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The influence of relational experience and contractual governance on the negotiation strategy in buyer–supplier disputes

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ABSTRACT

This paper theoretically refines and empirically extends the debate on the type of interplay between relational experience and contractual governance in an under-researched area: supply chain disputes. We define relational experience as either cooperative or competitive; distinguish between control and coordination functions of contractual governance; and assess their interplay on the negotiation strategy used in disputes. Using a unique data set of buyer-supplier disputes, we find, in particular that increasing contractual control governance weakens the positive effect of cooperative relational experience on cooperative negotiation strategy. However, increasing contractual control governance for a buyer-supplier dyad with competitive relational experience will increase cooperative negotiation strategy. Contractual coordination governance reinforces the positive effect of cooperative relational experience. Through this study, we reach a better understanding of *how* and *when* contractual and relational governance dimensions interact; rather than *whether* they act as substitutes or complements as has been studied in prior research. We discuss the implications of these findings for the field of supply chain management.

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1. Introduction

Despite the call of supply chain scholars and practitioners to use cooperative strategies in managing buyer–supplier exchanges, many business relationships end up in a dispute between partners (Dant and Schul, 1992; Jap and Anderson, 2003). Given this potential for opportunism and conflict, buyers and suppliers rely on governance mechanisms to mitigate risks and promote cooperation (Carey et al., 2011; Lumineau and Quélin, 2012; Tangpong et al., 2010).

Supply chain governance has traditionally been viewed from two theoretical perspectives. The first perspective focuses on relational governance as a mechanism in which interorganizational exchange is regulated through a set of norms that circumscribe acceptable behavior between exchange partners (Heide and John, 1992; Lusch and Brown, 1996; Macneil, 1980). The relational governance perspective suggests that as buyers and suppliers transact satisfactorily over time, relational norms of flexibility, participation, and solidarity are established (Griffith and Myers, 2005; Tangpong et al., 2010) maintaining the relationship and curtailing behavior promoting the goals of the parties (Heide and John, 1992; Zhang et al., 2003). The second perspective, in line with transaction cost economics (Williamson, 1985), highlights the importance of

the contract between trading partners and its formal rules of compliance (Lumineau and Malhotra, 2011; Reuer and Ariño, 2007) to safeguard against opportunism and conflict.

Considerable attention has been devoted to examining whether contractual and relational governance mechanisms act as substitutes or complements (e.g. Carey et al., 2011; Li et al., 2010; Liu et al., 2009; Lui and Ngo, 2004) on subsequent operational performance or strategic outcomes (see e.g. Cousins et al., 2006; Lawson et al., 2008; Sanders, 2008). Formal contracts and relational governance have traditionally been viewed as substitutes in terms of their impact on subsequent outcomes. The presence of one governance device would obviate the need for the other (Corts and Singh, 2004; Crocker and Reynolds, 1993; Gulati, 1995). However, a few studies have considered the possible complementary effects between contractual and relational dimensions (Klein Woolthuis et al., 2005; Poppo and Zenger, 2002; Ryall and Sampson, 2009). Clearly, the nature of the interplay between the effects of relational and contractual governance dimensions remains equivocal (Liu et al., 2009; Wuyts and Geyskens, 2005).

While prior research focuses on *whether* relational and contractual governance act as complements or substitutes on subsequent outcomes, we examine *how* and *when*—that is, under which conditions—different governance mechanisms influence buyer–supplier relations when a conflict has actually surfaced. Despite the intention of governance mechanisms to mitigate conflict, disputes will occasionally come about. We thus deal with the individual and joint effects of relational and contractual governance

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dimensions on the development of the negotiation strategy during dispute resolution.

Our work contributes to this stream by extending earlier conceptualizations of both relational governance and contractual governance. Firstly, prior research has largely used the number of previous transactions as a proxy for cooperative relational governance (Dyer and Singh, 1998). However, the use of this proxy assumes that competitive buyer-supplier relationships are essentially "weeded out" over time, and only cooperative relationships remain. In our study, we take into account the quality of the relational experience—competitive vs. cooperative—rather than using the number of prior transactions, and assess its interplay with contractual governance in influencing the negotiation strategy used in disputes. Secondly, recent studies have illustrated that contractual governance is about more than just control (Malhotra and Lumineau, 2011; Reuer and Ariño, 2007). Inter-firm contracts may serve two distinct functions: control and coordination. We use this distinction in testing the influence of relational and contractual governance mechanisms individually and collectively on the negotiation strategy used in disputes.

Our empirical analysis employs a unique dataset of 99 buyer–supplier disputes. The data came from approximately 150,000 pages of legal documents relating to supply chain disputes handled by a single European law firm. The data encompass a variety of contractual and relational characteristics, thereby enabling us to study in detail their influence on the negotiation strategy.

The paper is organized as follows. In the first section, we introduce the theoretical background on relational and contractual governance before proposing our model and 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.

2. Theoretical background

2.1. Disputes in supply chain relations

It has been widely observed in the operations management literature that the buyer–supplier relationship is of paramount importance to the effective management of the supply chain (Chen and Paulraj, 2004; Paulraj et al., 2008; Terpend et al., 2008). Despite this enthusiasm of supply chain scholars and practitioners to develop cooperative relationships in buyer–supplier exchanges, many supply chain relations do not reach this goal (MacDuffie and Helper, 2006; Zhang et al., 2009). Although scholars have devoted attention to relational tensions (Mudambi and Helper, 1998; Villena et al., 2011) and to opportunism between exchange partners (Carter and Stevens, 2007; Handley and Benton, 2012; Tangpong et al., 2010), we still do not know much about the way firms deal with disputes with their exchange partners.

From a supply chain management perspective, explaining the quality of the dispute negotiation strategy is an important outcome variable. Many scholars in supply chain management have called for more researches that examine performance outcomes resulting from relational exchanges (e.g. Nyaga et al., 2010; Morris and Carter, 2005). In this study, following prior literature at the crossroads of disputes and negotiations (Craver, 2003; Deutsch, 2006; Gulliver, 1979; Moffitt and Bordone, 2005), we start from the general assumption that a cooperative negotiation is a better outcome than a competitive negotiation. In a dispute, since negotiating includes common and conflicting goals (Barley, 1991; Bendersky and McGinn, 2011; Malhotra and Bazerman, 2007), both cooperation and competition are necessary to some extent (Bengtsson and Kock, 2000; Li et al., 2011; Luo, 2007). Using a cooperative negotiation strategy, each party defines and coordinates a mutual

agreement so that they both gain (Walton and McKersie, 1965). Such a strategy entails searching for alternative solutions and assessing both parties' outcomes. Using a competitive negotiation strategy, each party looks for individual gain, resulting in a win–lose outcome. Parties then attempt to resolve conflicts through the implicit or explicit use of threats, persuasive arguments, and punishments (Deutsch, 2006; Moffitt and Bordone, 2005).

Our study also extends the current literature relating to contextual analysis of operations management. By analyzing supply chain governance mechanisms in the context of disputes, we respond to the call for more research recognizing that the relationship between OM issues and cooperative outcomes should be contingent on some contextual factors (Giunipero et al., 2008; Liu et al., 2009). With very few exceptions (Malhotra and Lumineau, 2011; Mohr and Spekman, 1994; Tangpong et al., 2010), prior research examines the effects of governance mechanisms in stable exchange relationships—preventing conflict and/or promoting cooperation. Our study thus complements the existing supply chain literature by examining the role of governance mechanisms in the context of a dispute.

2.2. The combination of relational and contractual governance

Supply chain governance, whether relational or contractual, attempts to mitigate conflict and promote cooperation between trading partners (Wathne and Heide, 2004; Williamson, 1996). Research on governance has traditionally centered on governance mechanisms under a formal compliance perspective. A large stream of research, including the transaction cost approach, has shown that formal contracts provide the safeguards and adaptation mechanisms that can protect economic exchange from the consequences of bounded rationality and opportunism (Coase, 1937; Williamson, 1985). Formal contracts may detail roles and responsibilities to be performed, specify procedures for monitoring and penalties for noncompliance, and determine outputs to be delivered (Poppo and Zenger, 2002; Reuer and Ariño, 2007).

Advancements in governance theory recognize the role of informal governance in the form of relational norms (Macneil, 1980; Noordewier et al., 1990). This relational governance perspective points out the potential importance of relational norms in supply chain relations since they can provide benefits similar to those of contractual governance in terms of controlling opportunism and facilitating adaptation (Heide and John, 1992; Lusch and Brown, 1996). These relational mechanisms refer to the values shared among partners concerning appropriate behavior that maintains or improves their relationship (Macneil, 1980; Noordewier et al., 1990). Relational norms specify the permissible limits on behavior, and hence serve as a general protective device against deviant behavior (Heide and John, 1992). Relational norms traditionally involve flexibility, participation, and solidarity. Flexibility refers to the shared expectations that parties adjust to accommodate changes in the environment or in the parties' needs (Boyle et al., 1991; Noordewier et al., 1990). Participation refers to the willingness of parties to make investments in the relationship and share information, whether or not these behaviors are contractually mandated (Heide and John, 1992; Lusch and Brown, 1996). Finally, solidarity refers to the expectation that parties will generally act in ways that increase mutual benefit, engage in bilateral problem solving, and commit to joint, coordinated action toward shared objectives (Heide and John, 1992; Macneil,

As firms often simultaneously use both governance mechanisms to take advantage of their differential impacts (Bradach, 1997), a debate has ensued as to what mix would optimize exchange outcomes. Scholars remain divided about the nature of the relationship between contractual and relational governance mechanisms.

On the one hand, contractual and relational governance mechanisms have been viewed as substitutes (e.g. Corts and Singh, 2004; Crocker and Reynolds, 1993; Kalnins and Mayer, 2004). First, the existence of relational elements involves the expectation of reduced opportunism, mitigating the need for detailed contracting (Gulati, 1995). Relational governance operates as a self-enforcing safeguard that is a more effective and less costly alternative to contractual mechanisms (Hill, 1990). From this viewpoint, informal self-enforcing agreements often supplant the formal controls characteristic of contracts (Dyer and Singh, 1998). Second, detailed contracting may hinder the development of relational norms or even destroy the existing relational norms between parties (Ghoshal and Moran, 1996; Malhotra and Murnighan, 2002).

