

**CONTRACTING AND GOVERNANCE IN ALLIANCES: THE ROLE OF CONTRACTUAL  
COMPLEXITY**

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# **CONTRACTING AND GOVERNANCE IN ALLIANCES: THE ROLE OF CONTRACTUAL COMPLEXITY**

*Contracting and governance related issues are critical for the success of alliances. In this paper we provide a theoretical framework to describe the role and influence of the contractual complexity of alliance agreements for the governance of alliances. We use organizational control theory to explain how the goal incongruence and performance ambiguity among collaborating partners, in conjunction with the complexity of their contractual agreements, affect the form of governance as bureaucracy, market, clan, or adhocracy. We also explain how these antecedents to alliance governance are influenced by asset specificity, prior ties among partners, time boundedness of the alliance, strategic importance, and associated partner search costs. Our research implies that managers who review and control the determinants of contractual complexity, goal incongruence, and performance ambiguity, will be able to identify and employ governance structures that better support their firm's strategic intentions.*

## **INTRODUCTION**

Alliances are an important organizational arrangement to grow revenues. However, many organizations lack the competence to leverage their alliances, a competence that clearly influences the extent to which these alliances can contribute to the realization of corporate strategies. Several studies have shown that firms differ in their ability to deal with alliances (Dyer, Kale, & Singh, 2001; Reuer, Zollo, & Singh, 2002). Poor alliance management capabilities impede expansive and successful collaboration and, ultimately, hamper revenue growth, while organizations that collaborate widely, often develop excellent relational and managerial alliance competences. Superior capabilities are inherent in the structures and practices of the alliance, including, for example, dedicated alliance functions/teams, specific control and management processes, negotiation of contractual terms, and the alliance managers' responsibilities and behaviors that direct the alliance. The partners' ability to successfully manage their alliance is thus interwoven with the contracting and governance arrangements they put in place. In this paper we focus on these key aspects of effectively implementing alliance strategies.

Matters of governance and contracting in alliances are interrelated (Ariño & Reuer, 2006b) and have been recognized to affect overall alliance performance (e.g. Gudergan, Devinney, & Ellis, 2002; Ring & Van de Ven, 1992; White & Lui, 2005). Alliance governance concerns the means of authority and influence that determine the integration of the partners' interests, the use of joint resources, and the relationships of partnering organizations and the alliance team. The governance form refers to the chosen institutional context in which the alliance takes place (Ariño & Reuer, 2006b). Alliance

contracts are usually concerned with the allocation of risks and trading gains, which are a result of exchanges between alliance partners (James, 2000). Partners use the contract to articulate mutual rights and obligations by specifying inputs to the alliance, practices of interaction and problem solving, as well as expected outputs. The alliance contract also defines the scope of the alliance and the partners' individual roles and responsibilities; it can include provisions about claims on intellectual property, limitation of information disclosures, interaction with third parties, non-competing and non-solicitation agreements, and alliance termination. Overall, the contractual arrangements that the alliance partners put in place are related to the alliance governance mechanisms and succeeding governance forms.

Empirical studies also show that different forms of alliance governance occur with heterogeneity in contractual agreements (Lerner & Merges, 1998; Reuer & Ariño, 2007; Reuer, Ariño, & Mellewig, 2006), which are a result of trust or relational quality (e.g. Ariño, de la Torre, & Smith Ring, 2001; Wang & Nicholas, 2005), the specificity of alliance-related investments (Reuer & Ariño, 2007; Reuer et al., 2006), the purpose and type of the alliance (e.g. Lui & Ngo, 2004), and the duration of the alliance (Reuer & Ariño, 2007). These studies assert that underlying relational and situational characteristics of an alliance are a cause of contractual complexity. Furthermore, the studies suggest that the central factor of alliance contracting is the complexity of agreements. Contractual complexity has been defined as a design feature of the partnering firms' contractual agreements that reflects the number and stringency of the provisions employed (Reuer & Ariño, 2003). The underlying dimensions of contractual complexity are rooted in the enforcement and co-ordination functions of the various contractual provisions (Reuer & Ariño, 2007). That is, contractual provisions can be established to enforce that severe breach of, for example, intellectual property rights, entails termination of the alliance or third-party adjudication. Alternatively, contractual provisions can be established to help co-ordinate the alliance, for example, through less stringent and informational provisions regarding the mutual use of resources.

Determinants of contractual complexity include asset specificity, prior ties, time boundedness, strategic importance, and partner search costs (Reuer & Ariño, 2003). Asset specificity relates to the extent of the partners' transaction-specific investments for the alliance; prior ties captures the effect of previous partnerships between the collaborating parties; time boundedness is about the contracted duration to operate the alliance; strategic importance is about the significance that alliance partners

give to their collaborative venture; and, finally, partner search concerns the costs that are associated with finding, analyzing, and negotiating with potential alliance partners.

Although the existing literature (Reuer & Ariño, 2003) significantly increases our understanding of contractual complexity and captures important aspects of contracts between alliance partners, it has not yet been thoroughly studied as an influence on additional aspects of the collaborative relationship, in particular, alliance governance. Reuer and Ariño (2007) tackle this topic when suggesting that priorities and trust among alliance partners does not eliminate the need to negotiate enforcement provisions but does result in contractual provisions that are informational in nature and are geared toward the coordination of the alliance. They further imply that the governance form of alliance may differ depending on the balance of the enforcing versus co-ordinating nature of contractual provisions. This, however, has not yet been examined.

To better understand the link between the contractual complexity of alliance agreements and the resulting governance we also need to consider antecedent factors of alliance governance forms. Governance forms correspond to the institutional context of the alliance and relate to certain cultural and organizational characteristics. According to the organizational control perspective, we can look upon different governance forms in terms of organizational archetypes, namely a market, clan, bureaucracy, adhocracy or any hybrid form of these. These governance forms are influenced by the goal incongruence and performance ambiguity among partners (Cameron & Quinn, 1999; Ouchi, 1980). Organizational control theory is grounded in transaction cost economics and goal incongruence and performance ambiguity are the two sources of transaction costs that help explain the relationship between control and structure in organizations.

Goal incongruence refers to the fact that the goals of alliance partners may not be entirely consistent, describing a state of diverging preferences or a lack of overlapping goals. Hence, each partner could be pursuing distinct objectives so that partners' efforts are unco-ordinated, which leads to unwanted transaction costs and the need to put mechanisms in place that keep partners in line with mutually agreed goals for the partnership. We define goal incongruence as the degree to which the partnering organizations have inconsistent and distinct strategic objectives for the alliance. Performance ambiguity, on the other hand, arises when the measurement of partners' input and output toward the transactions within the alliance is subject to uncertainty. That is to say that performance ambiguity depends on whether input, processes, and output can be standardized in a meaningful way. But

because input and output are not easily measured, for example when the partners' tasks and the outcome of an alliance are intangible, performance ambiguity is high. We therefore define performance ambiguity as the degree to which the alliance partners' contribution and performance within the alliance is unclear and not easily measurable.

Different combinations of goal incongruence and performance ambiguity result in the aforementioned basic forms of governance outlined by the organizational control theory, that is, market, clan, bureaucracy, adhocracy or any hybrid form of these. Although the organizational control perspective does not explicitly consider aspects of contractual complexity, we suggest that it can provide a suitable theoretic underpinning to examine contractual complexity as an additional influence on governance form.

