STRATEGIC MANAGEMENT MEETS THE ECONOMICS OF RELATIONAL CONTRACTS

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Abstract

For many firms, designing governance structures for their inter-organizational relationships is a key strategic challenge. Strategic management and other management scholars have successfully applied concepts from sociology, economics, and organization theory to analyze this challenge. Despite their attention to the relational dimension of governance, however, these scholars have drawn very little from a stream of economics research that directly addresses relational governance and has become established in that field: namely, the economics of relational contracts. In this essay, we discuss what the economics of relational contracts can add to management studies of the governance of interorganizational relationships. We explain how the economics of relational contracts sheds light on the relative roles of, and interactions between, the shadow of the past and the shadow of the future in supporting interorganizational collaboration. In so doing, we suggest how economic models of relational contracts can radically change the interpretation of observations that management scholars have made about collaborative relationships they have studied. We also show how the economics of relational contracts literature can contribute to the extended debate about whether and when contracts are substitutes or complements for unwritten agreements. Finally, we discuss implications for the ways in which the economics of relational contracts can help us to better understand the governance of inter-organizational relationships.

Keywords

Relational governance; contractual governance; relational contracts; strategic management; economics

Introduction

A major theme in the strategic management literature over the past 30 years is that collaborating with other organizations is an important strategy for firms to improve their performances (Reuer, Ariño, Poppo & Zenger, 2016; Ring & Van de Ven, 1994). Strategic management scholars have therefore paid significant attention to the governance structures that firms use to support such collaboration; namely, contractual governance, which is based on agreements that can be enforced by courts and other third parties (e.g., arbitrators, neutral experts, alliance boards and committees); and relational governance, which involves agreements grounded in repeated interaction that are enforced by the collaborating firms themselves. Hundreds of studies in strategic management, economics, marketing and other fields have examined the roles of contractual and relational governance (for reviews, see Cao & Lumineau, 2015; de Figueiredo & Silverman, 2017; Poppo & Cheng, 2018; Roehrich et al., 2019).

While research in these fields largely agrees on what contractual governance involves, there are significant differences in how strategic management and economics understand relational governance. The strategic management literature follows Macneil (1980) in treating relational governance as an arrangement in which the collaborating parties rely on trust, shared norms, and mutual obligations to ensure mutual cooperation and adaptation (e.g., Zaheer, McEvily & Perrone, 1998). In contrast, the economics literature understands what it calls "relational contracts" as based on discretionary economic rewards and penalties that are contingent on actions and outcomes observed by the parties themselves, but may not be verifiable by courts and other third parties (e.g., Baker, Gibbons & Murphy 1994, 2002; Klein 1996; Levin 2003). These economic incentives help to achieve cooperation in the relationship, and are privately enforced by the shadow of future interactions between the parties. The reason for self-enforcement is that such incentives are difficult to specify in a contract with the degree of precision and definiteness that would satisfy an outside enforcement body such as a court or arbitrator (Scott, 2003).[1]

The strategic management and economics literatures that pursue these alternate approaches to relational governance have mostly proceeded in parallel; neither draws much from the other.[2] In this essay, we argue that this lack of cross-fertilization has resulted in missed research opportunities. We suggest several ways in which a better understanding of relational contracts as studied in economics can sharpen and deepen research on interfirm relationships in strategic management. We believe, of course, that the reverse is also true: research in economics could benefit from better understanding the approach to relational governance in management research. We nevertheless choose to focus on how economics can contribute to management because here we aim to address strategic management scholars more than economists. We briefly discuss potential insights from management research for economics in the conclusion.

There are important reasons why strategic management scholars should take the economics of relational contracts more seriously. For example, at the beginning of many interfirm relationships, the firms in question by definition have no history of working together, and therefore little basis to cooperate based on that history. Designing a set of self-enforcing economic incentives may therefore be an important way to jumpstart a long-term exchange relationship. By incorporating relational contracts into strategic management research, scholars

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[1] Examples of the kinds of subjective incentives featured in the economics of relational contracts include a seller's promise to accept post-delivery payments from reliable clients (Antras & Foley, 2015), or to grant voluntary discounts and subsidies to cooperative and flexible distributors (Zanarone, 2013; Barron, Gibbons, Gil & Murphy 2020). We explain further below.

[2] This economics of relational contracts literature builds upon early repeated-game models of self-enforcing agreements (e.g., Axelrod, 1984; Telser, 1981). While some classic papers in strategy did apply the early models' idea that the shadow of the future matters (Heide & Miner, 1992; Parkhe, 1993), the recent literature in strategy and related fields has largely overlooked the richer and more subtle predictions of economic models of relational contracts.

can therefore provide insights into how firms can establish and foster cooperation in the absence of prior relational history. Our essay also responds to Reuer's (2024) call for strategic management scholars to examine mechanisms of governance that go beyond traditional approaches.