On the other hand, some other scholars have found a complementary relationship between relational and contractual governance (e.g. Li et al., 2010; Poppo and Zenger, 2002; Ryall and Sampson, 2009). First, relational governance is seen as a necessary complement to the adaptive limits of contracts by fostering continuance and bilateralism when change and conflict arise (Lee and Cavusgil, 2006; Macneil, 1978). The build-up of relational norms can serve to strengthen some aspects of the exchange, especially in areas in which the contract is mute or uncertain (Cavusgil et al., 2004; Hadfield, 1990). It may even help to overcome the disadvantages of inflexibility inherent in contractual-based governance. Second, well-specified contractual clauses narrow the domain and severity of risk to which an exchange is exposed and may thereby encourage cooperation (Lorenz, 1999). Thus, contractual mechanisms may legitimize and crystallize emergent relational mechanisms and reinforce relational norms by providing back-ups and confidence in the stability of the relationship (Gulati and Singh, 1998).

We add to the debate by focusing on two major limitations from previous research and we highlight two unexplored areas of study: the influence of different types of buyer–supplier experiences (Section 2.3) and the impact of specific contractual provisions rather than gross measures of contractual complexity (Section 2.4).

2.3. Quality vs. quantity of relational experience

Empirical research on buyer–supplier relationships has assumed that the number of prior interactions creates familiarity, which in turn enables firms to develop "cooperative norms" (Heide and John, 1992), "relational behaviors" (Lusch and Brown, 1996), "relational norms" (Tangpong et al., 2010; Zhang et al., 2003), "relational norm governance" (Griffith and Myers, 2005), a "history of close collaboration" (Wuyts and Geyskens, 2005), "relational mechanisms" (Liu et al., 2009), or—the term used in this paper—"relational experience" (e.g. Goebel et al., 2003; Ryall and Sampson, 2009).

However, contrary to what is commonly perceived in the literature (e.g. Cousins and Menguc, 2006; Dyer and Chu, 2003; Ring and Van de Ven, 1994), the number of prior transactions may not necessarily lead to positive or cooperative relational experience and thus higher performance. First, repeated interactions between the same partners may increase the risk of opportunistic behavior and asymmetric appropriation of gains, as each partner becomes familiar with the other firm's proprietary assets (Balakrishnan and Koza, 1993; Villena et al., 2011). Second, because of investments in specific assets and very high switching costs (Williamson, 1985) or because the partner has a monopolistic position, it is not reasonably possible to replace an uncooperative exchange partner. Third, supposed benefits from the buyer-supplier interaction experience may be mitigated by unproductive learning and organizational inertia limiting any further performance gains from the relationship (Goerzen, 2007; Lavie and Rosenkopf, 2006). Thus, non-cooperative

or untrustworthy partners may not necessarily be "weeded out" during repeated rounds of contract renewal.

In contrast with those studies that have focused on the mere existence of a buyer–supplier relationship as an indicator of a cooperative relational experience, we study the parties' attitudes toward the relationship. We thus distinguish between cooperative and competitive relational experience rather than focusing only on the existence or the number of prior transactions as a proxy for cooperative relational governance (Goffin et al., 2006).

2.4. Control and coordination functions of contractual governance

The formal contract, or the official agreement creating and defining the obligations between the parties, is written in such a way that one will perform in accordance with the other's expectations (Salbu, 1997). Formal contracts typically include clauses to clarify and frame the different dimensions of a transaction (Crocker and Reynolds, 1993).

Contracts can cover two aspects of a buyer–supplier relationship: control and coordination (Lumineau and Quélin, 2012; Macneil, 1974; Reuer and Ariño, 2007). These two elements of contracts come from fundamentally different origins. Control is rooted in differences in both motivation and interest, whereas coordination arises from the cognitive limitations of individuals (Mesquita and Brush, 2008).

Organizational scholars have long considered contracts as instruments of control (Macneil, 1978; Williamson, 1985, 1991). Inter-firm collaborations, for example, have the potential to create significant value, but parties considering such relationships must consider and contend with the risk of exploitation by an opportunistic partner (Das and Teng, 1996; Williamson, 1985). The legal underpinnings of contracts give firms the option of sanctioning an exchange partner who is unable or unwilling to abide by mutually agreed terms (Joskow, 1987). This possibility (or threat) of third-party intervention and enforcement is the primary means by which contracts serve to exert control over the behavior of parties in an exchange.

The coordination function of contracts has received relatively less research attention (Lumineau and Malhotra, 2011; Mayer and Argyres, 2004). Especially in complex relationships, a contract—and the contracting process itself—helps parties make explicit of their assumptions and expectations regarding the transaction and each side's role (Beatty and Samuelson, 2001). Provisions in a contract that relate more directly to coordination (rather than control) are aimed at mitigating the risk of misunderstanding, structuring the means of efficient collaboration, and clarifying each party's roles and responsibilities (Salbu, 1997).

This more nuanced approach to studying contractual governance (Puranam and Vanneste, 2009) allows us to address more effectively how and when contractual and relational governance interact. For example, Malhotra and Murnighan (2002) suggest that contracts diminish trust, but their operationalization of these constructs reveals that they are studying only the control function of contracts. Furthermore, Mayer and Argyres (2004) argue that contracts and relational dimensions are complementary, but their analysis focuses more on the coordination function of contracts. In this paper, we thus evaluate the interaction between relational experience and contractual governance at the level of the individual provisions the contracts contain: those focusing primarily on control and those aimed primarily at facilitating coordination.

In summary, our paper explains how the relational experience (i.e. competitive or cooperative) combined with the different functions of contractual governance (i.e. control and coordination) influence the negotiation strategy in buyer–supplier disputes.

3. Hypothesis development: the influence of governance on the negotiation strategy

3.1. The influence of relational experience on the negotiation strategy

Relational experience plays an important role in organizing buyer–supplier transactions (Dyer and Singh, 1998; Gulati, 1995). When the parties have engaged in prior exchanges, they build up norms that specify permissible behavioral limits (Ouchi, 1979). By working together, partners experience their respective behaviors (Das and Teng, 1998). Such exchanges provide them with unique first-hand information about each other's reliability (Gulati and Gargiulo, 1999). Through the development of mutual knowledge-sharing routines (Dyer and Singh, 1998), each firm has an opportunity to evaluate its partner's intentions and motives. This relational background forms a basis for predictions about future behavior and facilitates inferences about trustworthiness (Anderson and Weitz, 1989; Ring and Van de Ven, 1992).

The development of flexibility, participation, and solidarity norms between the trading parties (Bradach and Eccles, 1989; Macneil, 1980) serves as a protective device against deviant behavior. When such norms are entrenched in a relationship, more cooperative interaction between the buyers and suppliers is likely to result (Dwyer et al., 1987; Su et al., 2008). Therefore, cooperative relational experience will more likely steer supply chain partners to seek a "win-win" solution in resolving disputes. Conversely, when this relational experience is competitive, dispute resolution is more likely to be oriented toward a search for individual gains. These arguments suggest the following baseline hypotheses (all our hypotheses are formulated under equal conditions and assume that all other dimensions are constant, as stated):

Hypothesis 1. Cooperative relational experience between the parties (as opposed to either no or competitive relational experience) will positively influence the use of a cooperative negotiation strategy.

3.2. The influence of contractual control governance on the negotiation strategy

In line with the transaction cost economics (Williamson, 1985), scholars have pointed out the controlling dimension of contracts and its safeguarding role to penalize noncompliance (e.g. Joskow, 1987). Contractual control governance deals with the problem of creating and monitoring rules with the aim of ensuring that an exchange partner performs in accordance with one's desires or expectations (Salbu, 1997). The presence of specific clauses of monitoring and inspection of supply chain partner's activities is an example of contractual control governance. For firms involved in a dispute, such control provisions not only allow, but can also encourage, the parties to consider their rights and potential liabilities. When contracts contain explicit provisions regarding the (potentially significant) sanctions that can be imposed on the offending party, this creates strong incentives for each side to defend its behavior and question the appropriateness of the other's actions. Contractual control clauses make it easier to detect divergences from the agreed terms of the transaction (Lyons and Mehta, 1997). Thus, by determining contractual control clauses in advance, parties are spared from devoting time and resources to searching for solutions that integrate the interests of both parties, decreasing the probability of a cooperative negotiation strategy. Furthermore, with more contractual control clauses, the affected party is more likely to focus on the cause of the contract breach and the required monetary compensation, elements of a win-lose or competitive negotiation strategy (Fisher et al., 1981).

Finally, given that contractual control governance covers sanctions and penalties, parties are more likely to use threats, persuasive arguments, and/or punishments, all of which support the use of a competitive negotiation strategy. Therefore, we posit:

Hypothesis 2. A higher number of control clauses in the contract will negatively influence the use of a cooperative negotiation strategy.

3.3. The influence of contractual coordination governance on the negotiation strategy

The contract may also be used to specify what goals the parties seek and how they want to coordinate achieving them (Salbu, 1997). More precisely, the coordinating function of a contract refers to the organization of priorities and programs for the future, the noting of the transacting parties' desires and expectations, and the adjustment of individual behaviors to accommodate the schedules and functions selected for a mutual endeavor (Lumineau and Malhotra, 2011). The existence of a specific clause explaining the interfaces to jointly manage the collaboration between supply chain partners illustrates contractual coordination governance. This dimension of contracts therefore involves provisions that are sometimes informational in nature (Reuer and Ariño, 2007).

Contractual coordination governance encourages communication and information sharing between the buyer and the supplier, and thus facilitates the convergence of expectations (Malmgren, 1961). The contract may state how various future situations will be handled (Lusch and Brown, 1996), thereby decreasing uncertainty about behaviors by providing formal procedures for maintaining the relationship. For example, making a provision in a contract for a process to redefine the objectives or reassign tasks between firms during their relationship facilitates the search for alternative solutions that fit in with the other party's plans, thereby enhancing a cooperative negotiation strategy. In sum, contractual coordination governance focuses "more on the positive (what we want to achieve and how) than on the negative (which legally enforceable measure do we put in place to safeguard property or knowledge)," (Klein Woolthuis et al., 2005, 835) which is a fundamental element of a cooperative negotiation strategy. Therefore, we hypothesize:

Hypothesis 3. A higher number of coordination clauses in the contract between the parties will positively influence the use of a cooperative negotiation strategy.