We focus on just this matter by integrating the theoretical and conceptual body of knowledge relating to contractual complexity, governance, and strategic alliances. We present a conceptual framework that firstly clarifies how the antecedents of performance ambiguity and goal incongruence overlap widely with factors that influence contractual complexity. Secondly, our framework clarifies how the influence of antecedents to contractual complexity is not necessarily direct, but mediated through goal incongruence and performance ambiguity. Thirdly, the framework clarifies how contractual complexity, together with goal incongruence and performance ambiguity, determines the alliance governance form. In short, we propose a theoretic explanation for the relationship between contracting and governance in alliances and show how contractual complexity influences the governance form for the partnership.

The foundations underlying our framework are organizational control theory (Ouchi, 1980) and recent theoretical developments on alliance contracts and contractual complexity (e.g. Ariño & Reuer, 2006b; Reuer & Ariño, 2007). We argue, in accordance with organizational control theory, that the alliance partners' goal incongruence and performance ambiguity—here specified as alliance governance and contract conditions—influence the form of governance as bureaucracy, market, clan or adhocracy. We also outline how the contractual complexity characterizing an alliance agreement affects the governance form of the alliance. Further, both contractual complexity and governance and contract conditions are influenced by what we term the alliance setting. The alliance setting includes factors like asset-specific investment within the alliance, prior ties among partners, time boundedness of the alliance, strategic importance, and partner search costs.

This conceptualization contributes to the literature in that it explains the interplay of contractual complexity and governance form in alliances. Although we apply Ariño and Reuers' (2007; 2006) conception of contractual complexity, we propose, in contrast to their conceptualization, that the influence of some of the factors comprised in the alliance setting on contractual complexity is not only direct but also mediated through performance ambiguity and/or goal incongruence (alliance governance and contracting conditions). In addition, we outline how contractual complexity and the governance and contract conditions affect the governance form in alliances. Extending the existing conjectures allows us to better explain how contractual aspects of the inter-organizational relationship relate to the governance of alliances. This will inform the way alliance partners set up contractual and governance arrangements for their partnerships. It will also help alliance partners to achieve their alliance related objectives by finding the best constellation of contractual and organizational control mechanisms. Hence, firms can meet their requirements to protect their investment in alliances by controlling the contractual complexity of their agreements while enabling a governance form and alliance culture that supports their overall alliance strategy.

## **GOVERNANCE THEORIES AND CONTRACTUAL COMPLEXITY**

Governance theories commonly deal with problems that result from the separation of ownership and control in organizations; they explain the role and importance of governance mechanisms that the owners use to influence and control partners, managers, and staff so that their decisions and actions serve the owners' interests. The alliance partners' choice of governance mechanisms results in an individual governance form for the alliance, which represents the institutional context in which the alliance takes place (Ariño & Reuer, 2006b). In this way, governance form corresponds to the organizational structure and culture of the alliance; it is a function of the mechanisms in place and is characterized by, for example, the underlying values and beliefs of people within the alliance team, the formality and centrality of decision-making processes, or the extent to which actions are based on trust. While governance mechanisms and governance form are naturally related, they are both associated with contractual specifications and related complexity.

Various theories have contributed to explaining the role and influence of different mechanisms and forms that occur in the organization of governance relationships. The multifaceted aspects of governance are embedded in, for example, the theory of the firm (Jensen & Meckling, 1976),

transaction cost economics (Williamson, 1985), institutional economics (e.g. North, 1990), and organizational control theory (Ouchi, 1980). We review each of these theories because they make distinct contributions to the understanding of governance form and antecedent influence factors, not only by addressing non-contractual aspects but also the contractual aspects of relationships.

The **agency perspective** is based on a model of economic rationality and potential for opportunism. It assumes that the economic self interest of principals and managers results in goal conflict and creates an agency problem. Within the alliance context, the situation can be aggravated as the interests of multiple principals compete for the attention of the managers/agents. Agency problems can be minimized by imposing rigid control structures upon the agent. Therefore, control, monitoring, and sanctioning mechanisms are put in place so that agents act in a way that best serves the principals' interests. Installing these governance mechanisms requires the alignment of partners' preferences, which is mostly achieved by forming implicit and explicit contracts. While implicit contracts are a result of unspoken mutual expectations, cultural norms, or individual role preferences (Argyris, 1962), explicit contracts are legitimately agreed upon and formalized—for example in regards to intellectual property rights or alliance team member employment contracts (Poppo & Zenger, 2002). Hence, although the contract is a key element in an agency relationship, the large number of studies that take an agency perspective do not examine explicitly the complexity of contracts, but focus on, for example, the distribution of control (Fama & Jensen, 1983), the role of performance monitoring (Jensen & Meckling, 1976), incentive based compensation systems (Hart & Holmström, 1987), or the effects of different ownership structures (Jensen & Meckling, 1976). Hence, notwithstanding the insights that agency theory and related research provide about alliance governance structures, they are silent about how the complexity and stringency of contractual provisions affect the governance relationship. Also, given that the assumption about utility maximization may not apply to all managers (Perrow, 1986), agency theory is unable to explain situations where contracts have a more informing than enforcing nature because of trust among principals and agents stemming from, for example, previous relationships (Reuer & Ariño, 2007).

Overall, agency theory accounts for contractual agreements as a central instrument underlying principal-agent relationships in an effort to align their goals, but fails to explain the complexity of contracts and how that can affect various forms of alliance governance. Agency theory is neither specific in regards to the institutional context as a result of the employed governance mechanisms nor

in regards to the social context in which the alliance is embedded. Consequently, agency theory cannot be relied upon exclusively to understand governance in alliances and its relationship with the complexity of embedded contracts.

**Transaction cost economics** (Williamson, 1975, 1985; 1991) has received much attention in the literature on governance. It describes governance as the structure that supports a transaction between two parties while causing the lowest production and transaction costs. Transaction costs refer to costs of arranging, managing, and monitoring transactions (Kogut, 1988); they increase when a partner behaves in an opportunistic way. Thus, the governance form is seen as a function of the costs that are associated with the exchange. In applying this theory, two basic forms of governance emerge: markets when transaction costs are low or hierarchies when transaction costs are high. In accordance with this perspective, the alliance itself has been acknowledged as an alternative form of governance (Williamson, 1991) because it can have characteristics that evade the problems of markets and hierarchies (Hennart, 1988; Koh & Venkatraman, 1991). More precisely, forming an alliance is a way to avoid internalizing an activity that may otherwise be outside the unique competencies of an organization or too costly to manage (Harrigan, 1988). At the same time, an alliance may reduce transaction costs because partners may stay away from opportunistic behavior in the interest of maintaining the partnership (Jarillo, 1988; Osborn & Baughn, 1990). However, with increasingly specific assets of the alliance, more complex agreements among parties are required to protect assets and to reduce bargaining costs over profits from specialized assets (Reuer & Ariño, 2002). Hence, related research suggests additional factors that affect governance in alliances. These additional factors include the type of transaction activity, the alliance scope, (Oxley, 1997; Oxley & Sampson, 2004), division of labor and the relevance of the alliance for the partnering firms (Reuer et al., 2002), or the costs of alternative partner selection (Reuer & Ariño, 2002).