In what follows, we explain that the economics of relational contracts can offer new ways to interpret observed cooperation in interfirm relationships. We also provide ideas for improving our measures of behavior in, and performance of, those relationships. In addition, we discuss how the economics of relational contracts can shed new light on a significant debate in strategic management and related fields; namely, whether and when exchange agreements enforced by third parties are substitutes or complements for self-enforced ones (e.g., Cao & Lumineau, 2015; Poppo & Zenger, 2002). This question has received so much attention because it carries important implications for how managers should govern their interfirm relationships; for example, when relational governance is feasible, should managers still pay attention to the design of contractual provisions and governance mechanisms (such as boards and alliance committees) that facilitate third-party enforcement? The economics of relational contracts offers non-obvious insights about when these formal mechanisms crowd out self-enforcing agreements grounded in repeated interactions, and when not.

Finally, we explain how the economics of relational contracts can inform another important debate in the strategic management literature; namely, the debate on the relative importance of the shadow of the past and the shadow of the future in stimulating cooperation in interfirm relationships (e.g., Poppo et al., 2008; Poppo et al., 2016). The shadow of the past refers to cooperation based on a shared history. Management scholars typically associate it with cooperation mechanisms other than incentives, such as trust that does not involve calculation

(Williamson 1996) and relational norms. On the other hand, the shadow of the future reflects incentives for cooperation that are grounded in the continuation of a valuable relationship in the future. We explain how the economics of relational contracts offers new ways to interpret and compare the two shadows, and how some of these insights challenge the conventional wisdom in management. For example, a shared history between partners in an interfirm relationship may support incentive-based governance rather obviate it.

We begin by briefly reviewing the literatures on interfirm governance in management fields, broadly considered, and in economics. Because one of our aims is to contribute to debates on the relationship between contractual and relational governance, we discuss both. Following this overview, we discuss how the economics of relational contracting can add value in strategic management, and how it can guide future empirical research.

Management and Economics Approaches to Interfirm Governance

Management

Scholars in strategic management and related fields such as marketing and supply chain management have been highly influenced by legal scholar Stewart Macaulay's argument that contracts play a limited role in business transactions, and that non-contractual relationships are more important (Macaulay, 1963). Until relatively recently, therefore, management scholars relegated the study of contracts to the background, emphasizing instead how social ties between partners facilitate collaboration (e.g., Bradach & Eccles, 1989; Granovetter, 1985; Powell, 1990). Their approach to "relational governance" emphasizes the roles of trust and shared social norms in stimulating mutual cooperation in ongoing interorganizational relationships (e.g., Dyer & Singh, 1998; Lusch & Brown, 1996; Zaheer et al., 1998). While trust involves the belief that a partner is sincere and will not try to harm or trick the focal firm (Lewicki et al., 1998), relational norms are shared expectations about the behaviors of each party (Cannon, Achrol & Gundlach, 2000; Heide & John, 1992). Two of the main sociological theories underpinning this research are Relational Exchange Theory (Macneil, 1980; Palmatier et al., 2007) which emphasizes norms and atmosphere, and Social Exchange Theory (Blau, 1964; Cropanzano & Mitchell, 2005) which emphasizes reciprocity. Many sociologically-oriented scholars thus argue that trusting and socially embedded relationships can operate as effective governance mechanisms to attenuate collaboration risks (Macaulay, 1963; Macneil, 1980), support coordination, and facilitate information exchange between partners (Lavie et al., 2012; Zhou & Xu, 2012).[3]

A stream of management research on alliances and joint ventures, does however, study the determinants of equity and other terms in those arrangements, drawing largely on transaction cost theory (e.g., Beamish & Banks, 1987; Contractor & Lorange, 1988; Hennart, 1988; Pisano et al., 1988). Further efforts aim at understanding various elements of contract structure, including overall contractual complexity (Reuer, Ariño & Mellewigt 2006) and specific contractual provisions (e.g., Anderson & Dekker, 2005; Argyres, Bercovitz & Mayer, 2007; Luo, 2002; Ryall & Sampson, 2009).

More recently, strategic management scholars have turned their attention to the contractual delegation of authority to structural interfaces dedicated to collaborations, such as technical and legal third parties in licensing partnerships (Duplat & Lumineau, 2016), boards of directors in equity-based partnerships (Reuer, Klijn & Lioukas 2014) and steering committees in non-equity-based partnerships (Reuer & Devarakonda, 2016). These governance mechanisms

[3] To ease exposition, we hereafter collapse "attenuation of collaboration risks," "support of coordination," and "facilitation of information exchange" into one catch-all term: "cooperation."

enable partner firms to establish clear decision-making processes and delineate responsibilities, which can be particularly beneficial in managing conflicts.

A third stream of research attempts to integrate the contractual and relational governance approaches discussed above by investigating the interplay between them. Poppo and Zenger's (2002) study has been particularly influential, finding that rather than substitute for each other, as had been widely suggested (e.g., Gulati, 1995; Malhotra & Murnighan, 2002; Ring & Van de Ven, 1994), contractual and relational governance mechanisms complement one another. Cao and Lumineau's (2015) meta-analysis identifies 149 quantitative studies of the interaction between relational and contractual governance published in management between 2002 and 2014. The most recent work in this stream analyzes boundary conditions and contingencies for the complementary vs. substitutive relationship between contractual and relational governance, including legal contexts (Zhou & Poppo, 2010), cultural considerations (Cao, Li, Jayaram, Liu, & Lumineau, 2018; Handley & Angst, 2015), and temporal factors (Keller, Lumineau, Mellewigt, & Ariño, 2021).