3.4. The interplay between relational experience and contractual control governance

The nature of a contract is likely to influence the existing relational norms between the trading parties, and thus the ensuing negotiation strategies. The use of formal control is likely to have a pernicious effect on established relational norms (Ghoshal and Moran, 1996; Poppo and Zenger, 2002). When relational experience between the parties has been cooperative, the use of contractual control clauses may result in the feeling that neither party can be trusted (Malhotra and Murnighan, 2002; Strickland, 1958). The explicit contractual controls may substitute the intrinsic motivation embodied in a committed relationship (Kreps, 1997; Lazzarini et al., 2008; Taylor, 1987). Such safeguards are seen as detrimental to the exchange relationship (Dyer and Singh, 1998; Ring and Van de Ven, 1992). Monitoring the partner and defining penalties in case of default may sow the seeds of mutual suspicion (Malhotra and Murnighan, 2002). Indeed, detailed contractual controls may even destroy relational norms, for example, by promoting a stigmatization process (Sitkin, 1995). Formal contractual control

governance may signal and nurture distrust by restraining cooperative interactions between the partners (Klein Woolthuis et al., 2005). Controlling aspects in the contract thus dampen the influence of relational experience on cooperative negotiations (Faems et al., 2008). Therefore, we hypothesize:

Hypothesis 4. A higher number of contractual control clauses will weaken the positive influence of cooperative relational experience on the use of a cooperative negotiation strategy.

3.5. The interplay between relational experience and contractual coordination governance

At the same time, contractual coordination clauses, such as those defining the objectives of the partnership, indicating conditions for renewing the transaction, and promoting communication and information sharing, may sustain the effect of cooperative relational experience on a more cooperative negotiation strategy. Since contractual coordination clauses allow for greater communication and an information sharing process in case of contingencies (Gulati and Singh, 1998; Mesquita and Brush, 2008), they narrow the uncertainty to which an exchange is exposed, thus further encouraging relational ties (Kwon and Suh, 2004; Poppo and Zenger, 2002). Information sharing has been shown to be critical when developing an understanding between the supply chain partners (Nyaga et al., 2010; Paulraj et al., 2008), especially in the context of a dispute resolution (Mohr and Spekman, 1994). By providing frameworks for bilateral adjustments and communication flows, this type of coordinating provision may help partners to leverage flexible behaviors and promote efficient collaboration (Min et al., 2005). As mechanisms to align expectations (Macneil, 1974), contractual coordination devices enhance the search for integrative solutions and cooperation (Mayer and Argyres, 2004). Furthermore, informal coordination through information sharing and joint decisionmaking-based on cooperative relational experience-may be more effective when used in conjunction with formal coordinating mechanisms such as plans, schedules, and defined interfaces. Indeed, contractual coordination clauses may also serve to make up for the deficiencies of informal relational norms (North, 1990). In addition, the parties may refer to the contractual coordination clauses (such as conflict resolution or changing roles and responsibilities) as negotiations during a dispute unfold, supporting the use of a cooperative negotiation strategy (Faems et al., 2008; Klein Woolthuis et al., 2005). Therefore, we suggest:

Hypothesis 5. A higher number of contractual coordination clauses will strengthen the positive influence of cooperative relational experience on the use of a cooperative negotiation strategy.

4. Research setting and data collection

Our empirical study used a sample of disputes arising in buyer–supplier relationships across a number of industries.² One of the authors was granted access to all legal files concerning disputes handled by a law firm between 1991 and 2005. Data collection took place over four months in 2005. Such a period of immersion enabled us to gain insights into the French legal system and the way of doing business in the law firm through daily informal conversations with

lawyers and administrative staff.³ In addition, 17 interviews were conducted with both lawyers and law professors who specialized in contract law. Due to the highly confidential nature of the data, it was not possible to speak directly with the firms involved in the disputes.

Each of the 128 disputes was examined in detail. We restricted our sample to two-party disputes involving supply chain relationships, leaving us with 99 disputes. To check for potential bias, differences between included and excluded disputes and firms were examined. We assessed the homogeneity of variances between these different samples with the Levene's test and then conducted t-tests. These findings suggested that disputes and firms excluded from the sample did not significantly differ from those included along the dimensions examined (i.e., contractual control governance, contractual coordination governance, firm's size, and national vs. international relationship). Of the 99 disputes remaining, 96 involved only European firms and 3 also involved non-European firms. The disputes concerned a variety of different types of contracts: distribution (36.4%), production supply (28.3%), IT (26.2%); and consulting and other services (9.1%). Approximately 46% of the cases involved cross-border relationships.

Our unit of analysis is the dispute (N=99). Each of the 99 dispute files contained between 800 and 5000 pages of documents, including all mandatory legal documents issued by the parties in the contract, all legal notes containing relevant information pertaining to the dispute, and all messages (e.g. letters and e-mails) exchanged during the dispute. The mandatory legal documents and legal notes provided the basis for developing the explanatory variables, contractual governance and relational experience, and some of the control variables.⁴ Additional variables were developed based on third-party sources of financial information such as the Bureau Van Dijk ORBIS database. Thus, all of the variables were based on secondary data gathered ex post but reflecting real-time information, limiting any social desirability bias, ex post rationalization, and/or retrospective errors (Miller et al., 1997). Moreover, this type of analysis allowed us to study buyer-supplier disputes by systematically analyzing relevant communication contents at a distance and in an unobtrusive manner (Krippendorff, 2004a).

5. Model, variable definitions, and methods

5.1. Coding methodology

For the different variables constructed from the dispute files, we followed Weber's (1990) protocol with a team of two researchers coding the content of the documents. First, the research team developed a list of relevant concepts and preliminary response categories to use for information coding. Second, each researcher

² The sample of firms came from manufacturing (51%), with industrial and commercial machinery most frequently represented (14%), followed by chemicals (12%), electrical (8%) and others not representing more than 5% each. Retail firms (15%) were also well represented, as were those providing a service (32%), a category that includes consulting. Finally, construction accounted for 2% of the firms.

³ Many of the firms in our sample are from outside of France but the contracts are subject to French contract law; litigation, when it occurs, takes place in French courts. While there are some subtle differences between the operation of a civil law system such as that found in France and the common law system found, for example, in the US, (see e.g. Yelpaala et al., 1986) we have little reason to believe that the legal setting interferes with inferences drawn from our analysis.

⁴ In spite of our focus on dispute cases, both our discussion with juridical experts and our comparison with other detailed inter-firm contractual agreements in the literature indicate that the selected inter-firm relationships do not significantly differ a priori from partnerships without contentious issues. For instance, in terms of contractual complexity, our sample is situated between Reuer and Ariño's sample of 88 alliances involving Spanish firms (with companies coming from a variety of industries and varying in size: see Reuer and Ariño, 2007, 318) and Reuer et al. (2006) sample of 66 alliances in the German telecommunications industry (contractual complexity with the unweighted Parkhe's (1993, 829) index = 4.37 compared with 3.69 and 5.05). This point is further discussed in the conclusion.

working independently read and coded the content in the documents. The next step involved an item selection and classification process (Jauch et al., 1980). Although we used computer-based analysis of the data with ConcordanceTM software, it did not replace the human judgments and interpretations on which the semantic validity largely depends (Krippendorff, 2004a). In order to assess the coding we calculated the level of agreement between the raters. For each variable, the results of the two coders had an agreement rate superior to 85%. We further checked our coding with Cohen's kappa and Krippendorff's alpha which are more rigorous indicators of inter-coder reliability because they are chance-corrected agreement coefficients (Krippendorff, 2004b). For each variable in our study, the Cohen's kappa and the Krippendorff's alpha were significantly superior to .7, which is the typical threshold indicating an adequate level of inter-rater reliability (Neuendorf, 2002). Any residual disagreements on ratings were resolved by discussion.

5.2. Dependent variable: negotiation strategy

We evaluated the negotiation strategy at the dispute level. As noted by Tangpong (2011, 633), "although it makes the coding process more labor-intensive, using the collective document [...] rather than words, phrases, and sentences as the recording units has the advantage of capturing a more accurate meaning of the text because the coders can see the context in which words, phrases, and sentences reside." Thus, instead of coding separately each of the 2251 messages exchanged between the firms, we evaluated the overall negotiation strategy for each dispute. This logic of coding (1) considers the fact that sometimes, one major message (e.g. extremely uncooperative) can counterbalance many weak messages (e.g. small signals of cooperation); and (2) is in line with recent research pointing out the importance in the analysis process of understanding the whole event and its particular context (McNulty and Russell, 2010; Smith et al., 2009).

We evaluated each dispute on a Likert scale between -5 (very uncooperative) and 5 (very cooperative). "Cooperative" is defined as helpful by doing what the firm is asked to do and being willing to fit in with the other party's plans; "competitive" is defined as not willing to be helpful to the other party or do what it asks (see Appendix A for examples of statements during a dispute). The answer categories were discussed verbally and numerically in order to ensure equidistance (Mueller, 1986); with -5: extremely uncooperative, -4: very uncooperative, -3: uncooperative, -2: quite uncooperative, -1: slightly uncooperative, 0: neither cooperative nor competitive, 1: slightly cooperative, 2: quite cooperative, 3: cooperative, 4: very cooperative, and 5: extremely cooperative. As a result, the dependent variable, Negotiation strategy, is continuous. For this variable, the results of the two coders had a Cohen's kappa inter-coder reliability of .76 (p < .001) and a Krippendorff's alpha inter-coder reliability of .76. These results indicated a sufficient level of coding reliability.

5.3. Explanatory variables

The explanatory variables include measures of relational experience and contractual governance. As noted, we want to explore how these governance mechanisms impact the negotiation strategy in the context of a buyer–supplier dispute.

5.3.1. Relational experience

Information on the relational experience prior to the dispute is drawn from copies of communications between the exchange partners as well as from lawyers' notes in the dispute files. To distinguish between cooperative and competitive relational experience, we first developed a preliminary list of relevant response categories for use in coding. Extant research on attitudes toward, and satisfaction in, trading relationships suggests three highly interrelated dimensions of the higher order construct of cooperative relational norms: flexibility, participation, and solidarity (Heide and John, 1992; Macneil, 1980). We thus coded as cooperative relational experience, messages that contained references to any of these perceptions. It follows that messages referencing elements of inflexibility, non-participation, and lack of solidarity were coded as competitive relational experience (see Appendix A for further details).

Relational experience was then constructed as a categorical variable and coded at the level of the dispute as follows: *Cooperative relational experience* = 1 if the dispute file contains explicit references to flexibility, participation, and/or solidarity in prior interactions between the partners; 0 otherwise. *Competitive relational experience* = 1 if the dispute file contains explicit references to inflexibility, non-participation, and/or individualism in prior business interactions between the partners; 0 otherwise. Files coded as zero on both measures were cases with no reference to any transactions between the firms prior to the start of the contract under dispute.

5.3.2. Contractual control governance and contractual coordination governance

As for all the cases in our sample there is one contract for each dispute and each dispute involves one contract, the dimensions of contractual governance were evaluated at the dispute level. With the help of three lawyers (with no connection to the disputes or to the law firm providing the data) and one law professor, we listed the relevant items to grasp in differentiating between the control and coordination functions within buyer–supplier contracts. We conducted 11 in-depth, face-to-face interviews with them to develop two composite indexes. Control and coordination in contracts were indexed thanks to a checklist of key clauses (Lui and Ngo, 2004; Parkhe, 1993).

