (0.04)
Asymmetry of revenues × interest-based				-0.12** (0.04)		-0.12** (0.04)
Asymmetry of alternatives × rights-based					-0.04 (0.04)	-0.03 (0.05)
Asymmetry of alternatives × interest-based					-0.04 (0.04)	-0.02 (0.04)
Judicial resolution	-0.00 (0.10)	0.05 (0.08)	0.01 (0.05)	0.03 (0.04)	0.02 (0.05)	0.03 (0.04)
Dispute resolution clause	-0.39*** (0.09)	-0.10 (0.10)	-0.00 (0.06)	-0.02 (0.06)	-0.00 (0.06)	-0.01 (0.06)
International	-0.05 (0.09)	-0.09 (0.07)	0.00 (0.05)	-0.00 (0.04)	-0.00 (0.04)	-0.00 (0.04)
Asymmetry of revenues	-0.22 (0.16)	-0.08 (0.13)	-0.06 (0.08)	-0.12 (0.15)	-0.11 (0.16)	-0.12 (0.15)
Sum of revenues	0.23 (0.18)	0.05 (0.15)	0.01 (0.09)	0.07 (0.15)	0.02 (0.15)	0.07 (0.15)
Asymmetry of alternatives	0.09 (0.06)	0.07 (0.05)	0.00 (0.03)	-0.00 (0.08)	0.01 (0.08)	0.00 (0.08)
Sum of alternatives	-0.06 (0.05)	-0.05 (0.04)	0.00 (0.02)	0.01 (0.08)	0.01 (0.08)	0.00 (0.08)
Number of messages	-0.00 (0.00)	-0.00 (0.00)	-0.00 (0.00)	-0.00 (0.04)	-0.01 (0.04)	0.00 (0.04)
Constant	1.86*** (0.50)	2.77*** (0.44)	2.50*** (0.27)	-0.00 (0.04)	-0.00 (0.04)	-0.00 (0.04)
R ²	0.193	0.438	0.776	0.794	0.778	0.795
χ ²		56.14***	314.47***	358.65***	321.95***	360.36***
<i>Instrumental variables on governance structure</i>						
Prior relationship length		-0.00** (0.00)	-0.00** (0.00)	-0.19** (0.07)	-0.20** (0.07)	-0.19** (0.07)
Technical detail		0.42*** (0.09)	0.41*** (0.09)	0.35*** (0.08)	0.35*** (0.08)	0.35*** (0.08)
Time bound		0.45† (0.26)	0.49† (0.25)	0.13† (0.07)	0.13† (0.07)	0.13† (0.07)
Asset specificity		0.54*** (0.14)	0.53*** (0.13)	0.32*** (0.08)	0.31*** (0.08)	0.32*** (0.08)
Distribution		-0.47 (0.30)	-0.54† (0.30)	-0.16† (0.08)	-0.16† (0.08)	-0.16† (0.08)
Services		-0.37 (0.46)	-0.38 (0.45)	-0.07 (0.07)	-0.07 (0.07)	-0.07 (0.07)
IT		-0.13 (0.32)	-0.16 (0.32)	-0.05 (0.08)	-0.05 (0.08)	-0.05 (0.08)

Table 3. (Continued)

	External resolution costs					
	Model 1	Model 2	Model 3	Model 4a	Model 4b	Model 4c
Constant		3.25*** (0.32)	3.27*** (0.31)	-0.00 (0.07)	-0.00 (0.07)	-0.00 (0.07)
R ²		0.461	0.461	0.459	0.459	0.459
χ ²		86.91***	86.38***	86.88***	86.75***	86.95***

$N = 102$; † $p < 0.10$; * $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$. Standards errors are in parentheses.

the impact of governance. The effect of governance on micro-level interactions has largely been ignored (Ness and Haugland, 2005). On the other hand, negotiation and dispute resolution scholars, whose work is largely based in the psychological and ‘micro-OB’ research traditions, have paid relatively little attention to the macro contexts that shape negotiation behaviors. In bridging these two streams of research, and these disciplines, we were able to gain some unique insights into the influence of governance structures on the types of negotiations that arise between exchange partners.