Economics

Early contributions to the economics literature on interfirm collaborations focused on contractual governance, extending agency and transaction cost theory to explore incentive provisions in franchising (e.g., Battacharyya & Lafontaine, 1995; Lafontaine, 1992), and holdup and adaptation hazards in buyer-supplier contracts (e.g., Crocker & Reynolds, 1993; Joskow, 1987; Masten, 1984). Lafontaine and Slade (1997, 2013) offer extensive reviews of this literature. The literature on relational contracts borrows from the agency literature the idea that certain dimensions of performance, such as effort or human capital investment, cannot be verified and enforced by third parties (e.g., Bull, 1987; MacLeod & Malcomson, 1989; Shapiro

& Stiglitz, 1984; Telser, 1981). At the same time, it borrows from the incomplete contracting literature the idea that it is often too costly to contractually specify performance under all possible contingencies, implying that holdup and imperfect adaptation may occur. However, while the agency and incomplete contracting literatures emphasize sophisticated formal contracts as a solution to these problems (e.g., Hart & Moore, 1988; Holmstrom & Milgrom, 1991), the literature on relational contracts emphasizes self-enforcing agreements sustained by implicit incentives and the threat of termination. Influential models in this literature typically assume that transaction partners agree at the outset on the terms of the relational contract – that is, desired actions and rewards that follow cooperation, at every stage of the relationship, as well as "punishments" in case of breach (e.g., Baker et al., 2002; Levin, 2003).

After agreeing on the terms of the relational contract, partners play an infinitely repeated game with each other. In any given period, if a firm honors the agreement, it receives the agreed-upon reward (e.g., a bonus, a price upgrade, increased business) from its partner. However, if a firm fails to take an agreed-upon action or honor an agreed-upon reward, the relational contract ends or is temporarily suspended. During such a "punishment phase," partners revert to "spot exchange," defined as a one-shot exchange governed by arm's length contracting with no expectations for future exchanges. Thus, in the typical relational contracting model, parties agree on actions and incentives that maximize their joint surplus, subject to the constraint that such actions and incentives are self-enforcing. That is, that the parties' joint gains from continuing the relational contract, net of the payoff they would receive under arm's length contracting, offset their present reneging temptation (Baker et al., 1994, 2002).

This framework predicts that performance and relational incentives improve as the condition for self-enforceability becomes easier to satisfy. As future interactions become more valuable to the parties, arm's length contracting becomes less attractive, and the present gains from reneging become smaller. The framework can also deliver subtler predictions regarding the dynamics of relational contracts, such as the rationales for "forgiveness," or alternating of cycles of collaboration and punishment (Li & Matouschek, 2013), following poor performance. Another such prediction regards the strengthening of relational incentives over time, as uncertainty about the value of the relationship and the feasibility of self-enforcement are resolved (Halac, 2012). Recent empirical papers have found evidence consistent with the operation of these mechanisms (e.g., Barron et al., 2020; Gil et al., 2022; Gil & Marion, 2013; Macchiavello & Morjaria, 2015, 2021; see also the reviews by Gil & Zanarone, 2017, 2018).

Despite the theoretical and empirical successes of modern economic models of relational contracts, however, they have yet to make a substantial impact on the strategic management literature. We now develop several key insights that these models can offer to strategic management. We first discuss implications related to trust and norms vs. economic incentives in relational governance; second, we turn to implications related to the interaction between contractual and relational governance.

Trust and Norms vs. Economic Incentives in Relational Governance

Strategic management scholars, as well as those in marketing and other fields of management, tend to emphasize trust and norms as the key drivers of interfirm cooperation. As Williamson (1996) pointed out, the way these concepts are usually employed assumes that when firms cooperate out of trust or according to norms, they do not try to assess incentive compatibility – that is, whether their counterpart has an economic incentive to honor their trust or reciprocate their cooperation. Firms instead assume that their partner will cooperate due to a history they share, or due to the larger social context in which the transaction takes place (e.g., Zucker, 1986). In economic models of relational contracts, on the other hand, firms formulate a cooperation strategy by considering their own and their partner's economic payoffs from cooperating or not at each stage of the relationship, and discount future payoffs appropriately. Mutual cooperation is thus generated by calculating an optimal level of economic incentives, subject to the constraint that these incentives be sustainable (i.e., self-enforcing).

Whether and when trust and norms are more important drivers of cooperation in interfirm exchanges than economic incentives, or vice versa, are obviously important questions. Besides their conceptual relevance, these questions bear critical implications for how much managers should rely on accumulated trust and institutionalized norms versus designing and executing incentives when planning the governance of interfirm exchanges. This is especially important when considering which types of exchanges may prioritize one set of governance mechanisms over the other. Through the discussion of paradigmatic examples, we argue below that only by taking economic models of relational contracts seriously can strategic management scholars answer these questions.