We operationalized the variable *Contractual Control Governance* by relying on the following provisions: (a) right to audit/inspection, (b) safeguard system, (c) control by a third party, (d) penalty clause, and (e) resolution clause (see Appendix A). The measure was, therefore, defined as $\sum D_i$; $D_i = 1$ if clause i exists; $D_i = 0$ otherwise. The summation is an integer variable ranging from 0 to 5. The measure was left unweighted since previous researchers found that the relative importance of each clause was either unclear or did not provide any additional information to their estimations (see e.g. Lui and Ngo, 2004; Reuer and Ariño, 2007).

Contractual Coordination Governance was operationalized with the following five clauses: (a) assignment of roles and responsibilities, (b) indications of duration and conditions of renewal, (c) organizational coordination (ability to reassign tasks among participants without altering the goal of the contractual arrangement), (d) strategic coordination (process that is set up to redefine the objective of the relationship), and (e) dispute resolution

⁵ In order to reduce possible random variance to the score distribution (Mueller, 1986), we also ran all of our analyses with a more common 7-point Likert scale (between −3: very uncooperative to 3: very cooperative). All of the results of our hypotheses tests were consistent across these two measures (results available on request), which provided confidence in the robustness of the findings.

⁶ These notes are compiled during the normal course of events at the first meetings between the lawyer and the client during the focal dispute. During these meetings, lawyers routinely interview the client regarding the nature of the current exchange (and any previous exchanges) between the firms; the behavior of the other party in this and prior contracts, the origins of the current dispute, etc.

(arbitration/mediation clause). The variable was then constructed in the same manner as *Contractual Control Governance*.

In order to test inter-rater reliability of these two variables, we contacted six other contract law experts to evaluate the same five randomly selected contracts in our data set. Each expert was asked to make 50 assessments (5 contracts \times 2 functions \times 5 criteria). A structured questionnaire guided the interviews, which lasted from 1.5 h to 3 h. We checked inter-coder reliability both among the experts as well as between the experts and our own classification. As noted above, we found an adequate level of reliability both with the percentage of agreement between the coders (Kolbe and Burnett, 1991) and with Cohen's kappa and Krippendorff's alpha tests (Krippendorff, 2004b).

Furthermore, we conducted a follow-up analysis to further evaluate the robustness of our coding scheme. We re-analyzed all coordination and control clauses in our sample, by adding an interpretive coding step that takes into account the inherent complexity of contractual provisions. In this step, a rater eliminated all clauses that seemed ambiguous-i.e. those that did not clearly suggest a coordination vs. control function as would be implied by our initial coding scheme. This coding required the rater not only to read the text of each clause as written, but also to consider the context in which the clause was introduced and embedded. To test the reliability of this alternative measure, a second rater evaluated 10 randomly selected clauses for each of the 10 types of provisions. Out of the 100 clauses checked by both raters, the level of agreement was 89%. This more conservative measure of coordination vs. control provisions led us to delete 7.25% of the coordination provisions and 11.14% of the control provisions. 8 Re-running the analyses with the revised measure gave us results (not reported here but available on request) that were almost identical to those of our initial coding.

5.4. Control variables

A set of control variables evaluated at the dispute level were included in the model: (5.4.1) the type of dispute, (5.4.2) the source of the dispute, (5.4.3) the length of the dispute, (5.4.4) whether the relationship was national or international, (5.4.5) the contract value, (5.4.6) the agreement type, and (5.4.7) the asymmetry in firms' size.

5.4.1. Dispute type

To develop the categorical variables, *Dispute type* and *Dispute source*, we examined the type of complaint voiced by the firms in the messages (see Appendix A). *Dispute type* was classified as either a strong form (0) or a weak form (1) (Luo, 2006). A strong form dispute describes actions violating contractual obligations that are explicitly codified in the contract. A weak form dispute encompasses relational norm violations not spelled out in the contract but embedded in the common understanding between the two trading partners.

5.4.2. Dispute source

Dispute source was classified as either ex post (1) or ex ante (0) (Williamson, 1985). Ex ante disputes refer to the alleged strategic manipulation of information and misrepresentation of intentions before the firms start to transact, while ex post disputes consist of conflicts that are perceived as emerging after the firms start to transact.

5.4.3. Length of the dispute

Variance in the length of the dispute may reflect differences in the type, nature or complexity of the dispute, all of which may impact the negotiation strategy adopted. We thus controlled for the total *length of the dispute* with the logarithm of the number of days.

5.4.4. International relationship

In addition to the type and length of dispute, we controlled for the nature of the transaction. As there tends to be less information about foreign firms than domestic firms, we included a control to indicate whether or not the transaction was a cross-border relationship (Morris et al., 1998). We developed a dummy variable with a value of 0 for relationships between firms from the same country and 1 for international relationships.

5.4.5. Contract value

While we did not have a direct measure of the monetary value under dispute, we did have information on the total value of the contract. We therefore included *Contract value* defined as the total value in thousands of inflation-adjusted Euros.

5.4.6. Agreement type

As the exchange relationships having led to a dispute represented different types of contracts, we controlled for the *Agreement type* with a set of variables for (a) *Distribution* contracts, (b) *Production supply* contracts, (c) *IT* contracts, and (d) contracts for consulting or other services.

5.4.7. Size asymmetry

We also controlled for bargaining power (Crook and Combs, 2007) by measuring the asymmetry between buyer and supplier. *Size asymmetry* was calculated by dividing the revenues of the larger firm by the revenues of the smaller one (in thousands of inflationadjusted Euros) for the year in which the contract was signed.

6. Empirical results

6.1. Descriptive statistics

Table 1 shows summary statistics for the variables that are used in the estimations. A number of observations can be made. First, while the dependent variable, Negotiation strategy, ranges between -5 (very uncooperative) and 5 (very cooperative), it appears that 61% of the disputes were negotiated mostly in an uncooperative way (Negotiation strategy ≤ 0) and 39% of the disputes were negotiated mostly in a cooperative way (Negotiation strategy >0). Second, 51% of the disputes were norm violations (weak form) rather than contract violations (strong form). For 56% of the observations, the source of the dispute came after transacting (ex post), rather than before (ex ante). Third, 46% of the contracts were international in nature as opposed to national. The contract values ranged from as low as approximately €8000 to as high as €62 billion. The variable Asymmetry ranges from a low of 1.0 (equal sized partners) to a high of 2778 suggesting substantial bargaining power differences. Out of the sample, 70% had no relational experience, 17% had cooperative relational experience and 13% had competitive relational experience. On average, the contracts contained 2.82 control clauses and

⁷ Our interviews were organized around the following questions:

⁻For this contract, please evaluate the presence or absence of the 10 following clauses [this question was then repeated for four other contracts].

⁻How do you characterize each of these five contracts? (independently and comparatively).

⁻As for the controlling aspects, how do you characterize each of these five contracts? (independently and comparatively)

 ⁻As for the coordinating aspects, how do you characterize each of these five contracts? (independently and comparatively).

⁸ Example of a provision that was no longer coded as a coordination provision: "Reporting results have to be sent to the Engineering Team before the 5th of each month."

nable 1
Descriptive statistics and Spearman's rank correlation coefficients.

Variables	Mean	S.D.	Min	Max	1	2	3	4	5	9	7	8		10	11	12	13
1. Negotiation strategy	.01	1.61	-5	5													
2. Cooperative relational experience	.17	.37	0	1	*67:												
3. Competitive relational experience	.13	.33	0	1	28	17											
4. Contractual control governance	2.82	1.49	0	5	17	90.–	00										
5. Contractual coordination governance	2.57	1.40	0	5	.39°	01	12	14									
6. Type of dispute	.50	.50	0		.18	03	.02	.42	.32*								
7. Source of the dispute	.56	.49	0	1	.10	.07	.03	18	.05	05							
8. Length of the dispute	6.16	.62	5.02	7.99	13	90.	.21	11	02	03	13						
9. International relationship	.45	.50	0	1	.02	20	00.	13	.03	60.	90'						
10. Contract value	2.52e + 09	1.00e + 10	8065	6.23e + 10	60.	16	03	90'-	90'-	12			.20				
11. Agreement type-Distribution	.36	.48	0	1	16	01	.07	.03	10	13		.17	01	04			
12. Agreement type-Production supply	60.	.28	0	1	.04	.04	01	90'-	09	10				00	23*		
13. Agreement type-IT	.26	44.	0	1	.16	15	02	00.	.13	80:				.16	45	18	
14. Size asymmetry	86.92	349.29	1	2778	00.	.03	04	08	.19	04				90	.07	90.	11
N - 00																	

2.57 coordination clauses but on each dimension they ranged from 0 clauses to 5.

In addition, Table 1 reports the Spearman's rank correlation coefficients among the variables used in our analysis. We checked for potential multicollinearity because some variables were correlated. The variance inflation factors (VIF) statistics were all below 10, indicating that multicollinearity was not a concern (Chatterjee and Price, 1991).

Finally, we verified the general assumption that a cooperative negotiation strategy is indeed preferable. From our sample, a cooperative negotiation strategy was associated with relatively more private resolution than court settlement (Spearman's rank correlation coefficient .521, p < .001). This result is consistent with the wealth of empirical evidence showing a link between the kinds of tactics negotiators use and the quality of deals they reach. In particular, parties taking a cooperative orientation are more likely to look for creative ways of meeting both sides' interests (e.g. De Dreu et al., 2000; Pruitt and Lewis, 1975).

6.2. Regression analysis

Regression analyses are used to test the impact of governance mechanisms on the negotiation strategy. As some firms in our sample are involved in multiple disputes (i.e., are repeat clients in the lawyer firm where we collected the data), correlated residuals across observations are possible; we therefore report results with robust standard errors clustered on firms (76 clusters). Table 2 reports the results of the regression analysis.

We first examine the outcomes of the regression analysis on the dependent variable Negotiation strategy. Model 1 in Table 2 includes only the control variables. Model 1 indicates that the nature of the dispute (i.e., type, source, and length), the nature of the transaction (i.e., national or international, contract value, and agreement type), and the asymmetry in firms' size do not seem to significantly influence the Negotiation strategy. Such findings can be put in perspective with prior research. In particular, while prior literature has suggested that disputes involving violations of relational norms (e.g. Luo, 2006) or relatively high stakes (e.g. Dant and Schul, 1992) may be more difficult to resolve, we found that such types of disputes do not seem to directly influence the nature of the negotiation strategy. In addition, while it has been previously suggested that negotiations between culturally and geographically distant partners may be more challenging (e.g. Lee et al., 2006; Rao and Schmidt, 1998), we did not find a significant effect of international transactions on the type of negotiation strategy in buyer-supplier disputes. At last, while the issue of power has received a significant amount of attention in the supply chain literature (e.g. Benton and Maloni, 2005; Crook and Combs, 2007; Handley and Benton, 2012), our results do not indicate a significant effect of the size asymmetry between the parties (Gaski, 1984) on the type of negotiation strategy.