The transaction cost economic perspective addresses the role of asset specificity, strategic importance of the alliance, and partner search costs, which are also inherent in the conception of contractual complexity. Increasing investments in specific alliance assets, for instance, increases the potential of value losses for partners. To safeguard the consequences of breach and termination and to establish processes that circumvent such threats, partners will negotiate more complex contracts (Dyer, 1997; Poppo & Zenger, 2002; Reuer & Ariño, 2003); hence, the greater the strategic importance of the alliance, the more complex the alliance contract is (Reuer & Ariño, 2003). And, finally, the greater the



costs involved in locating an alliance partner, the more likely are firms to agree on more complex contractual arrangements (Reuer et al., 2006).

However, other factors that relate to the complexity of alliance contracts, like the history of previous ties or the duration of the alliance, are not dealt with in the transaction cost economic perspective; it overlooks, reminiscent of agency theory, the role and importance of the social and relational aspects of the collaboration. That is, the assumption in transaction cost economics is that there are no issues associated with the relationships between people who are involved in a partnership or the different corporate cultures of the participants. This is, however, usually not the case. In fact, alliance team members and their diverse cultural backgrounds often clash, such that the agreement of contracts and the governance form might well be affected. These roles and influences, however, are beyond the transaction cost economic rationale.

In sum, the transaction cost economic perspective offers important insights, but is restricted to the efficiency and cost-minimizing rationales for the roles and influences on contracts in alliances. It only partially addresses the complexity of contractual arrangements, and does not account for the social context in which alliance relationships are embedded.

The **institutional economics** perspective (e.g. North, 1990) views governance in two parts: the institutional environment and institutional arrangements. The institutional environment refers to the underlying formal explicit rules and the informal often implicit rules that guide individual behavior; it is defined as the set of fundamental political, social and legal ground rules that establishes the basis for production, exchange and distribution (Davis, North, & Smorodin, 1971). Factors within the environment that influence governance include investment regulations (Contractor, 1990), cultural differences (Kogut & Singh, 1988; Shane, 1994), and political or investment risks (e.g. Agarwal & Ramaswami, 1992; Kim & Hwang, 1992). These characteristics have a major influence on the form of governance in alliances too; so, for example, alliance partners will adopt more hierarchical governance forms when intellectual property protection is weak (Oxley, 1999). Such transaction-level characteristics can include aspects of contractual complexity such as the strategic importance and duration of the partnership or the role of previous ties among partners. However, these relationships have not been examined from an institutional economic perspective, nor have they been linked to different forms of alliance governance.

Institutional arrangements, by contrast, relate to specific guidelines designed to mediate alliances where the fundamental determinants of governance are property rights and transaction costs. Institutional arrangements address many aspects of contractual complexity and their influence on governance forms—foremost, the role of investment in specific assets. Asset specificity or relationship-specific investments include physical and human capital or intangibles like R&D and firm-specific knowledge or capabilities. When relationship-specific assets are at risk and product markets are weak, mutual co-ordination of investment decisions are more attractive and combined ownership of these assets is more efficient, and hence more hierarchical forms of governance evolve. Hierarchies safeguard specific investments and provide efficient mechanisms to respond and adjust to crucial changes. Compared with decentralized structures, however, hierarchies provide managers with weaker incentives to maximize profits and reduce bureaucratic costs. Furthermore, Carson and co-authors (1999) emphasize the role of trust-based norms that determine the form of governance. Such norms bind parties to a certain conduct and are most adaptive as they can impose governance in areas that are not covered by more formal arrangements like explicit or formal contracts. The notion of trust-based norms emphasizes a social and relational dimension of the institutional economic perspective that could encompass, for example, the role of previous ties as a determinant of contractual complexity. However, these relationships have not yet been examined.

The institutional economics perspective offers an explanation for the role of asset specificity in alliance governance and for aspects of the organizational relationship and their influences on alliance governance; however, it falls short of dealing with other factors, like the history of relationships, strategic importance, and time boundedness, all of which are primarily associated with contractual complexity.

Within the **organizational control perspective**, Ouchi and Wilkins (1980; 1983) link the economic transaction cost perspective with a socio-cultural view and suggest that governance depends on the degree of ambiguity of individual performance (performance ambiguity) and the congruence of the agents' and principals' goals (goal incongruence). While goal incongruence signifies the degree to which preferences among partners diverge or goals are separate, performance ambiguity signifies the inability to capture the partners' intangible contribution in alliance transactions. The theoretical link between goal incongruence and performance ambiguity is grounded in transaction cost economic theory, which suggests that efficient adaptation results when the organizational form that minimizes

transaction costs is implemented (Williamson, 1975, 1985; 1991). Ouchi and Wilkins (1980; 1983) extend this view and its ability to explain the relationship between control and structure in organizations by suggesting performance ambiguity and goal incongruence as the two sources of transaction costs that determine governance form. High levels of goal incongruence and performance ambiguity could lead to unwanted transaction costs and the need to put mechanisms in place that keep partners in line with mutually agreed input, output, and objectives for the partnership. Hence, different groupings of goal incongruence and performance ambiguity lead to three basic forms of governance: (1) markets, which are efficient when performance ambiguity is low and goal incongruence is high; (2) bureaucracies, which are efficient when both goal incongruence and performance ambiguity are moderately high; and (3) clans, which are efficient when goal incongruence is low and performance ambiguity is high. These three governance forms represent substantially different, and often mutually exclusive, mechanisms by which organizations control or influence individual behavior (Ouchi 1980).

Cameron and Ettington (1988) suggest a fourth form, adhocracies. Their typology derives from Jung's (1971) psychological types and Quinn's (1988) competing values model; it encompasses two dimensions: dynamism and internal orientation. Dynamism is characterized by flexibility, individuality, and spontaneity and internal orientation is characterized by a short term orientation, internal maintenance, and smoothing activities. Hence, adhocracy could be said to feature dynamism, individual risk taking, innovation, leadership, and entrepreneurship. Mintzberg (1993) relates adhocracy governance back to the organizational control perspective and implies that adhocracies are efficient when goal incongruence and performance ambiguity are low, and Cameron and Quinn (1999) suggest hierarchy (bureaucracy), market, clan, and adhocracy as four archetypes of organizational culture, which also correspond with the governance forms proposed by Ouchi (1988). We review the characteristics of these governance/cultural forms based on these contributions.

The *market* form is theoretically the most efficient mechanism of control but is rarely found in practice since it assumes a frictionless situation where decision makers have adequate information to make decisions. The market form is like pure market contracting in that information is complete and partners are aware of an explicit competitive price for each task or exchange. There is no need to define processes and measuring efficiency since information is accessible and understandable. The participant's commitment to the organization's objectives is obtained by self interest and based on the price mechanism. *Bureaucracies* involve close personal surveillance and direction of subordinates by

superiors, and the information that is necessary for task completion is contained in the rules. The cost of administration in bureaucracies is typically expected to be high. The *clan* form of governance adds a social or cultural dimension to governance in assuming that in situations of great uncertainty and complexity, managerial control is established through the groups' system of beliefs and perceptions rather than through their behavior or output. Accordingly, the conception of clan governance assumes that individuals are acculturated into a system of controls and meanings. In addition to the performance ambiguity and goal incongruence criteria for clan governance to persist, there needs to be a shared sense of duty to the collective purpose and some shared general paradigm for making sense of the world. Clan governance is also supported by a long organizational history and stable membership, absence of institutional alternatives, and interaction among members. This makes clan governance inherently more flexible and, under circumstances that call for flexibility, more efficient.