Strategic management research on the governance of interfirm exchanges that draws on older economic theories assumes that partners are engaged in constant calculation – i.e., calculation at every point in the exchange (e.g., Poppo et al., 2016). This assumption has important implications for both empirical testing and management practice. Regarding testability, the assumption implies that one can infer the relative importance of trust and norms versus incentives in interfirm governance from the degree of calculativeness of the managers in charge of a given collaborative relationship (Williamson, 1996). Regarding managerial implications, the calculativeness assumption suggests that incentive-based governance could be extremely costly, and hence inferior to governance based on trust and norms, due to the repeated assessment and interpretation efforts it requires from managers at the partner firms.

The modern economic models of relational contracts imply, however, that both of the above conclusions are mistaken. In these models, calculation and assessment of incentive compatibility conditions only takes place *ex ante*, in the initial design of the relational contract between partners. Therefore, one cannot infer the relative importance of trust and norms in governing the relationship from observing the absence/presence of calculation ex post (that is, after the exchange relationship has already begun). In relational contracting models, collaborating firms agree upfront to a set of contingencies or "states of the world" in which high cooperation is self-enforcing given the value of future interactions (e.g., Baker et al., 2002, 2011; Levin, 2003; Li & Powell, 2020). Partners also agree that in the remaining states, high cooperation is not sustainable and hence not required. Once the terms of the relational contract are agreed upon (and the initial costs of incentive design and calculation are sunk), managers or employees at the collaborating firms need not reassess the costs and benefits of honoring vs. reneging on their agreement every time one of the states in the "high cooperation set" occurs. Instead, they simply recognize that the realized state is covered by the interorganizational relational contract and cooperate accordingly, thus saving on cognitive/calculation costs. Importantly, this is true even if managers believe their collaboration to be driven by economic incentives rather than shared values and norms.

The economics of relational contracting framework therefore implies that cooperation can be simultaneously non-calculative (in the sense that partners do not re-assess rewards and punishments for every contingency or transaction) and incentive-driven (in the sense that whether the set of high cooperation states is large or small depends on the value of the relationship and the shadow of future rewards and punishments). This is because parties are assumed to invest *ex ante* in the design of principles and mechanisms that enable rapid, non-calculative updates of cooperation within the spirit of the contract (e.g., bonuses, promotions, inspections, and the conditions that lead to termination). The return on these investments is cooperation at low cognitive/managerial costs. If this logic of relational contracting models is correct, governance and incentive tools need not compete with the goal of reducing the costs of calculation, and should not be downplayed in the hope that a firm's trust in its partner will always be honored.

Insight 1: Ex ante calculation does not imply ex post calculation.

This insight has important implications for management research on relational governance. First, future studies should conceptually separate the issues of calculation vs. non-calculation from trust/norms vs. economic incentives. This will help scholars to better identify whether interfirm cooperation is driven more by trust and norms, or more by economic incentives, without assuming that the absence of calculation implies that the former are more important. Second, if directly measuring both mechanisms is difficult, researchers could combine partial measurement of the mechanisms with measurement of *ex post* behaviors to develop a reliable test. For instance, observing that the extent of non-calculative trust is insensitive to the presence of economic incentive mechanisms and/or the scope of the collaboration (i.e., the number of "states" covered by the relational contract) would be consistent with relational governance based on trust and norms, and inconsistent with incentive-based governance.

Empirical studies published in both economics and management journals offer examples of how to measure the extent of relational incentives through proxies for the expected value of a collaborative relationship. For instance, Gil and Marion (2013) measure the expectation of future interactions between contractors and subcontractors in public procurement projects through the number of forthcoming auctions announced by the agency. Other scholars have used proxies for the parties' present gains from reneging on a relational contract as a lower bound for the present discounted value of their relationship. For example, in their study of the relationships between Kenyan flower exporters and their international clients, Macchiavello and Morjaria (2015) measure the exporter's gain from breaching a relational delivery agreement with the client based on the revenue the exporter could obtain by selling on the spot market. In their study of the U.S. airline industry, Gil et al. (2022) measure a regional airline's gain from not giving landing slots to its major airline partner in the event of adverse weather through the extent of adverse weather across the routes the regional operates for the major. In measuring the continuation value of a relationship through the parties' present temptation to defect, these studies exploit the fact that in a self-enforcing agreement sustained by the shadow of the future, the former must be at least as large as the latter.

In the strategic management and related literatures, trust/norms-based views of relational governance are usually associated with the shadow of the past – that is, accumulated interactions that lead to the development of trust and the operation of shared norms of reciprocity (Dyer & Chu, 2000; Gulati, 1995; Ring & Van de Ven, 1994).[4] In contrast, incentive-based views of relational governance are associated with the shadow of the future – that is, the expectation of future interactions that strengthen the threat of termination as a relational incentive tool (Lumineau & Oxley, 2012).[5] A logical implication of these two polar approaches is substitution between trust and norms on the one hand, and economic incentives on the other: if one observes

[4] Exceptions include Blomqvist and Cook (2018) and Meyerson, Weick and Kramer (1996).
[5] A recent exception is Fahn (2023), who develops a model where relational incentives sustained by future interactions coexist with and interact with norms of reciprocity sustained by social preferences.

a positive association between the extent of past interactions and the degree of cooperation in a set of interfirm relationships, then it must be the case that trust and norms are more important governance mechanisms than economic incentives in those relationships.