Consistent with our prediction in Hypothesis 1, it appears that relational experience, as measured by the variable *Cooperative relational experience*, positively influences *Negotiation strategy* (compared to the reference point of no relational experience, cooperative relational experience: 1.24, p < .05 in Model 4). Despite having interacted previously, those parties with competitive relational experience appear to proceed with more competitive negotiation strategies than those with no relational experience (compared to the reference point of no relational experience, competitive relational experience: -.74, p < .05 in Model 4).

Hypotheses 2 and 3 look at the direct effect of contractual control governance and contractual coordination governance on the negotiation strategy. Consistent with our hypotheses, we found in Model 4 that contractual control governance significantly contributes to less cooperative negotiation strategy (-.36, p < .05). We

Table 2Results of regression analysis on negotiation strategy.

	Negotiation	strategy					
	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7
Independent variables							
Cooperative relational experience		1.332 [*] (.656)		1.246* (.569)	4.143*** (.813)	.087 (1.536)	2.790*** (1.042)
Competitive relational experience		876** (.303)		740^{*} (.295)	-1.915** (.652)	-1.149^{\dagger} (.601)	-1.996** (.651)
Contractual control governance			397 [*] (.170)	367* (.156)	145 (.135)	398* (.162)	167 (.135)
Contractual coordination governance			.232 [†] (.135)	.216 [†] (.118)	.304** (.095)	.111 (.135)	.224* (.110)
Contractual control governance × Cooperative					-1.064***		-1.113***
relational experience Contractual control governance × Competitive					(.267) .423*		(.247) .467*
relational experience					(.205)		(.223)
Contractual coordination governance × Cooperative					(.203)	.438	.566*
relational experience						(.457)	(.263)
Contractual coordination governance × Competitive						.155	065
relational experience						(.207)	(.190)
Control variables							
Type of dispute	.461	.506	.828*	.838*	.671*	.852*	.675*
	(.306)	(.304)	(.391)	(.409)	(.322)	(.398)	(.317)
Source of the dispute	.470	.385	.257	.189	.037	.264	.080
	(.321)	(.323)	(.303)	(.294)	(.251)	(.301)	(.256)
Length of the dispute	227	203	330	310	248	275	175
	(.281)	(.244)	(.253)	(.241)	(.211)	(.232)	(.195)
International relationship	.108	.295	119	.074	.141	.047	.145
	(.323)	(.271)	(.317)	(.273)	(.230)	(.295)	(.237)
Contract value	000	000	000	000	000	000	000
A CONTRACTOR OF THE CONTRACTOR	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)
Agreement type – Distribution	055	.102	.144	.275	.190	.270	.251
	(.464)	(.462)	(.466)	(.451)	(.364)	(.451)	(.345)
Agreement type – Production supply	.556	.659	.560	.656	.088	.598	.038
A TO	(.754)	(.664)	(.617)	(.557)	(.437)	(.552)	(.418)
Agreement type – IT	.542 (.457)	.784 [†] (.418)	.504 (.423)	.735 [†] (.389)	.532 (.392)	.715 [†] (.391)	.498 (.397)
Size asymmetry	000	000	000	000	(.392) 000	(.591) 000	000^*
SIZE dayminemy	(.000)	000 (.000)	(.000)	000 (.000)	(.000)	(.000)	(.000)
Constant	.740	.273	1.907	1.434	.450	1.570	.263
Constant	.740 (1.516)	.273 (1.311)	(1.472)	(1.474)	.450 (1.219)	(1.578)	(1.223)
R^2	.093	.237	.265	.383	.563	(1.578)	.592

N = 99. Standard errors in parentheses; clustering on firms (# of clusters = 76).

also observe that contractual coordination governance tends to lead to more cooperative negotiations (.21, p < .10).

In Hypothesis 4, we argue that increasing the number of contractual control clauses will undermine the positive influence of cooperative relational experience on the type of negotiation strategy. Several important observations can be made from Model 7 in Table 2. First, as predicted, contractual control governance appears to negate the positive effect of cooperative relational experience on the type of negotiation strategy (-1.11, p < .001). Furthermore, increasing the number of contractual control clauses in the case of competitive relational experience seems to improve the type of negotiation strategy (.46, p < .05).

Model 7 also shows the result of testing Hypothesis 5 on the interaction between contractual coordination governance and cooperative relational experience. We posit that contractual coordination governance and cooperative relational experience act as complements. Increasing the number of contractual coordination clauses should reinforce the positive effect of cooperative relational experience on the negotiation strategy. As predicted, we find that the coefficient for the interaction with *Cooperative relational experience* is significant (.56, p < .05). However, the interaction with *Competitive relational experience* is not significant.

At last, we plot the interaction results to illustrate those moderating effects in Figs. 1–4. For purposes of illustration, we create a dummy variable to distinguish cases with low (0; when 0, 1, or 2 clauses; N = 33 cases) vs. high (1; when 3, 4, or 5 clauses; N = 66 cases) contractual control governance. In the same way, we create

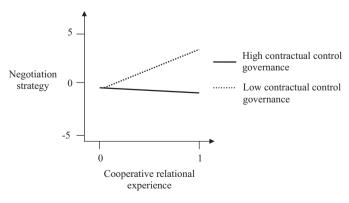


Fig. 1. The effect of cooperative relational experience on negotiation strategy by level of contractual control governance.

 $^{^{\}dagger}$ p < .10.

^{*} p < .05.
** p < .01.

^{***} p < .001.

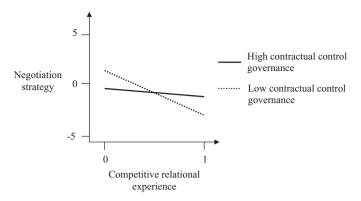


Fig. 2. The effect of competitive relational experience on negotiation strategy by level of contractual control governance.

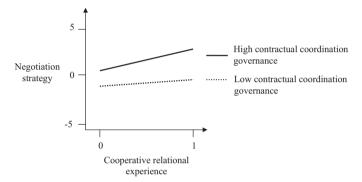


Fig. 3. The effect of cooperative relational experience on negotiation strategy by level of contractual coordination governance.

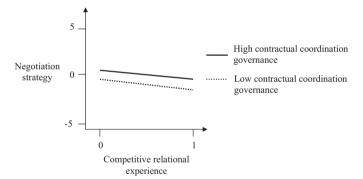


Fig. 4. The effect of competitive relational experience on negotiation strategy by level of contractual coordination governance.

another dummy variable to distinguish cases with low (N=44 cases) vs. high (N=55 cases) contractual coordination governance.

7. Discussion

7.1. Contributions and implications

This paper attempts to answer an important question in supply chain management research given the increasing importance of buyer–supplier relationships (see Chen and Paulraj, 2004; Giunipero et al., 2008; Terpend et al., 2008 for a review): how relational and contractual governance interact and their subsequent impact on outcomes. The interplay of contractual and

relational governance dimensions and their impact on outcomes remain under debate (Lazzarini et al., 2008; Liu et al., 2009; Puranam and Vanneste, 2009). Our study contributes to provide a stronger theoretical foundation for the understanding of supply chain governance by highlighting two unexplored areas of study: (a) studying the influence of different types of buyer–supplier experiences and (b) analyzing more closely the impact of specific contractual provisions rather than gross measures of contractual complexity.

By leveraging a unique dataset of 99 buyer-supplier disputes, we are uniquely positioned to untangle the interplay of relational experience and contractual governance individually and in combination on the negotiation strategy during a dispute. Consistent with prior research (Dwyer et al., 1987; Su et al., 2008), the first set of findings shows that cooperative relational experience (as opposed to no or competitive relational experience) positively influences cooperative negotiation strategies. Moreover, our results suggest that partners with competitive relational experience seem to develop more competitive negotiation strategies despite having interacted previously. By highlighting the importance of defining the quality of the prior relationship experience rather than simply the existence of a prior relationship, our study thus extends prior research which has traditionally focused on the mere existence of prior ties between exchange partners (e.g. Goffin et al., 2006; Li et al., 2010). Moreover, the findings indicate that while increasing the number of contractual control clauses leads, on average, to less cooperative negotiation strategies, increasing contractual coordination governance significantly contributes to more cooperative negotiation strategies during a dispute between buyers and suppliers.

While prior research on supply chain governance has generally considered contractual governance and relational governance as two uni-dimensional concepts (Carey et al., 2011; Liu et al., 2009; Mahapatra et al., 2010), our results speak to the importance both of making a distinction between contractual functions (control and coordination) and of taking into account the whole scope of relational experience (cooperative and competitive) between buyers and suppliers.

On the one hand, our study extends prior research on supply chain governance by considering different types of relational norms. The overwhelming majority of prior studies on relational governance have advocated the benefits of relational norms and their positive effects (e.g. Dyer and Chu, 2003), in particular in supply chain relations (Cousins et al., 2006; Liu et al., 2009). In contrast, our research not only looks at the cooperative side of relational experience but also considers the possible competitive side of buyer–supplier relational experience. We thus extend a few recent studies which have suggested a possible "dark side" (Anderson and Jap, 2005; Villena et al., 2011) or "embeddedness failure" (Azoulay et al., 2010) of inter-organizational relationships and we offer a finer analysis of the value of relational experience.

On the other hand, our distinction between different contractual dimensions gives us a better understanding of how contractual governance design may influence the actions and behaviors of exchange partners. Transaction cost economics (TCE) has traditionally focused on the controlling aspect of formal contracts to mitigate exchange hazards (Williamson, 1985). TCE considers the contractual governance as a way to avoid some negative outcomes, such as opportunism. Our investigation of the coordinating aspect of contractual governance sheds new light on the role of supply chain contracts to work as a blueprint for the transaction. Our findings point out that contractual coordination governance may help firms to look for cooperative negotiations. Our study also contributes to the contractual governance literature by suggesting that the contract may have several facets with distinctive influences.

In particular, the contract may be an important driver of subsequent behaviors not only to prevent negative outcomes but also to promote cooperation. We thus call for further integration of the rational view of governance—in the TCE tradition—with a more behavioral approach to contract design—in line with micro theories (Lumineau et al., 2011).