*Adhocracies*, finally, represent a highly organic and unordered form of governance. Members within an adhocracy generally perform complex work in small teams with substantial personal communication. Adhocracy governance is designed to be flexible and to be adaptable to rapidly changing environments. Of all governance forms, the adhocracy is least appropriate for the classic principles of management, especially the unity of command (Cameron & Ettington, 1988; Mintzberg, 1979). Bureaucratic organizational standards and processes hamper the adhocracy because of the intrinsic professional values of employees in adhocracies, and the varying and unpredictable demands of the complex tasks they perform.

Goal incongruence and performance ambiguity are related to antecedents of contractual complexity. Goal incongruence is linked to asset specificity through related levels of decision-making uncertainty and trust among alliance members; it relates to partner search costs through associated efforts of strategic goal alignment in the process of finding alliance partners; it relates to prior ties through the degree of behavioral uncertainty and trust among partners; and it relates to the time boundedness of the alliance through partners' ability to better predict environmental uncertainties when the alliance duration is predetermined. Performance ambiguity too, is linked to prior ties through existing experience and trust among partners, and it relates to time boundedness through potentially opportunistic partner behavior in fixed duration alliances.

The organizational control perspective overcomes the major limitations of transaction cost theory and agency theory models in addressing social, cultural, and relational aspects of the governance

relationship. Yet, while the theory emphasizes performance ambiguity and goal incongruence as the major influence on the resulting governance form, it does not explicitly take into account the influence of the number and stringency of contractual provisions between alliance partners. But it provides a comprehensive explanation on how to arrange governance mechanisms for alliances and we argue that performance ambiguity and goal incongruence have apparent associations with antecedents of contractual complexity. Moreover, Arino and Reuers' (2006) conceptualization of contractual complexity and Ouchis' (1980) framework for governance have the same theoretical foundation in transaction cost economics. Both perspectives assume environmental uncertainty, asset specificity, bounded rationality, and the behavioral uncertainty of opportunism to result in transaction costs that determine the characteristics of the relationship between partnering organizations. In aid of these links and the consistency of underlying theoretic assumptions between governance and contractual complexity, it is, in our opinion, plausible that organizational control theory provides a suitable theoretical foundation for a framework that addresses the influence of contractual complexity on the resulting governance form of the alliance.

In conclusion, governance theories provide valuable explanations for a range of aspects and mechanisms that are associated with contractual complexity and governance in alliances. However, none of the discussed theories adequately integrates or explains the existing economic, relational, and behavioral complexities of alliance contracts and their influence on resulting forms of governance.

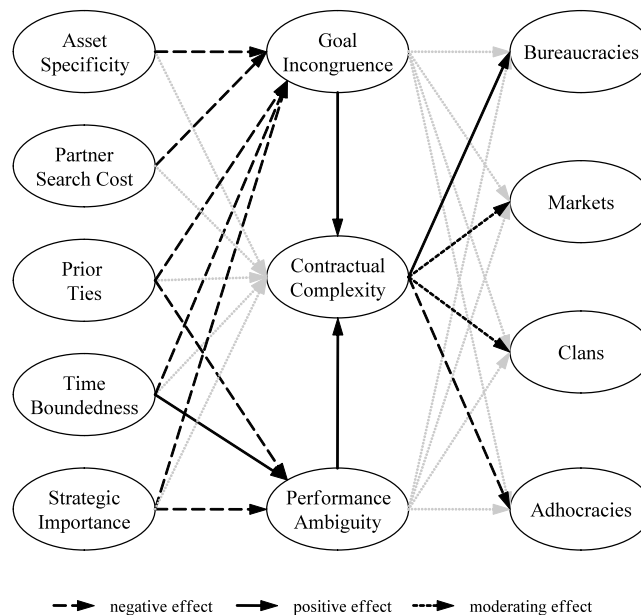
While agency theory accounts for contracts as governance mechanisms, it fails to acknowledge the stringency of contractual provisions and is neither explicit regarding the resulting institutional context nor regarding the social context in which the alliance is embedded. Transaction cost economics is restricted to the efficiency and cost-minimizing rationales for the roles and influences on contracts and falls short to account for the relational history or the duration of the alliance. Institutional economics also overlooks the history of relationships, as well as their strategic importance and time boundedness which are both primarily associated with contractual complexity. Lastly, organizational control theory too does not explicitly explain aspects of contractual complexity, but it does suggest that goal incongruence and performance ambiguity are major determinants of governance form, and goal incongruence and performance ambiguity are related to the factors that underlie contractual complexity. Furthermore, the underlying theoretical assumptions of organizational control theory and recent views on contractual complexity (Ariño & Reuer, 2006b) are consistent and applicable to the

alliance context. Hence, we consider the organizational control perspective a suitable theory to explain contractual complexity as an additional influence on governance form because the factors that determine performance ambiguity and goal incongruence overlap with those influencing contractual complexity.

## ALLIANCE CONTRACTING AND GOVERNANCE FRAMEWORK

In our conceptual framework we combine recent research on contractual complexity (Ariño & Reuer, 2006b) with our adaptation of organizational control theory (Cameron & Ettington, 1988; Mintzberg, 1979; Ouchi, 1980) to explain how contractual complexity in alliances influences the choice and development of governance forms. We discuss (1) the effects of antecedent factors (termed the alliance setting) on goal incongruence, performance ambiguity, and contractual complexity, (2) the effects of goal incongruence and performance ambiguity on contractual complexity, and (3) the effects of goal incongruence, performance ambiguity, and contractual complexity on governance form. A graphical representation of the conceptual framework and the discussed relationships is presented in Figure 1.

Figure 1: Alliance setting, contractual complexity and governance forms



### Antecedents of goal incongruence, performance ambiguity, and contractual complexity

Because the antecedent factors of contractual complexity overlap with those underlying goal incongruence and performance ambiguities, we suggest additional effects of asset specificity, partner

search costs, prior ties, time boundedness, and strategic importance on goal incongruence and performance ambiguity of the alliance. In their seminal work, Ariño and Reuer (2006) propose that antecedent factors have a direct effect on contractual complexity. While investigating the relationships of the alliance setting with goal incongruence and performance ambiguity, we find strong theoretical links between them. These effects of the alliance setting on goal incongruence and performance ambiguity are direct and show that previously suggested direct effects on contractual complexity are indeed to some extent mediated by goal incongruence and performance ambiguity of the partnership. In what follows we discuss in detail the effects of the different factors of the alliance setting on contractual complexity, performance ambiguity, and goal incongruence.

**Asset specificity.** When alliance assets are specific, contracts are complex because partnering organizations intend to safeguard their investment for the partnership by agreeing on more specific agreements in formal contracts (Ariño & Reuer, 2006b) and supporting related governance decisions (Reuer & Ariño, 2002). However, increasing asset specific investment in an alliance is also associated with a better understanding of each other's objectives because the process of contract negotiation and re-negotiation is a process of goal alignment, which leads to lower levels of goal incongruence. Especially when asset specificity is high, alliance partners spend more time and effort on explicitly clarifying mutual objectives and, as a consequence, create more detailed contracts. This is supported by Joskow (1987), who also suggests that as investments increase in their specificity in a particular relationship, contracts become more long term. Long term contractual agreements are a result of careful and thorough goal alignment between contracting partners. Furthermore, Dyer (1996, 1997) finds that high asset specificity in Japanese automotive alliances leads to a reduction of goal conflicts among partners which helped agree on governance mechanisms and reduce transaction costs. Hence, levels of asset specificity influence goal incongruence between collaborating partners through their influence on the duration and intensity of the associated goal alignment process that partners undergo in agreeing on contracts and appropriate governance mechanisms.