There is empirical evidence, however, that does not support this conclusion. Using cross-sectional survey data on buyer-supplier relationships, Poppo et al. (2008) find that past interactions positively affect trust between buyers and suppliers only when the relationship is expected to continue in the future. Gil and Marion (2013) conduct a similar test using longitudinal data and an instrumental variable approach for identifying the causal effect of the shadow of the future, and find similar results. Both articles therefore suggest that past and future interactions complement each other in developing incentive-based governance.

Economic models of relational contracts provide potential theoretical rationales for this complementarity. An important insight from information economics is that observing an individual's past behavior improves one's information on that individual's characteristics through belief updating. Building on this insight, Halac (2012) shows that past interactions can improve incentive provision in relational contracts. Specifically, she shows that when a partner (say, a buyer) has private information about the future value of her relationship with the other (say, a supplier), the uninformed partner cannot credibly offer high-powered incentives at the beginning of the relationship. As time goes by without buyer default, however, the supplier positively updates her information about the buyer's continuation value, and as a result, the buyer can credibly increase incentive power and elicit better performance. Eventually, incentives grow large enough that bad buyers (i.e., those with low continuation value) end up defaulting on their supplier. Consequently, weak relationships terminate, and strong relationships can switch to even stronger incentives and collaboration.

Models such as Halac (2012) suggest that, consistent with the empirical evidence mentioned above, the accumulation of past interactions goes hand-in-hand with improvements in relational incentives – that is, a long shadow of the past magnifies and sustains the effect of a long shadow of the future. These models also suggest more detailed mechanisms through which the shadow of the past complements the shadow of the future, which management scholars could test in future work. For instance, it should be possible to use internal company records or survey data to measure the strength of interfirm relational incentives over time, as in Barron et al.'s (2020) study of movie distribution, and to verify whether past interactions and relationship continuation value positively interact in increasing the size of such incentives. Economic models also suggest that because the shadow of the past can be part of an incentive-based relational governance, empirical research aiming at isolating the effect of relational governance based on non-calculative trust and norms should not hinge on the importance of past vs. future interactions.

Insight 2: Past interactions can complement incentives, not only substitute for them.

Interaction between Contractual and Relational Governance

As discussed above, the management and economics literatures have both explored whether contractual and relational governance are substitutes (i.e., the use of one type of governance decreases the benefits from the other) or complements (i.e., the use of one increases the benefits from the other). These literatures are extensively reviewed by Cao and Lumineau (2015) and Gil and Zanarone (2018). However, while management scholars have mostly investigated the interplay of contractual and relational governance over time, economists have focused on their substitution vs. complementarity across different institutional settings.

Early work on this topic in the strategic management literature include studies supporting substitution (e.g., Das & Teng, 1998; Dyer & Singh, 1998; Lui & Ngo, 2004; Malhotra & Murnighan, 2002) and other studies supporting complementarity (e.g., Liu et al., 2009; Poppo & Zenger, 2002; Ryall & Sampson, 2009). More recently, management scholarship has moved away from this "either/or" debate to analyze *when* contractual and relational mechanisms substitute or complement each other, with an emphasis on the dynamics of governance mechanisms. Drawing on a rich tradition of processual research on interorganizational collaboration (Ariño & de la Torre, 1998; de Rond & Bouchikhi, 2004; Doz, 1996; see Majchrzak, Jarvenpaa, & Bagherzadeh, 2015 for a review), the management literature has emphasized the role of the temporal context and, in particular, the influence of distinct types of behavioral and environmental uncertainty at different stages of interorganizational relationships (Oliveira & Lumineau, 2017; Keller et al., 2021).

Economic models of relational contracts instead take a comparative static perspective, and ask whether the availability of court-enforceable contracts makes relational contracts more or less effective. The interplay of contractual and relational governance was discussed in early papers by Klein and coauthors (e.g., Klein, 2000; Klein & Murphy, 1988), and more formally and comprehensively analyzed in a series of papers by Baker, Gibbons and Murphy (Baker et al., 1994, 2002, 2011).[6] These analyses contain two main insights. First, contracts facilitate relational governance when they reduce the parties' present gains from defecting on relational incentives. This effect may occur because contractual incentives enable parties to achieve a given level of cooperation with lower, and hence easier to sustain, relational bonuses (Baker et al., 1994); or because cleverly designed contractual provisions may enable one party to immediately punish

[6] Related research includes Argyres, Bercovitz, and Zanarone (2020), Baker et al. (2011), Battigalli and Maggi (2008), Kvaloy and Olsen (2009), and Zanarone (2013).

the other upon defection by enforcing the contract (Klein, 2000). Second, and less intuitively, contracts hamper relational governance when they make arm's length contracting too attractive as a fallback option, thereby weakening the future punishment that termination of relational contracting inflicts on defectors.