Such conceptual distinctions on contractual and relational governance also offer additional insights into the way governance mechanisms interact (Carey et al., 2011; Li et al., 2010; Liu et al., 2009). Our second set of findings indicate that, in disputes where the buyer and supplier had cooperative relational experience, increasing contractual control governance leads to undesirable consequences—increasing competitive negotiations. In those disputes where the buyer and supplier had competitive relational experience, increasing contractual control provisions led to an increase (albeit to a small degree) in the use of cooperative negotiation strategies. Finally, contractual coordination governance appears to amplify the positive effect of cooperative relational experience, highlighting its complementary effect.

In sum, the apparent dichotomy implied by the "complements-substitutes" terminology fails to capture different kinds of relationships between governance mechanisms that may, in fact, coexist (Puranam and Vanneste, 2009). In this regard, our findings show that distinct contractual functions interact differently with relational experience. We extend prior studies and suggest that the relevant question is not so much whether contractual and relational mechanisms substitute or complement each other but when and how they interact in specific ways. Our results suggest in particular a dual role played by contractual control governance—reducing the effectiveness of cooperative relational experience on the one hand, but "setting the rules of engagement" for competitive relational experience on the other.

Additionally, this study informs managerial practice. It supplements traditional research on governance design by showing the distinct roles controlling and coordinating contractual dimensions have in the effective management of supply chain relations. Purchasing and supply chain managers can benefit from our results by noting the challenges in designing contracts able to balance prevention of risks and promotion of cooperative behaviors. As contracts can work as frames influencing partners' behaviors, supply chain managers could gain from considering the contract as an influential managerial mechanism and not only as a legal tool (Lumineau et al., 2011). Furthermore, linking a study of governance design and subsequent negotiations may provide an important lever, in both a proactive and a reactive way, for enhancing the ability to resolve disputes between supply chain partners. Our study specifically cautions against assuming an unequivocal positive effect of relational experience.

7.2. Limitations and suggestions for future research

There are of course limitations inherent in the data available for our study, suggesting the need for caution in drawing conclusions but also representing worthwhile avenues for further research.

First, some of the more important limitations come from the selection bias inherent in the sample available from our data source: law firm dispute notes. On the one hand, the comparison of our sample with other contracts used in transactions that did not systematically lead to a dispute mitigates this concern. On the

other hand, we do not observe disputes between exchange partners unless they had escalated to the point where lawyers became involved. We may therefore be observing a biased sample, skewed toward the most serious disputes. However, this possible bias may work against our goal of explaining cooperative negotiation strategies and thus may serve to strengthen the inferences we can draw from our results.

Second, our study was conducted primarily on a sample of continental European firms embedded in a legal system based on civil law. Different legal systems are likely to affect the effectiveness of formal contracts as governance mechanisms. Additionally, the contracts we analyzed were mainly IT, distribution, and supply contracts. Here again, we did not find significant differences between these types of contracts. However, future research in other institutional settings and areas would be valuable to confirm or discount our findings.

Third, our current data do not allow us to fully observe how negotiation strategies are impacted by the "shadow of the future" compared with the "shadow of the past" (Poppo et al., 2008). Future research may examine the evolution of exchange relationships over a longer time horizon and consider the availability of alternative partners for future transactions.

Fourth, we have been studying the influence of relational experience and contractual governance mechanisms on negotiation strategies. However, it could be argued that negotiation strategies could lead to changes in contracts (as a result of adaptation, learning, etc.). In our dataset, there are no examples of contractual revisions actually developed and implemented during the dispute. In this regard, our measured contractual variables are constant and reflect the contractual instruments used to face the conflict. However, contract revisions or renegotiations would certainly be an interesting research avenue.

Despite these limitations, our arguments and empirical conclusions have led us to develop a more detailed understanding of how governance influences negotiation strategies in supply chain disputes. This study has therefore conceptually refined and empirically extended previous work on disputes, contractual governance, and negotiation strategies between firms. In spite of their prominence in the marketplace, research on disputes between buyers and suppliers is sparse. Because negotiation behavior between organizations is a fundamental form of social interaction, we hope that this paper opens the way for further studies in this emerging field.

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Key constructs	
Constructs	Items
Cooperative	The firm manifests its intent to pursue the collaboration: "I reassert my intention to pursue our collaboration," "Tak
negotiation strategy	it easy! We will find a solution," "Our team is working day and night to finish the project."
	The firm makes a proposition to solve the dispute: "I propose to send two technicians to repair the damages."
	The firm implements a proposal coming from the other party, or the firm decides to implement an alternative or
Competitive negotiation	corrective action: "We have decided to grant you a discount," "Following your request, I will review my plan." The firm accuses its partner: "You are responsible for," "We blame you for the failure of"
strategy	The firm threatens the other party or issues it with an ultimatum: "If you do not change your standpoint on before the firm threatens the other party or issues it with an ultimatum: "If you do not change your standpoint on before the firm threatens the other party or issues it with an ultimatum: "If you do not change your standpoint on before the firm threatens the other party or issues it with an ultimatum: "If you do not change your standpoint on before the firm threatens the other party or issues it with an ultimatum: "If you do not change your standpoint on before the firm threatens the other party or issues it with an ultimatum: "If you do not change your standpoint on before the firm threatens the other party or issues it with an ultimatum: "If you do not change your standpoint on before the firm threatens the other party or issues it with an ultimatum in the firm threatens the other party or issues it with an ultimatum in the firm threatens the other party or issues it with an ultimatum in the firm threatens the other party or issues it with an ultimatum in the firm threatens the other party or issues it with an ultimatum in the firm threatens the other party or issues it with an ultimatum in the firm threatens the other party or issues it with an ultimatum in the firm threatens the other party or issues it with the other
	the end of the month, we will refer the matter to the Court."
	The firm sends a formal notice to do/to not do something: "Please accept by the present letter, a formal notice to pa
	the sum of" The firm serves a writ on its partner: "Please accept by the present letter that firm issues a writ against your
	company."
Relational experience	We coded as cooperative relational experience, messages that contained references to any of the three following
	dimensions: Flexibility refers to the shared expectations that parties will make adjustments to accommodate change
	in the environment or in parties' needs (Boyle et al., 1991; Noordewier et al., 1990); participation refers to the
	willingness of parties to make investments in the relationship and share information, whether or not these behavio are contractually mandated (Heide and John, 1992; Lusch and Brown, 1996). Finally, solidarity refers to the expectati
	that parties will generally act in ways that increase mutual benefit, engage in bilateral problem solving, and commit
	joint, coordinated action toward shared objectives (Heide and John, 1992; Macneil, 1980). Competitive relational
	experiences, it follows, were those that referenced elements of inflexibility, non-participation, and lack of solidarity
	Cooperative relational experience: "The parties have been working together for five months in a cooperative way. Mr
	XYZ [the manager in charge of the project] especially points out 'the collaborative and trusting atmosphere' of their relationship with firm B's team," "It is now the third time firm A and firm B are doing business together. They first
	worked together in 2002 on []. They also worked together in 2004 for the implementation of []. Technicians at
	engineers from both parties have developed strong ties. They even used to go out and play soccer together," "The Al
	project is the first transaction between firm A and firm B. So far, each party seems to have been really willing to sha
	information on their own business. When they faced this issue on [] in November, the commercial people were very flexible and spent much time to adapt and look for a joint solution."
	Competitive relational experience: "Firm A and firm B have started to work together in 2001. In spite of regular tensio
	both parties look very committed into this relationship. According to Mr. XYZ [the CEO] and Mr. ZYX [the vice
	president], it would be unreasonable to look for another trading partner, especially after their investment in this
	unique 400.000-euro robot," "Very soon after the beginning of the deal, parties have reported mutual rigidity. After
	the first meeting, parties reciprocally accused the other of rigidity and selfishness," "Frictions have been frequent fro the beginning of firm A-firm B relationship in 2000. Firm B regularly blames unhelpful behavior of firm A's manage
	while firm A reproaches firm A for being obstructive."
Contractual control governance	Right to audit/inspection: "Firm A maintains the right to audit firm B's manufacturing facility for conformance"
	Safeguard/hostage clause: "Upon termination of the agreement, the Manufacturer shall repurchase the product stock
	from the Distributor"
	Control/inspection by a third party: In a contract between firm A and firm B to supply product for final customer firm "Firm C may at all reasonable times visit firm A's facilities and observe the work being performed."
	Penalty clause: "If firm A fails to complete and deliver on the specified dates firm A shall pay firm B liquidated
	damages at the rate of [X] Euros per day of delay."
	Termination/resolution clause: "In the event the obligations of one of the Parties do not comply with the articles
	referred to hereunder, the contract shall be, if required by the creditor of the said obligations, canceled, by giving
Contractual coordination	notice of such termination" Assignment of roles and responsibilities: "All development work will be performed by Developer or its employees at
governance	Developer's offices or by approved independent contractors who have executed confidentiality and assignment
	agreements that are acceptable to the Client."
	Indications of duration and conditions of renewal: "This Agreement is made for a term of three years. The Agreement
	shall be renewed automatically at the end of three years unless"
	Operational coordination related to reassignment of tasks among participants: "On completion of phase 1, Parties agree discuss the allocation of resources to the task."
	Strategic coordination: "The 2nd-stage specific objectives will be defined by the Parties through mutual consultation
	after completion of the 1st-stage objectives."
	Dispute resolution provision: "Any dispute arising out of or in connection with this Agreement shall be settled witho
Disputa type	recourse to the courts" Strong form dignute describes actions yielding contractual norms that are explicitly codified in the contract. For
Dispute type	Strong form dispute describes actions violating contractual norms that are explicitly codified in the contract. For example, parties would report "You cheated on the agreed terms and provisions written in our contract;" "Your firm
	showing dishonesty on the conditions specified in our contract;" or "I remind you that Article 4 requires that
	Therefore, firm [] does not fulfill its written commitments."
	Weak form dispute encompasses relational norm violation not spelled out in the contract but embedded in the
	common understanding of the trading partners. For instance, parties may state "You are not honoring your oral
	promise and are not respecting our implicit understanding;" "You withheld important information and thereby breached our unspoken promises;" or "This lack of commitment to the nature and philosophy of the discussions do
	not fit with the spirit of our agreement."
Dispute source	Ex ante disputes refer to the strategic manipulation of information and misrepresentation of intentions before the firm
	start to transact. For example, violated parties may state "you withheld key information on your ability to deliver [t
	product];" "Firm [] showed dishonesty when we signed the [] contract;" "[W]e faced a calculated effort to
	confuse [us] from the beginning;" "[You] misrepresented reality by not fully disclosing that;" "You knew that you could not [fulfill your obligations], whereas it affects the equity of our business relationship."
	Ex post disputes consist of situations in which parties state "You are reluctant to fulfill your commitments;" "You fail
	to complete your obligations;" "You did not respect your promises;" "Firm [] runs counter to our initial agreemen
	or "This represents a blatant act of deception."