Well over a decade ago, Zaheer and Venkatraman (1995) argued that studies of interfirm governance must go beyond focusing on structural elements of strategic relationships and begin to understand processes. This study represents an effort to tackle this challenge by jointly examining interfirm governance structures and interfirm processes in an effort to understand outcomes. We find that analysis of governance structure alone is insufficient to explain dispute outcomes. Our results also suggest that a firm’s preference for a particular governance structure should not simply be based on a consideration of transactional attributes (i.e., the structure of the relationship); it should also consider the ways in which governance structure will (a) shape the psychological frame through which organizational actors will make judgments, and (b) influence subsequent firm and interfirm behaviors (i.e., processes). The results appear to encourage further explorations of how contract design decisions, as elements of strategy, can be used to influence interorganizational relationships and performance.

The paper also provides insights with more immediate practical relevance. Managers seeking to establish vertical relationships need to consider not only how effectively the governance structure helps to avoid potential conflict but also how

effective it is in the event that a conflict does arise. While considerable attention has been paid to which types of governance structures are most useful in promoting trust and cooperation (Gundlach *et al.*, 1995; Jap and Ganesan, 2000), and in avoiding conflict (Brown *et al.*, 2000; Gulati and Nickerson, 2008), little is known regarding which structures are best suited for guiding firms through a dispute that was *not* avoided. Thus, despite the empirical challenge it represents, the research agenda of strategy scholars working on interorganizational relationships can be interestingly extended to further take into account actual cases of conflicts and disputes between firms. This would represent a useful counterbalance to the overwhelming emphasis on cooperation and gains in the study of interorganizational relationships (e.g., Gulati, Lavie, and Singh, 2009). It is also worth considering the intriguing possibility that the types of contracts that are best suited for avoiding conflict may not be the best suited for resolving conflict, a possibility that we could not evaluate, but is worthy of further study.

A number of limitations of the current study—and associated avenues for further research—are also important to consider. First, there is a possibility of selection bias inherent in the way our data was collected (i.e., from a law firm). We did not observe conflicts between exchange partners unless they escalated to the point where lawyers became involved, potentially skewing our sample toward the most serious and challenging disputes. On the other hand, if governance structures can shape dispute frames and behaviors even after conflict has escalated to the point where lawyers are involved (and the principles are presumably less involved), it is quite plausible that effects of governance structure will hold when disputes are less severe. We have also attempted to evaluate the representativeness of our dataset through

a series of analyses that compare key characteristics of our sample—at the contract level, the firm level, and the relationship level—to available benchmarks in datasets that do not involve disputing firms. While we did not find any significant differences on dimensions that we can identify, this does not eliminate the possibility of selective representation.

Second, our study was primarily conducted on firms from continental European countries that have a legal system based on civil law. While there is no obvious reason why the hypotheses and results would differ under different legal institutions, future research in other institutional settings and regions would be valuable to confirm or modify our findings.

Third, our measure of dispute costs captures only the observable costs incurred for firms that were represented by the law firm that supplied the data. Thus, we were forced to ignore internal costs related to the resources mobilized within each firm and to opportunity costs that resulted from a damaged relationship. This creates opportunities for future research that might probe more deeply into the various types of costs that are impacted by governance structures. Alternatively, future research may do well to focus on entirely different outcome measures, such as disputant satisfaction.

This paper represents an initial attempt to explore some of the psychologically based micro-processes that determine how governance structures influence strategic interfirm behaviors and outcomes when contractual governance fails to achieve its primary objective to promote cooperation and stability. The results as well as the limitations may serve as guides to further explorations of these important issues.

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**APPENDIX: RESPONSE CATEGORIES
USED IN CODING RIGHTS- AND
INTEREST-BASED MESSAGES**

The following response categories, derived from Ury *et al.*'s (1988) and Brett *et al.*'s (1990) definitions of rights-based and interest-based approaches, were used to code messages.

Rights-based approach

- (1) References to right vs. wrong
- (2) References to competition
- (3) References to the distribution of torts and responsibilities
- (4) References to legitimate or illegitimate behaviors
- (5) References to the respect for or lack of respect for specific norms
- (6) References to a violation of the contract
- (7) References to valid or invalid actions

Example of a message coded as conveying a rights-based approach: 'You did not respect our contract. Your behavior was not only unfair, but it also represents a clear contractual breach!'

Interest-based approach

- (1) References to consensus
- (2) References to problem solving
- (3) References to common interests
- (4) References to mutual benefits
- (5) References to the reaching of an agreement
- (6) References to a 'win-win' or other mutually beneficial solution

Example of a message coded as conveying an interest-based approach: 'Let's try to find a solution [...] we could renegotiate the agreement to redefine our mutual interests.'