To understand both of these insights, consider the following analytical example inspired by Baker et al. (1994, 2002, 2011). A supplier (S) promises to cooperate with a buyer (B) by taking an action at cost c that cannot be verified and hence enforced by a third party. Cooperation generates present discounted surplus V, such that the relational contract is self-enforcing if this surplus outweighs S's present gains from defection (i.e., avoiding *c)*:

$$V \geq c. \tag{1}$$

Suppose now that B and S have the opportunity to sign a contract that can be enforced by a third party but is imperfect, in that all it can do is commit S to an inferior cooperative action, which costs $\underline{c} < c$ to S, and generates present discounted surplus $\underline{V} < V$. If such contract is feasible (and if B and S sign it), a parallel relational contract that prescribes full cooperation is self-enforcing if:

$$V - \underline{V} \geq c - \underline{c}. \tag{2}$$

S's present temptation to defect is smaller under condition (2) than under condition (1) because if S defects on full cooperation, she is contractually obliged to at least provide inferior cooperation. At the same time, under condition (2), the net relationship value from cooperation is smaller because if S defects, her fallback option is to supply under the terms of the court-enforceable contract in future periods, which is more attractive than termination of the relationship. When the cost of inferior cooperation is high relative to the value it creates ($\underline{c} > \underline{V}$), the imperfect contract serves as a threat (Iossa & Spagnolo, 2012; Klein, 2000): the reduction in

S's defection temptation dominates, and contractual and relational governance are complements. That is, availability of an imperfect contract makes it easier to enforce a superior relational agreement. When the cost of inferior cooperation is lower than its value ($\underline{c} < \underline{V}$), however, the improvement in S's fallback option dominates, and contractual and relational governance are substitutes. If (1) holds but (2) does not, B would like to "opt out of the legal system" (Bernstein, 1992), that is, to commit not to use court-enforceable contracts that crowd out superior relational contracts.

Insight 3: Whether contractual and relational governance are complements or substitutes depends on the fallback option from failed relational governance.

A natural interpretation of the availability of third-party-enforced contracts -- i.e., the switch from self-enforceability condition (1) to condition (2) -- is in terms of the quality of legal institutions such as contract law and the judiciary. Examples of low-quality legal institutions are courts that enforce contracts but do so slowly or inefficiently (Djankov, La Porta, Lopez-De-Silanes & Schleifer, 2003). According to this interpretation, the presence of imperfect legal institutions facilitates relational contracting when the imperfect court-enforceable contracts that result from such institutions are not an attractive fallback option for the parties, but can be used as a threat ($\underline{c} > \underline{V}$). If instead imperfect court-enforceable contracts provide a relatively attractive fallback option, moderately weak legal institutions hamper relational contracting (relative to a scenario of extremely weak legal institutions, in which no contract can be enforced in court).

In the management literature, only a handful of studies pay attention to the influence of the institutional context on the use of governance mechanisms. In their study of buyer-supplier exchanges in China, for example, Zhou and Poppo (2010) find that when managers perceive that the legal system can protect their firm's interests, they tend to use explicit contracts rather than relational reliability (i.e., the belief that the other party involved in the market exchange will act in a non-opportunistic manner) to safeguard transactions. Their study also suggests that when managers do not perceive the legal system to be credible, they are less likely to use contracts, and instead rely on relational reliability to safeguard transactions associated with specialized assets and environmental uncertainty, but not those involving behavioral uncertainty. In a meta-analysis covering 35 countries, Cao et al. (2018) focus on the role of informal institutions and observe that when a type of governance mechanism is less consistent with a certain national culture, it is less likely to be accepted as legitimate in managing exchange hazards. Overall, the management literature therefore tends to assume that strong institutions can operate as substitutes for relational governance mechanisms.

In contrast, the economics framework described above suggests that contract enforcement and relational governance can be either substitutes or complements. Which relationship is dominant depends on the attractiveness of purely contractual governance as a fallback option following the breakdown of relational governance. While Baker et al.'s predictions regarding the interaction between contractual and relational mechanisms await thorough empirical verification, there is recent evidence consistent with them. In particular, Michler and Wu (2020) study irrigation contracts in Bangladesh, and find that in order to incentivize water suppliers to provide a high quality and reliable service, farmers use court-enforceable crop sharing contracts in communities with strong enforcement institutions, and (presumably relational) fixed-price contracts in communities with weak institutions. This evidence is consistent with complementarity between contractual and relational governance: purely relational contracts are used only when court-enforceable contracts are infeasible.[7]

Understanding the conditions under which strong legal institutions and relational governance substitute or complement each other is particularly important for global strategy. Establishing and managing relational contracts with partners requires effort and, potentially, the sacrifice of efficient "spot market" alternatives (Board, 2011). Thus, it is important for managers of multinational firms to understand whether these efforts and costs become more or less necessary when their firm enters a country with strong legal and contract enforcement institutions, or outsources transactions to suppliers based in that country. We return to these issues below.