References

- Anderson, E., Jap, S.D., 2005. The dark side of close relationships. MIT Sloan Management Review 46 (3), 75–82.
- Anderson, E., Weitz, B., 1989. Determinants of continuity in conventional industrial channel dyads. Marketing Science 8, 310–323.
- Azoulay, P., Repenning, N.P., Zuckerman, E.W., 2010. Nasty, brutish, and short: embeddedness failure in the pharmaceutical industry. Administrative Science Quarterly 55 (3), 472–507.
- Balakrishnan, S., Koza, M.P., 1993. Information asymmetry, adverse selection and joint-ventures. Journal of Economic Behavior and Organization 20 (1), 99–117.
- Barley, S.R., 1991. Contextualizing conflict: notes on the anthropology of disputes and negotiations. In: Bazerman, M.H., Sheppard, B.H., Lewicki, R. (Eds.), Research on Negotiation in Organizations. JAI Press, Greenwich, CT, pp. 165–199.
- Beatty, J., Samuelson, S., 2001. Business Law for a New Century. West Legal Studies in Business, Cincinnati, OH.
- Bendersky, C., McGinn, K.L., 2011. Open to negotiation: phenomenological assumptions and knowledge dissemination. Organization Science 21 (3), 781–800.
- Bengtsson, M., Kock, S., 2000. Co-opetition in business networks—to cooperate and compete simultaneously. Industrial Marketing Management 29, 411–426.
- Benton, W.C., Maloni, M., 2005. The influence of power driven buyer/seller relationships on supply chain satisfaction. Journal of Operations Management 23 (1), 1–22.
- Boyle, B., Dwyer, R., Robicheaux, R., Simpson, J., 1991. Influence strategies in marketing channels: measures and use in different relationship structures. Journal of Marketing Research 29, 462–473.
- of Marketing Research 29, 462–475.

 Bradach, J.L., 1997. Using the plural form in the management of restaurant chains.

 Administrative Science Quarterly 42, 276–303.
- Bradach, J.L., Eccles, R.G., 1989. Price, authority and trust: from ideal types to plural forms. Annual Review of Sociology 15, 97–118.
- Carey, S., Lawson, B., Krause, D.R., 2011. Social capital configuration, legal bonds and performance in buyer-supplier relationships. Journal of Operations Management 29 (4), 277–288.
- Carter, C.R., Stevens, C.K., 2007. Electronic reverse auction configuration and its impact on buyer price and supplier perceptions of opportunism: a laboratory experiment. Journal of Operations Management 25 (5), 1035–1054.
- Cavusgil, S.T., Deligonul, S., Zhang, C., 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.
- Chatterjee, S., Price, B., 1991. Regression Analysis by Example, 2nd ed. Wiley, New York.
- Chen, I.J., Paulraj, A., 2004. Towards a theory of supply chain management: the constructs and measurements. Journal of Operations Management 22 (3), 119–150. Coase, R.H., 1937. The nature of the firm. Economica 16 (4), 386–405.
- 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 (1), 230–260.
- Cousins, P.D., Handfield, R.B., Lawson, B., Petersen, K.J., 2006. Creating supply chain relational capital: the impact of formal and informal socialization processes. Journal of Operations Management 24, 851–863.
- Cousins, P.D., Menguc, B., 2006. The implications of socialization and integration in supply chain management. Journal of Operations Management 24, 604–620. Craver, C., 2003. Negotiation styles. Dispute Resolution Journal 58 (1), 48–55.
- Crocker, K.J., Reynolds, K.J., 1993. The efficiency of incomplete contracts: an empirical analysis of air force engine procurement. RAND Journal of Economics 24 (1), 126–146.
- Crook, T.R., Combs, J.G., 2007. Sources and consequences of bargaining power in supply chains. Journal of Operations Management 25, 546–555.
- Dant, R.P., Schul, P.L., 1992. Conflict resolution processes in contractual channels of distribution. Journal of Marketing 56 (1), 38–54.
- Das, T.K., Teng, B.S., 1996. Risk types and inter-firm alliance structures. Journal of
- Management Studies 33 (6), 827–843.

 Das, T.K., Teng, B.S., 1998. Resource and risk management in the strategic alliance making process. Journal of Management 24 (1), 21–42.
- De Dreu, C.K.W., Weingart, L.R., Kwon, S., 2000. Influence of social motives on integrative negotiation: a meta-analytic review and test of two theories. Journal of Personality and Social Psychology 78, 889–905.
- Deutsch, M., 2006. Cooperation and competition. In: Deutsch, M., Coleman, P., Colton Marcus, E. (Eds.), The Handbook of Conflict Resolution: Theory and Practice. John Wiley and Sons, San Francisco, pp. 23–42.
- Dwyer, F.R., Schurr, P.H., Oh, S., 1987. Developing buyer–supplier relationships. Journal of Marketing 51, 11–27.
- Dyer, J.H., Chu, W., 2003. The role of trustworthiness in reducing transaction costs and improving performance: empirical evidence from the United States, Japan, and Korea. Organization Science 14 (1), 57–68.
- Dyer, J.H., Singh, \dot{H} ., 1998. The relational view: cooperative strategy and sources of interorganizational competitive advantage. Academy of Management Review 23 (4), 660–679.
- Faems, D., Janssens, M., Madhok, A., Van Looy, B., 2008. Towards an integrative perspective on alliance governance: connecting contract design, contract application, and trust dynamics. Academy of Management Journal 51 (6), 1053–1078.
- Fisher, R., Ury, W., Patton, B., 1981. Getting to Yes: Negotiating Agreement Without Giving In. Penguin Books, New York.
- Gaski, J.F., 1984. The theory of power and conflict in channels of distribution. Journal of Marketing 48 (3), 9–30.

- Ghoshal, S., Moran, P., 1996. Bad for practice: a critic of the transaction cost theory. Academy of Management Review 21 (1), 13–47.
- Giunipero, L.C., Hooker, R.E., Matthews, S.J., Yoon, T.E., Brudvig, S., 2008. A decade of SCM literature: past, present and future implications. Journal of Supply Chain Management 44 (4), 66–86.
- Goebel, D.J., Marshall, G.W., Locander, W.B., 2003. Enhancing purchasing's strategic reputation: evidence and recommendations for future research. Journal of Supply Chain Management 39, 4–14.
- Goerzen, A., 2007. Alliance networks and firm performance: the impact of repeated partnerships. Strategic Management Journal 28, 487–509.
- Goffin, K., Lemke, F., Szwejczewski, M., 2006. An exploratory study of 'close' supplier-manufacturer relationships. Journal of Operations Management 24, 189-209.
- Griffith, D.A., Myers, M.B., 2005. The performance implications of strategic fit of relational norm governance strategies in global supply chain relationships. Journal of International Business Studies 36, 254–269.
- 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., Gargiulo, M., 1999. Where do interorganizational networks come from? American Journal of Sociology 104, 1439–1493.
- Gulati, R., Singh, H., 1998. The architecture of cooperation: managing coordination costs and appropriation concerns in strategic alliances. Administrative Science Quarterly 43, 781–794.
- Gulliver, P.H., 1979. Disputes and Negotiations. Academic Press, New York.
- Hadfield, G.K., 1990. Problematic relations: franchising and the law of incomplete contracts. Stanford Law Review 42, 927–992.
- Handley, S.M., Benton, W.C., 2012. The influence of exchange hazards and power on opportunism in outsourcing relationships. Journal of Operations Management 30, 55–68.
- Heide, J.B., John, G., 1992. Do norms matter in marketing relationships? Journal of Marketing 56 (2), 32–44.
- Hill, C.W.L., 1990. Cooperation, opportunism, and the invisible hand: implications for transaction cost theory. Academy of Management Review 15, 500–513.
- Jap, S.D., Anderson, E., 2003. Safeguarding interorganizational performance and continuity under ex post opportunism. Management Science 49 (12), 1684–1701.
- Jauch, L.R., Osborn, R.N., Martin, T.N., 1980. Structured content analysis of cases: a complementary method for organizational research. Academy of Management Journal 5, 517–526.
- Joskow, P.L., 1987. Contract duration and relationship-specific investments: empirical evidence from coal markets. American Economic Review 77 (1), 168–185.
- Kalnins, A., Mayer, K.J., 2004. Relationships and hybrid contracts: an analysis of contract choice in information technology. Journal of Law, Economics, and Organization 20 (1), 207–229.
- Klein Woolthuis, R., Hillebrand, B., Nooteboom, B., 2005. Trust, contract and relationship development. Organization Studies 26 (6), 813–840.
- Kolbe, R.H., Burnett, M.S., 1991. Content-analysis research: an examination of applications with directives for improving research reliability and objectivity. Journal of Consumer Research 18 (2), 243–250.
- Kreps, D.M., 1997. Intrinsic motivation and extrinsic incentives. American Economic Review 87, 359–364.
- Krippendorff, K., 2004a. Content Analysis: An Introduction to its Methodology, 2nd ed. Sage Publications, Thousand Oaks.
- Krippendorff, K., 2004b. Reliability in content analysis: some common misconceptions and recommendations. Human Communication Research 30 (3), 411–433.
- Kwon, I.-W.G., Suh, T., 2004. Factors affecting the level of trust and commitment in supply chain relationships. Journal of Supply Chain Management 40 (2), 4–14.
- Lavie, D., Rosenkopf, L., 2006. Balancing exploration and exploitation in alliance formation. Academy of Management Journal 49 (4), 797–818.
- Lawson, B., Tyler, B.B., Cousins, P.D., 2008. Antecedents and consequences of social capital on buyer performance improvement. Journal of Operations Management 26 (3), 446–460.
- Lazzarini, S.G., Miller, G.J., Zenger, T.R., 2008. Dealing with the paradox of embeddedness: the role of contracts and trust in facilitating movement out of committed relationships. Organization Science 19, 709–728.
- Lee, K.H., Yang, G., Gaham, J.L., 2006. Tension and trust in international business negotiations: American executives negotiating with Chinese executives. Journal of International Business Studies 37 (5), 623–641.
- Lee, Y., Cavusgil, T., 2006. Enhancing alliance performance: the effects of contractual-based versus relational-based governance. Journal of Business Research 59, 896–905.
- Li, Y., Liu, Y., Liu, H., 2011. Co-opetition, distributor's entrepreneurial orientation and manufacturer's knowledge acquisition: evidence from China. Journal of Operations Management 29 (1-2), 128–142.
- Li, Y., Xie, E., Teo, H.H., Peng, M.W., 2010. Formal control and social control in domestic and international buyer–supplier relationships. Journal of Operations Management 28 (4), 333–344.
- Liu, Y., Luo, Y., Liu, T., 2009. Governing buyer–supplier relationships through transactional and relational mechanisms: evidence from China. Journal of Operations Management 27, 294–309.
- Lorenz, E., 1999. Trust, contract and economic cooperation. Cambridge Journal of Economics 23, 301–315.
- Lui, S.S., Ngo, H.Y., 2004. The role of trust and contractual safeguards on cooperation in non-equity alliances. Journal of Management 30 (4), 471–485.
- Lumineau, F., Fréchet, M., Puthod, D., 2011. An organizational learning perspective on the contracting process. Strategic Organization 9, 8–32.