While we concur with Ariño and Reuer (2006) that asset specificity influences contractual complexity, we propose that asset specificity also determines goal incongruence and suggest the following proposition:

*Proposition 1: Alliance-specific investments in assets are associated with low goal incongruence between collaborating partners.*

**Partner search costs.** Ariño and Reuer (2006b) argue that the greater the partner search costs, the greater the organizations' incentive to accept the costs of negotiating more complex contractual arrangements since the precise terming of the allocation of responsibility, the designing processes for unforeseeable outcomes, and the general specification of exchanges and remedies will safeguard the costly partner selection process. If, however, partners can easily find an alternative partner, the contract can be fairly simple since the costs of switching to another partner are lower.

Expanding on this argument we suggest that high partner search costs are also associated with the achievement of goal congruence among alliance partners because an extensive partner selection process includes a thorough analysis of the potential partners' capabilities, objectives, and motivation. We suppose that the strategic objectives of the partnering organizations are likely to be consistent following such a substantial effort of analysis and the agreement on terms and conditions for the partnership. Reuer, Ariño, and Mellewigt (2006) provide some support for this argument, since they find that firms which have undertaken a significant search process tend to choose an equity based alliance. A partnership that involves mutual equity commitment not only encompasses greater contractual complexity than non-equity arrangements, but it also represents a significant strategic investment for which each partner is likely to ensure that mutual goals are consistent. Hence, the high cost of finding alliance partners decreases the degree to which partners are inconsistent in their strategic intention for the alliance, that is, the goal incongruence among them. Low partner search costs, on the other hand, do not necessarily precede goal incongruence (or goal congruence), since collaborating parties may agree directly on consistent goals for the alliance, for example, in the case of very few available potential partners or when prior ties exist and a suitable partner is known already. We encapsulate the above in the following proposition:

*Proposition 2: Higher partner search costs are associated with lower goal incongruence among alliance partners.*

**Prior ties.** While organizations that enter new relationships use formal and complex contractual means to protect their interests (Johnson, McMillan, & Woodruff, 2002), prior ties among partners are likely to reduce behavioral uncertainty and result in lower levels of contractual complexity. Ariño and Reuer (2006b) suggest this relationship and find further support in research that shows that repetitive interaction between partners and associated relational contracts can protect the relationship from the consequences associated with one partner resigning from the partnership (e.g. Telser, 1980).



The key aspect underlying the discussion of prior ties is inter-organizational trust. Different studies, however, come to contradicting conclusions regarding the role and influence of trust and its relationship with contracts and governance in alliances. Ring and Van de Ven (1992), for example, examine trust and risk as two important mechanisms to determine governance forms in alliances. They find that levels of risk and reliance on trust among partners change over time, and that partners modify governance structures and accompanying safeguards accordingly. Correspondingly, Lui and Ngo (2004) find that the level and type of trust between alliance partners in non-equity alliances controls the relationship between contractual safeguards and alliance outcomes. Poppo and Zenger (2002), on the other hand, find that relational governance that is based on trustful relations among alliance partners is complemented by formal and possibly more complex alliance agreements. This finding is contrary to the common view that formal contracts undermine trust and encourage the opportunistic behavior they are designed to discourage. Hence, the intricacies of prior ties, underlying levels of trust, and their affect on the formality and complexity of contractual agreements are neither clear-cut nor evident from previous research.

We suggest that inter-organizational trust, inherent in previous ties, is primarily related to goal incongruence and performance ambiguity among partners. Support for this claim comes from, for example, Dyer and Chu (2003), who reveal that trust in supplier-buyer relationships is associated with greater information sharing and ultimately greater value for the exchange relationship. Greater information sharing implies better knowledge about partners' goals (reduced goal incongruence) and the partners' capacity to perform within the alliance (reduced performance ambiguity). Various studies in the field of management (Chow & Holden, 1997; Doz, 1996; Smith, Carroll, & Ashford, 1995; Zaheer, McEvily, & Perrone, 1998) and marketing (Doney & Cannon, 1997; Fram, 1995) also indicate that trust is an important factor in the success of long term relationships. Studies that link inter-organizational trust to motivation and problem solving (Jeffries & Reed, 2000), or that emphasize the role of relational contracts to safeguard long term relationships (Arrighetti, Bachmann, & Deakin, 1997; Gundlach & Achrol, 1993; Joskow, 1987; Joskow, 1990; Leffler & Rucker, 1991) demonstrate that knowledge about alliance partners, and anticipating and understanding mutual actions and related trust can reduce goal incongruence and performance ambiguity.

Accordingly, goal incongruence reduces as a result of prior ties because a history of collaboration leads to an improved perception of mutual strengths, ways of working, and strategic goals, including

those for a possibly recurring partnership. Performance ambiguity is likely to decrease as a result of prior ties because partners can equally consider previous relations, shared knowledge, and related existing levels of trust (Wilkins & Ouchi, 1983), so that when entering a new alliance, any further evaluation of a previous partner's strategic goals and performance will be enhanced based on prior experiences. In sum, we suggest that the influence of prior ties is not primarily on contractual complexity as proposed by Ariño and Reuer (2006), but on goal incongruence and performance ambiguity among alliance partners as well. We encapsulate our view in the following two propositions:

*Proposition 3a: Previous ties between alliance partners are associated with low goal incongruence.*

*Proposition 3b: Previous ties between alliance partners are associated with less partner performance ambiguity.*

**Time boundedness.** In practice, alliances are either open ended or they are agreed for a fixed duration, bound to the achievement of alliance objectives or until a certain point in time. Decisions about time boundedness are influenced by environmental and behavioral uncertainties that alliance partners face when forming the alliance. Ariño and Reuer (2006b) suggest that alliances with a pre-specified duration are likely to negotiate more complex contracts than open ended alliances because they are associated with higher behavioral uncertainty and lower environmental uncertainty. With open ended alliances, on the other hand, it can be costly to predict future environmental uncertainties and agree on adequate contractual provisions. Since alliance partners avoid these transaction costs, they tend to rely on incomplete contracts under environmentally uncertain conditions (Crocker & Reynolds, 1993).

The partners' choice in assigning a specific timeframe to their alliance based on environmental and behavioral uncertainties also alludes to the degree to which their strategic goals are congruent and performance is ambiguous. In following the logic of the argument that Ariño and Reuer (2006b) put forward, we suggest that goal congruence is associated with time bound alliances and goal incongruence is associated with open ended alliances. In time bound alliances environmental uncertainty are reduced so that partners can predict future states and align alliance objectives (Noldeke & Schmidt, 1995). In open ended alliances, on the other hand, uncertainty about future

states is higher and partners rely more on incomplete alliance contracts (e.g. Crocker & Reynolds, 1993) that require re-negotiation and goal alignment when events unfold.