Another way in which the economics literature can inform the management literature regarding the interaction between contractual and relational governance is by suggesting more precise empirical tests of their complementarity vs. substitutability under given institutions. Poppo and Zenger (2002) measured contractual governance (the extent of court enforcement) as increasing in the complexity/formality of contractual provisions. They developed a test in which formal contracts and relational governance are complementary if more complex provisions make relational governance more effective, and are substitutes otherwise. Similarly, Ryall and Sampson (2009) interpreted a positive correlation between contractual detail and repeated interaction as complementarity between contractual and relational governance.

In contrast with these kinds of interpretations, economic models of relational contracts imply that contract complexity/formality need not be correlated with the strength of court enforcement. As discussed above, according to economic models the court-enforceable contract

[7] This evidence is only suggestive of complementarity because it is unclear whether, under strong institutions, incentives are determined by crop sharing contracts alone or in combination with relational contracts.

that optimally supports a relational contract may serve as a threat, and hence need not be used in equilibrium. Thus, such a contract may be much simpler (i.e., less formal) than the court-enforceable contract that would be optimal in the absence of relational contracting (e.g., Gil & Zanarone, 2018; Iossa & Spagnolo, 2012; Klein, 2000). For instance, Klein and Murphy (1988) argue that minimum resale prices and exclusive territories create quasi-rents that retailers would lose upon termination. These provisions therefore facilitate self-enforcement, and hence substitute for more detailed provisions directly specifying retailer behavior.

Therefore, Poppo and Zenger (2002) could under-detect complementarity by implying that contractual and relational governance are substitutes when they are really complements. While Poppo and Zenger (2002) find complementarity despite this risk of under-detection, economic models of relational contracts suggest that performing the Poppo and Zenger test on new datasets might be inaccurate.

Future studies could develop a more precise test of complementarity between contractual and relational governance by asking whether a relational contract is more productive when a court-enforceable contract is also used, as compared to the case in which no court-enforceable contract is used. Variations in court quality and enforcement institutions (Antras & Foley, 2015; Johnson, McMillan, Woodruff, 2002; Michler & Wu, 2020) could provide a way to exogenously measure the existence of court-enforceable contracts.

Insight 4: The economics of relational contracts provides precise tests for the substitution versus complementarity of contractual and relational governance by evaluating whether the productivity of a relational contract improves in the presence of a court-enforceable contract, compared to its absence.

Conducting Empirical Studies on Relational Contracts in Strategic Management Research

We have hopefully demonstrated above that economic models of relational contracts offer novel and potentially valuable insights into the governance of inter-organizational relationships. To facilitate the integration of these insights into strategic management research, in this section we provide guidance on conducting empirical studies that properly account for the implications of relational incentive contracts. We do so by discussing four areas of research. This set is in no way exhaustive but is merely intended to spur further thought and research.

Rewards, Penalties, and Their Enforcement

It is generally assumed that to encourage cooperation, interfirm contracts enforced by third parties rely upon rewards and penalties for achieving certain objective performance thresholds (e.g., quantity and quality metrics, delivery timeliness, sales targets, etc.). Relational contracts are more flexible in that they incorporate subjective performance evaluations and discretionary rewards that are difficult for courts to verify and enforce (Gibbons, 2005). [8]

Barron et al. (2020) documented an empirical example of the use of subjective incentives in interfirm contracts in the movie industry. The authors show that movie distributors provided discounts to exhibitors who kept their movies on screen longer despite the availability of more appealing alternatives. Because it is difficult to predict which movies will face strong competition and when, incentives for the exhibitor to show a movie cannot be easily included in the contract signed by the parties at the outset of their relationship. After movies are shown,

[8] Note that even seemingly objective performance measures in contracts are often disputed, and excuses for non-performance are often offered. Such disputes and excuses are also costly and difficult to adjudicate through the courts. Therefore, their effectiveness often relies on the relational context and the ongoing interactions between the parties involved. In many cases, the "shadow of the future" plays a critical role in motivating compliance, as parties may prefer to maintain a positive relationship and avoid the costs associated with legal enforcement. Some studies suggest that certain contractual provisions are more readily enforced privately, and others by courts (Reuer & Ariño, 2007; Hagedoorn & Hesen, 2007).

however, distributors and exhibitors can informally agree on which movies it is desirable to keep on screen, and when doing so is costly for the exhibitor and hence should benefit from a reward.

Barron et al. (2020) also suggest that the cooperation that relational contracts aim to incentivize should not be solely interpreted as the provision of non-verifiable performance, but also as the willingness to flexibly adapt or renegotiate existing agreements under unforeseen circumstances. Such adaptations might include adjusting which movies are shown, for how long, at what price, etc. Similarly, Gil et al. (2022) show that major and regional U.S. airlines with a more valuable ongoing relationship are more likely to flexibly restructure their portfolio of jointly operated routes during an industry-wide crisis.

While this evidence on the use of subjective incentives is insightful, it is limited to a few industries. Broader evidence on the use and design of objective versus subjective performance metrics in interfirm relationships remains scarce, and represents an important opportunity for future research.