- Lumineau, F., Malhotra, D., 2011. Shadow of the contract: How contract structure shapes interfirm dispute resolution. Strategic Management Journal 32, 532–555.
- Lumineau, F., Quélin, B.V., 2012. An empirical investigation of interorganizational opportunism and contracting mechanisms. Strategic Organization 10, 55–84.
- Luo, Y., 2006. Opportunism in inter-firm exchanges in emerging markets. Management Organization Review 2 (1), 121–147.
- Luo, Y., 2007. A co-opetition perspective of global competition. Journal of World Business 42 (2), 129–144.
- Lusch, R.F., Brown, J.R., 1996. Interdependency, contracting and relational behavior in marketing channels. Journal of Marketing 60, 193–238.
- Lyons, B., Mehta, J., 1997. Contracts, opportunism and trust: self-interest and social orientation. Cambridge Journal of Economics 21 (2), 239–257.
- MacDuffie, J.P., Helper, S., 2006. Collaboration in supply chains with and without trust. In: Adler, P. (Ed.), The Firm as Collaborative Community, Re-constructing Trust in the Knowledge Economy. Oxford University Press, Oxford.
- Macneil, I.R., 1974. The many futures of contracts. Southern California Law Review 47, 691–816.
- Macneil, I.R., 1978. Contracts: adjustment of long-term economic relations under classical, neoclassical, and relational contract law. Northwestern University Law Review 72. 854–902.
- Macneil, I.R., 1980. The New Social Contract: An Inquiry into Modern Contractual Relations. Yale University Press, New Haven.
- Mahapatra, S.K., Narasimhan, R., Barbieri, P., 2010. Strategic interdependence, governance effectiveness and supplier performance: a dyadic case study investigation and theory development. Journal of Operations Management 28 (6), 537–552.
- Malhotra, D., Bazerman, M.H., 2007. Negotiation Genius. Bantam Books. Malhotra, D., Lumineau, F., 2011. Trust and collaboration in the aftermath of con-
- flict: the effects of contract structure. Academy of Management Journal 54 (5), 981–998.
- Malhotra, D., Murnighan, J.K., 2002. The effects of contracts on interpersonal trust. Administrative Science Quarterly 47 (3), 534–560.
- Malmgren, H.B., 1961. Information, expectations and the theory of the firm. Quarterly Journal of Economics 75 (3), 399–421.
- Mayer, K.J., Argyres, N.S., 2004. Learning to contract: evidence from the personal computer industry. Organization Science 15 (4), 394–410.
- McNulty, J.K., Russell, V.M., 2010. When 'negative' behaviors are positive: a contextual analysis of the long-term effects of problem-solving behaviors on changes in relationship satisfaction. Journal of Personality and Social Psychology 98 (4), 587–604.
- Mesquita, L.F., Brush, T., 2008. Untangling safeguard and production coordination effects in long-term buyer supplier relationships. Academy of Management Journal 51 (4), 785–807.
- Miller, C., Cardinal, L., Glick, W., 1997. Retrospective reports in organizational research: a reexamination of recent evidence. Academy of Management Journal 40 (1), 189–204.
- Min, S., Roath, A.S., Daugherty, P.J., Genchev, S.E., Chen, H., Arndt, A.D., Richey, G.R., 2005. Supply chain collaboration: what is happening? International Journal of Logistics Management 16 (2), 237–256.
- Moffitt, M.L., Bordone, R.C., 2005. The Handbook of Dispute Resolution. Jossey Bass, San Francisco.
- Mohr, J., Spekman, R., 1994. Characteristics of partnership success: partnership attributes, communication behavior, and conflict resolution techniques. Strategic Management Journal 15 (2), 135–142.
- Morris, M., Carter, C.R., 2005. Relationship marketing and supplier logistics performance: an extension of the key mediating variables model. Journal of Supply Chain Management 41 (4), 32–43.
- Morris, M.W., Williams, K.Y., Leung, K., Larrick, R., Mendoza, M.T., Bhatnagar, D., Li, J., Kondo, M., Luo, J.L., Hu, J.C., 1998. Conflict management style: accounting for cross-national differences. Journal of International Business Studies 29 (4), 729–747.
- Mudambi, R., Helper, S., 1998. The 'close but adversarial' model of supplier relations in the U.S. auto industry. Strategic Management Journal 19, 775–792.
- Mueller, D.J., 1986. Measuring Social Attitudes: A Handbook for Researchers and Practitioners. Teachers College Press, New York.
- Neuendorf, K.A., 2002. The Content Analysis Guidebook. Sage Publications, Thousand Oaks.
- Noordewier, T.G., John, G., Nevin, J.R., 1990. Performance outcomes of purchasing arrangements in buyer-vendor relationships. Journal of Marketing (October), 80-93.
- North, D.C., 1990. Institutions, Institutional Change and Economic Performance. Cambridge University Press, Cambridge, UK.
- Nyaga, G.N., Whipple, J.M., Lynch, D.F., 2010. Examining supply chain relationships: do buyer and supplier perspectives on collaborative relationships differ? Journal of Operations Management 28, 101–114.
- Ouchi, W.G., 1979. A conceptual framework for the design of organizational control mechanisms. Management Science 25 (9), 833–848.

- Parkhe, A., 1993. Strategic alliance structuring: a game theoretic and transaction costs examination of interfirm cooperation. Academy of Management Journal 36, 794–829.
- Paulraj, A., Lado, A.A., Chen, I.J., 2008. Inter-organizational communication as a relational competence: antecedents and performance outcomes in collaborative buyer-supplier relationships. Journal of Operations Management 26, 45–64.
- 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., Ryu, S., 2008. Alternative origins to interorganizational trust: an interdependence perspective on the shadow of the past and the shadow of the future. Organization Science 19 (1), 39–55.
- Pruitt, D.G., Lewis, S., 1975. Development of integrative solutions in bilateral negotiations. Journal of Personality and Social Psychology 31, 621–633.
- Puranam, P., Vanneste, B., 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 (4), 665–694.
- Reuer, J., Ariño, A., 2007. Strategic alliance contracts: dimensions and determinants of contractual complexity. Strategic Management Journal 28 (3), 313–330.
- Reuer, J., Ariño, A., Mellewigt, T., 2006. Entrepreneurial alliances as contractual forms. Journal of Business Venturing 21 (3), 306–325.
- Ring, P.S., Van de Ven, A.H., 1992. Structuring cooperative relationships between organizations. Strategic Management Journal 13, 483–498.
- Ring, P.S., Van de Ven, A.H., 1994. Developmental processes of cooperative interorganizational relationships. Academy of Management Review 19 (1), 90–118.
- Ryall, M.D., Sampson, R., 2009. Repeated interaction and contract structure: evidence from technology development contracts. Management Science 55 (6), 906–925.
- Salbu, S.R., 1997. Evolving contract as a device for flexible coordination and control. American Business Law Journal 34 (3), 329–384.
- Sanders, N.R., 2008. Pattern of information technology use: the impact on buyer-supplier coordination and performance. Journal of Operations Management 26 (3), 349–367.
- Sitkin, S.B., 1995. On the positive effect of legalization on trust. Research on Negotiation in Organizations 5, 185–217.
- Smith, J.A., Flowers, P., Larkin, M., 2009. Interpretative Phenomenological Analysis: Theory, Method, and Research. London, Sage Publications.
- Strickland, L.H., 1958. The effects of surveillance on trust. Journal of Personality 26, 200–215.
- Su, Q., Song, Y.T., Dang, J.X., 2008. The impact of supply chain relationship quality on cooperative strategy. Journal of Purchasing and Supply Management 14, 263–272.
- Tangpong, C., 2011. Content analytic approach to measuring constructs in operations and supply chain management. Journal of Operations Management 29, 627–638.
- Tangpong, C., Hung, K.-T., Ro, Y.K., 2010. The interaction effect of relational norms and agent cooperativeness on opportunism in buyer–supplier relationships. Journal of Operations Management 28 (5), 398–414.
- Taylor, M., 1987. The Possibility of Cooperation. Cambridge University Press, New York.
- Terpend, R., Tyler, B.B., Krause, D.R., Handfield, R.B., 2008. Buyer-supplier relationships: derived value over two decades. Journal of Supply Chain Management 44 (2), 28-55.
- Villena, V.H., Revilla, E., Choi, T.Y., 2011. The dark side of buyer-supplier relationships: a social capital perspective. Journal of Operations Management 29, 561–576.
- Walton, R.E., McKersie, R.B., 1965. A Behavioral Theory of Labor Negotiation. McGraw-Hill. New York.
- Wathne, K.H., Heide, J.B., 2004. Relationship governance in a supply chain network. Journal of Marketing 68 (1), 73–89.
- Weber, R.P., 1990. Basic Content Analysis. Sage, Thousand Oaks.
- Williamson, O.E., 1985. The Economic Institutions of Capitalism. Free Press, New York.
- Williamson, O.E., 1991. Comparative economic organization: the analysis of discrete structural alternatives. Administrative Science Quarterly 36 (2), 269–296.
- Williamson, O.E., 1996. The Mechanisms of Governance. Oxford University Press, New York.
- Wuyts, S., Geyskens, I., 2005. The formation of buyer–supplier relationships: detailed contract drafting and close partner selection. Journal of Marketing 69, 103–117.
- Yelpaala, K., Rubino-Sammartano, M., Campbell, D., 1986. Drafting and Enforcing Contracts in Civil and Common Law Jurisdictions. Kluwer Law and Taxation, Deventer, the Netherlands.
- 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 (6), 550–566.
- Zhang, C., Henke Jr., J.W., Griffith, D.A., 2009. Do buyer cooperative actions matter under relational stress? Evidence from Japanese and U.S. assemblers in the U.S. automotive industry. Journal of Operations Management 27, 479–494.