Performance ambiguity is lower in open ended alliances because partners will not jeopardize potential gains from future collaborations by acting opportunistic and pursuing more immediate gains (Telser, 1980). Parkhe (1993), for example, shows that long time perspectives decrease uncertainty regarding potential opportunism. In time bound alliances, on the other hand, performance ambiguity can be greater since an alliance partner can act opportunistically when time beyond the agreed alliance duration is not of strategic importance to that party (Hill, 1990). Reuer and Ariño (2003) provide empirical evidence that time bound alliances tend to rely more on safeguards concerning confidential and proprietary information, alliance termination, and the settlement of disputes by third parties. The following propositions can be stated:

*Proposition 4a: Time boundedness in alliances is associated with lower goal incongruence.*

*Proposition 4b: Time boundedness in alliances is associated with greater performance ambiguity.*

**Strategic importance.** Ariño and Reuer (2006b) suggest that in order to protect strategically important alliances, alliance partners are likely to employ additional resources to negotiate more complete, all encompassing, and ultimately more complex contracts. Their conception follows research that has found that strategically important alliances are likely to involve more complexity (Hagedoorn, 1993), put a greater emphasis on appropriate partner selection (e.g. Harbison & Pekar, 1998), implement alliance management functions (e.g. Kale, Dyer, & Singh, 2002), specify monitoring and control mechanisms as well as procedures that resolve disagreement (Doz, 1996; Ring & Van de Ven, 1994), and engage in more comprehensive contract negotiations (Ring, 2002). We expand on this view and suppose that the strategic importance of the alliance is as significant for goal incongruence and performance ambiguity among alliance partners as it is for contractual complexity.

When forming strategically important alliances, firms are more exposed to the risks that are associated with alliances (Koza & Lewin, 1998; Mitchell & Singh, 1996). Therefore, managers usually strive to fully understand environmental, behavioral, relational, and other situational aspects of the venture in order to reduce risks. The potential risks include external threats, such as competitors who own similar strategic resources (Branstetter & Sakakibara, 2002; Khanna, Gulati, & Nohria, 1998), or

alliance internal threats, such as unwanted knowledge diffusion caused by ambiguous ownership or property rights and additional costs that occur due to a vague definition of the alliance scope (Borys & Jemison, 1989; Oxley & Sampson, 2004). Defining the scope of the alliance refers to the mutual agreement of practices that preserve extensive knowledge sharing among alliance participants. This can be achieved through specific processes and structures of limited, and carefully regulated, knowledge transfer (e.g. Dyer & Nobeoka, 2000; Inkpen, 1998; Swan, Newell, Scarbrough, & Hislop, 1999).

Hence, when an alliance is strategically important and managers strive to reduce associated risks, they are likely to clarify joint strategic objectives and define the scope of the alliance accordingly. The mutual alignment of alliance objectives and the definition of alliance scope decreases performance ambiguity. Hennart and Zeng (2005) too suggest that the control of alliance size, scope, and vertical configuration through tangible processes of learning and knowledge exchange helps minimize goal conflicts, holdup, and knowledge spillover effects among alliance partners. Managing the alliance scope not only helps partners reduce alliance risks, it also results in a consistent perception of the objectives for and mutual contributions to the alliance. Besides, since the strategic importance that a firm gives to its alliance is also reflected in the firm's attitude and commitment to it (Deeds & Hill, 1998), we argue that both goal incongruence and performance ambiguity are likely to be lesser when alliances are strategically important and alliance scope is defined.

*Proposition 5a: Strategic importance of alliances is associated with lower goal incongruence.*

*Proposition 5b: Strategic importance of alliances is associated with lesser performance ambiguity.*

### **The effects of goal incongruence and performance ambiguity on contractual complexity**

When alliance partners negotiate and agree on contractual provisions, they take into account the extent to which their strategic objectives are corresponding as well as whether they are able to assess mutual contributions to the alliance or learn from each other (e.g. Doz, Olk, & Ring, 2000; Hennart, 1988). These two central aspects of inter-organizational collaboration are captured by the alliance partners' perception of goal incongruence and performance ambiguity. We suggest that in addition to asset-specific investment, prior ties, time boundedness, strategic importance, and partner search costs (the alliance setting) that Ariño and Reuer (2006b) find antecedent to contractual complexity, there

are also links of goal incongruence and performance ambiguity with contractual complexity. Based on these relationships and the previous stated propositions regarding the effects of the alliance setting on goal incongruence and performance ambiguity, we further suppose that goal incongruence and performance ambiguity mediate the influence of the alliance setting on contractual complexity.

Goal incongruence affects contractual complexity because alliance partners are likely to first achieve consistency and mutual understanding of objectives and then enter negotiations of detailed or suitably stringent contracts in order to safeguard their interests. Put simply, when goal incongruence is low, contractual complexity is low, while in the case of significant goal incongruence potential partners would either decide to not enter the alliance or agree on complex contracts. Performance ambiguity, on the other hand, affects contractual complexity because contract negotiation is more complex when it is difficult to measure outcomes or evaluate transactions (Barzel, 1982) and when tasks have little predictability (Demsetz, 1988). When outcomes of the alliance are easily measurable and tasks are predictable, the complexity of contractual agreements, associated transaction costs, and the likelihood of re-negotiation are low (Eisenhardt, 1985). So, when performance ambiguity is high, contractual complexity is high, and when performance ambiguity is low, contractual complexity is low.

Further, according to organizational control theory, contracts can be very simple either when goal incongruence is reduced or when contracts are left deliberately incomplete because performance is unverifiable (Bernheim & Whinston, 1998). Hence, when it is difficult to distinguish partners' contribution to the alliance and when input, processes, and outcome are uncertain (Alchian & Demsetz, 1972), alliance partners require more and detailed contractual safeguards to balance the uncertainty about the collaborating partners' capabilities and performance. Accordingly we argue that high goal incongruence and high performance ambiguity within an alliance are associated with high contractual complexity. We encapsulate the above in the following propositions:

*Proposition 6a: Greater goal incongruence in alliances is associated with greater contractual complexity.*

*Proposition 6b: Greater performance ambiguity between alliance partners is associated with greater contractual complexity.*

Transaction cost economics suggests that factors like asset-specific investments, incentive alignment, and loyalty (Alchian & Demsetz, 1972; Ouchi, 1979; Williamson, 1975) help reduce goal incongruence. Moreover, organizational control theory puts forward that goal incongruence and

performance ambiguity can be reduced through increased efficiency of the exchange as a result of cultural control (Ouchi, 1980; Wilkins & Ouchi, 1983). Cultural control refers to a common set of beliefs, meanings, and values among individuals that helps alliance members develop effective habits, conventions, and routines for their daily practice (DiTomaso, 1987; Scott, 1998). Cultural control requires time to evolve and might not be immediately effective in safeguarding opportunistic behavior when alliance partners have no relational history. However, in cases of previous ties, cultural control can result in lower goal incongruence and performance ambiguity, leading to less complex contracts.

Further, when partner search costs are high, firms may achieve very low goal incongruence (goal congruence) due to intensive partner evaluation and goal alignment processes, which would result in few or no requirements to establish complex contractual safeguards. However, when partner search costs are high and alliance partners discover significant goal incongruence in the process of evaluation, they would either choose not to enter the alliance or agree on complex contractual agreements to safeguard their interests. The latter case then also indicates a high strategic importance of the alliance, which can lead to increased complexity of contractual agreements. Hence, a significant effort to find a suitable alliance partner also helps achieve a better understanding of the partners' objectives (goal incongruence) and clarity about the partners' contributions to the alliance (performance ambiguity). Whether this effort ultimately results in more or less complex contractual provisions then depends on the degrees of goal incongruence and performance ambiguity amongst them.