Regarding enforcement, strategy scholars should investigate how private sanctions are used to enforce compliance in relational contracts. The nature of these sanctions may vary based on the relationship and desired outcomes. For instance, termination may be used for poor performance seen as cheating, while forgiveness, perhaps combined with a temporary scaling down or suspension of collaboration, may be favored for poor performance attributed to random chance or bad luck.[9] Future research should also compare the ways in which private sanctions are used to the ways in which sanctions are imposed by third parties such as arbitrators, boards, and the like (Reuer, 2024). By focusing on these issues, future strategy research can provide valuable

[9] While termination rights can be formalized in a court-enforceable contract (e.g., Arrunada et al., 2001), it is difficult to precisely specify all the contingencies in which termination is allowed. In legal regimes (like the US) where the standard is termination at will, the threat to terminate an agreement is discretionary and can thus be used as a relational incentive mechanism (Klein, 1980).

insights into the design and management of governance mechanisms, helping practitioners make informed decisions that align with their strategic objectives.

The Interplay between Relational and Contractual Governance

As discussed above, an important research topic in strategic management is the interplay between relational and contractual governance mechanisms. Traditionally, management studies of this issue have focused on the complexity of contracts in repeated interactions. However, we have shown that relational contracting models do not make specific predictions about complexity. Instead, these models make comparative predictions about how contracts should be designed under two alternative scenarios: (a) parties strictly adhere to the contract (arm's length contracting) or (b) parties adhere to the relational contract, and formal provisions are there to facilitate and complement self-enforcement. The optimal contractual design typically differs across these two scenarios, which allows one to develop tests for whether court-enforced contracts complement or substitute for relational ones (Gil & Zanarone, 2018).

To develop such tests, management researchers could develop models that predict the optimal design of formal provisions under the two scenarios in a given industry. Unlike in typical economics papers, these models should be deliberately context-specific rather than general and abstract, their purpose being to guide hypothesis development. Subsequently, data can be used to examine the role that formal provisions tend to play in the focal industries, whether design (b) is more common in long-term relationships, and the association between contract design and performance outcomes. By employing this approach, future strategy research can contribute to a deeper understanding of how relational contracting models impact the design and effectiveness of formal provisions in different relationship contexts.

The Impact of History and Future Expectations

Insight #2 above states that past interactions between partners may complement, not only substitute for, contractual governance. One way to explore this possibility empirically is to study settings in which a focal firm manages similar, repeated exchanges with various partners that differ only in the longevity of their relationships with the focal firm. Economic models of relational contracting would predict that informal economic incentives are more likely to be observed in older relationships, and less frequently observed in newer relationships.

One setting that may be suitable for such tests is business format franchising. In such franchising, a franchisor engages in similar kinds of exchanges with similar franchisees, governed in part by a contractual agreement that is common to all franchisees that signed it in a given year. Franchisees differ, however, in the longevity of their relationships with a given franchisor. Economic models of relational contracting would predict that franchisees with longer relationships with their franchisors are more likely to have been revealed as "relational types," and therefore more likely to qualify for relational governance based on informal incentives. Such incentives might include discounts on royalty payments to franchisees with outstanding sales performance, subsidies on costly store refurbishments, and even implicit leniency in the application of store inspections and compliance with formal contractual requirements (Zanarone, 2013). This is not a prediction that theories of relational contracting based on trust or norms would make, since those theories do not contemplate such incentives.

Relational Contracts in Global Strategy

Future research should also explore the role of relational contracts for firms operating in international markets and engaging in cross-border strategic alliances. For example, how can relational contracts, with their reliance on flexible subjective incentives, long-term relationships, and private enforcement mechanisms, be adapted to countries characterized by different cultural, legal, and institutional environments (Pinkham & Peng 2017; Devarakonda, Klijn, Reuer & Duplat 2021)? How do relational contracts influence the transfer of knowledge, technology, and resources in international alliances? By examining these issues, researchers can shed light on the unique challenges and opportunities of using relational contracts in an international context.

Conclusion

Our contention is that bridging the gap between the economics of relational contracts and strategic management will provide valuable insights into the strategic considerations, performance implications, and managerial practices associated with the use of relational governance in inter-organizational relationships. While the former literature can bring new theoretical perspectives to bear, strategic management scholars have their own strengths to offer.

For example, strategic management scholars can offer valuable insights through qualitative research methodologies that explore the roles of context, complexity, and the nuances of interpersonal relationships in contractual settings. By exploring how firms navigate relationships and power dynamics, they can enrich our understanding of relational contracts beyond what quantitative economic models alone can provide. In addition, incorporation of insights from psychology and sociology, which is common in strategic management, can further enhance this dialogue. For instance, trust, negotiation tactics, and social capital are critical in understanding how relational dynamics influence contract formation and enforcement (e.g., Malhotra & Lumineau, 2011). By integrating these perspectives with perspectives from economics, strategic management scholars can contribute to a more comprehensive understanding of relational governance, and its interaction with contractual governance. We hope that the research agenda we have laid out in this paper will help to spark research in this important direction.

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