Finally, while the influence of time boundedness on contractual complexity is subject to perceived environmental and behavioral uncertainties (Ariño & Reuer, 2006b), we suppose that these environmental and behavioral uncertainties correspond with perceived levels of goal incongruence and performance ambiguity among alliance partners. Hence, the effect of the firms' intention to collaborate for a fixed versus undefined duration on the resulting complexity of contracts is mediated by the degree of goal incongruence and performance ambiguity among them. In sum, the influence that asset specificity, partner search costs, prior ties, time boundedness, and the strategic importance of the alliance have on contractual complexity of the alliance agreement can also be explained through their relationship with goal incongruence and performance ambiguity. We propose the following:

*Proposition 6c: The individual effects of alliance specificity, partner search cost, prior ties, time boundedness, and strategic importance on contractual complexity are mediated by the degrees of goal incongruence and performance ambiguity among partnering organizations.*

### **The effects of contractual complexity on governance form**

So far, in this paper we have discussed that asset specificity, partner search costs, prior ties, time boundedness, and strategic importance are not only factors that determine contractual complexity but also influence the goal incongruence and performance ambiguity among alliance partners. We have further illustrated how goal incongruence and performance ambiguity relate to contractual complexity and we have argued that goal incongruence and performance ambiguity mediate the influence of mutual antecedent factors on contractual complexity. We turn now to the discussion of how contractual complexity can be integrated with theory that explains the occurrence of different governance forms.

Governance form is, according to organizational control theory, a function of goal incongruence and performance ambiguity among partners in an exchange. Accordingly, high performance ambiguity among alliance partners is associated with either bureaucratic or clan governance, while low performance ambiguity is related to market and adhocracy governance. Likewise, high goal incongruence among alliance partners is linked to bureaucracy and market governance, while low goal incongruence is correlated with clan or adhocracy governance. Four possible forms of governance become visible: (1) a market governance form emerges when performance ambiguity is low and goal incongruence is high; (2) a bureaucracy emerges when both goal incongruence and performance ambiguity are high; (3) clan governance emerges when goal incongruence is low and performance ambiguity is high; and finally, (4) an adhocracy governance form emerges when both performance ambiguity and goal incongruence are low.

We propose that the governance form of alliances may differ depending on the complexity of contractual provisions. That is, the various enforcing and co-ordinating aspects of contractual provisions provide guidance beyond safeguarding partners against unforeseen events or partner opportunism (Ariño & Reuer, 2006b) since they, together with goal incongruence and performance ambiguity, influence the governance form of alliances. We discuss high, low, and moderate levels of contractual complexity and derive different effects for each of them.

**High versus low contractual complexity.** Complex alliance contracts consist of stringent provisions to control various aspects of the partnership. This can include, for example, enforcement provisions like a detailed account of property rights and knowledge sharing, or informational aspects like measures of performance for each alliance partner. Poppo and Zenger (2002) assert that complex contracts are more detailed regarding the specification of promises, obligations, and processes for the resolution of disagreements. Complex contracts include details like roles and responsibilities to be performed or specific procedures for monitoring, consequences of non-compliance and description of expected outcomes or output. Complete contracting refers to agreements that are based on the assumption that all potential contingencies that might influence the contractual relation can be known (Bolton & Dewatripont, 2005; Laffont & Martimort, 2002; Salanié, 1997). Furthermore, complete contracting assumes that asymmetric information and different risk preferences among partners can cause failure to achieve mutual objectives. Complete contracting then implies that alliance partners increase the complexity of their contractual agreements by supporting numerous, all encompassing provisions that safeguard their interests (Parkhe, 1993). This overall larger amount and augmented stringency of contractual regulations usually requires an equally increased effort to manage, monitor, and control such mutual requirements and obligations; that is, many different and interconnected contractual agreements need a likewise greater amount of governance mechanisms in place to help ensure that contractual obligations are met.

Bureaucracy governance emerges because partners trust that the more they can quantify and measure activities and performance in terms of means and ends, the more they eliminate the potential for favoritism or whimsical decisions. Hence, within bureaucratic alliances, partners assume that the majority of contingencies can be dealt with by policies, standardized procedures, formal division of responsibility, and hierarchical structures (Mintzberg, 1993), which are typically established within the contractual agreement for the partnership.

Low levels of contractual complexity, on the other hand, mean that there are fewer and less stringent provisions agreed in the contract to control the partnership. Partners may deliberately choose to only agree on a few provisions and not control aspects of the partnership because of high information costs or because contract terms may not be enforceable or are assumed to evolve as the partnership unfolds. Alliance partners may then find it necessary to renegotiate their contracts at some stage, either because they encounter situations in which the contract is silent or where the contract specifies



inefficient terms. Yet, the agreement of less complex contracts also emphasizes the incentive effect of the partners' inability to write complex contingent contracts. That is, while a contractual agreement between alliance partners may only encompass a few agreements for a fraction of the partnership's scope, it can still enforce and entirely safeguard partners' interests for the given situation. A complex contract, in contrast, including less enforcement but more informational provisions, might fail to protect partners' interests because of a lack in stringency of the set provisions. Overall, less contractual complexity seems to give alliance partners more flexibility to experiment with different ways to control and shape the alliance, while at the same time exposing it to more risk involved with uncertain situations.

Formal and complex contractual agreements are rare within adhocracies because intensive informal interaction, spontaneity, casualness, and interpersonal familiarity act as their co-ordinating and integrating mechanisms (Jarillo, 1988). Because of these characteristics, adhocracies rely more on relational contracts (e.g. Bryant & Colledge, 2002; Goldberg, 1976; Heide, 1994; Macaulay, 1963) than on explicit and formal contracts. That is, alliance partners demonstrate more flexibility and solidarity while solving problems because they desire continuity in the relationship, so that increased co-operation, dependency, mutual trust, and commitment make it unnecessary to cover all contingencies in complex agreements (Anderson & Weitz, 1992; Jeffries & Reed, 2000). Low contractual complexity can therefore support the development of adhocracy governance in alliances; it helps foster minimal formalization of procedures, a highly organic structure, and mutual long term relationships (Achrol, 1997; Daft, 1995). It also allows alliance partners to make decisions without the presence of hierarchical structures and policies (Cameron & Ettington, 1988; Mintzberg, 1979).

The interplay of contractual complexity, performance ambiguity, and goal incongruence is associated with different forms of governance. While high levels of contractual complexity, performance ambiguity, and goal incongruence lead to bureaucracies, low levels of contractual complexity, performance ambiguity, and goal incongruence lead to adhocracy governance. In this way, bureaucracy and adhocracy governance represent the two ends of the governance spectrum that result from high and low levels of contractual complexity, performance ambiguity, and goal incongruence.

We encapsulate the above by advancing the following two propositions:

*Proposition 7a: High contractual complexity, high goal incongruence, and high performance ambiguity in alliances is associated with bureaucracy governance.*

*Proposition 7b: Low contractual complexity, low goal incongruence, and low performance ambiguity in alliances is associated with adhocracy governance.*

**Moderate contractual complexity.** Moderate contractual complexity represents the alliance partners' intention to balance between too much and too little control through contractual provisions. We associate the clan and market governance forms with moderate levels of contractual complexity and suppose that moderate contractual complexity in combination with high performance ambiguity and low goal incongruence result in clan governance, while moderate contractual complexity in combination with low performance ambiguity and high goal incongruence results in market governance. This is supported by the characteristics and the information requirements of clan and market governance forms. In an alliance with the attributes of a clan, trust and mutual understanding among the members usually reduces the need for monitoring, both in the pre-contractual and post-contractual phase. Consequently, the formal contracts that bind alliance partners are only as complete as needed to avoid opportunistic behavior. On these grounds, Williamson and Ouchi distinguish between "hard" and "soft" contracting and argue that soft contracting represents the clan-type management style. Subsequently, clan governance presumes that the identity of interests between the parties is much closer and formal contracts among parties are less complete (Williamson, 1975). Further, clan governance is based on traditions where information is implicit; existing but mostly unstated (Ouchi, 1979), it is embedded in established systems of shared values and beliefs, common goals, and mutual understanding that, once adopted, are only moderately explicit and complex. While clan members may share general orientations, but not necessarily specific knowledge, they trust each other and the fact that know-how always stays within the clan, and whatever action they take based on whatever knowledge they possess will ultimately be beneficial for all. Accordingly, there is less need to contractually formalize knowledge transfer, restrict knowledge sharing, and safeguard against knowledge spillover effects, since a common vision, shared objectives, and relational bonds among members of the clan predict those risks sufficiently.

The market form of governance, on the other hand, represents an open structure in which highly autonomous partners establish contractual relationships that are characterized by discrete, often short term, agreements that aim to facilitate an economically efficient exchange. Partner performance is unambiguous because the conditions and agreements of the collaboration are specific, complete, and monetized. Hence, information requirements within market governance are explicit, fully accessible,

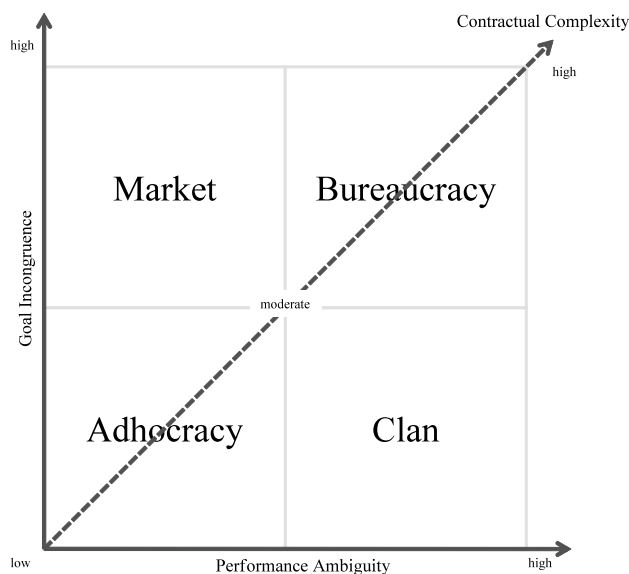
and easy to understand so that market governance is based on simple market mechanisms following simple contracts. Moreover, within market governance, exchange objects tend to be non-specific, that is, the resources, products, services or knowledge that a partner contributes can also be found with other partners (Macneil, 1978; Williamson, 1985). Therefore, highly complex contractual agreements are not necessary since the competitive marketplace and standard contract regulations and corresponding laws provide efficient safeguards to the parties for governing their transactions (Ring & Van de Ven, 1992). Besides, in such a competitive market, partners are equal and legally free, so that social relations among them are limited since developing them could incur costs or be irrelevant (Williamson, 1985). As a consequence, partners avoid the costs of agreeing on complex contracts that can influence and control their transactions. We encapsulate the above in the following two final propositions.

*Proposition 7c: Moderate contractual complexity, high goal incongruence, and low performance ambiguity in alliances are associated with market governance.*

*Proposition 7d: Moderate contractual complexity, low goal incongruence, and high performance ambiguity in alliances are associated with clan governance.*

A graphical representation of the effects of contractual complexity on governance form is presented in Figure 2.

Figure 2: Effects of contractual complexity on governance form



## CONCLUSION

In this paper we provide a detailed analysis regarding the influence of contracts on the governance forms that support and enable inter-organizational collaboration. We show how bureaucracy, market, clan, and adhocracy governance forms are different alternatives to safeguard opportunistic threats in alliances based on their associated levels of goal incongruence, performance ambiguity, and contractual complexity. The primary objective of our research is therefore to integrate the related contracting and governance literature, thereby framing contractual complexity as a mediator for the development of governance forms in alliances. In accordance with organizational control theory, we propose that high levels of contractual complexity, performance ambiguity, and goal incongruence lead to a bureaucracy form of governance, while low levels of contractual complexity, performance ambiguity, and goal incongruence lead to adhocracy governance. Moderate contractual complexity results in clan governance when performance ambiguity is high and goal incongruence is low, and it results in market governance when performance ambiguity is low and goal incongruence is high. We also discuss the antecedent factors of contractual complexity and find that they also matter for the governance of the alliance. Although previous research has suggested that asset specificity, prior ties, time boundedness, strategic importance, and partner search costs primarily establish complexity of alliance contracts, they indeed seem to influence the goal incongruence and performance ambiguity among alliance partners.

This conceptualization contributes to the study of contracting, governance and alliances in various ways. First, while previous research regarding contractual complexity in alliances has focused on the role and importance of contributory influences (e.g. Ariño, Ragozzino, & Reuer, 2006; Ariño & Reuer, 2006b; Reuer & Ariño, 2002, 2007; Reuer et al., 2006), our conceptualization further expands on this growing body of research by discussing the implication of contractual complexity for alliance governance forms. In the same way, we begin to fill an important gap in the alliance governance literature by examining a specific aspect, that is, contractual complexity, and its implications for emerging governance. Earlier studies in the field of alliance governance have typically examined relatively broad categories of governance, like equity versus non-equity arrangements (e.g. Gudergan, Devinney, & Ellis, 2003; Lui & Ngo, 2004; Wang & Nicholas, 2007) or alliances as a form of governance as opposed to mergers and acquisitions (e.g. Hagedoorn, 1993). In this study, however, we contribute to the literature that examines the factors that explain how forms of governance emerge

(e.g. Nielsen, 2003; Ouchi, 1979, 1980; Ouchi & Johnson, 1978; White & Lui, 2005) and why firms apply certain levels of complexity in their contractual agreement to achieve particular governance forms in alliances.

Besides, we add to the various literatures that explain the roles of asset specificity (e.g. Dyer, 1993, 1996, 1997; Joshi & Stump, 1999; Joskow, 1987; Reuer & Ariño, 2002, 2007), partner search costs (e.g. Ariño & Reuer, 2006b; Reuer et al., 2006), prior ties and trust among alliance partners (Reuer & Ariño, 2007), time boundedness of alliance agreements (e.g. Reuer & Ariño, 2003) and strategic importance of alliances (e.g. Ariño & Reuer, 2006b; Hagedoorn, 1993; Harbison & Pekar, 1998) by clarifying the influence of these alliance management aspects on alliance governance. More precisely, we integrate the alliance contracting and governance perspectives by showing how the antecedents of contractual complexity also relate to the goal incongruence and performance ambiguity of alliance partners and contribute to the establishment of bureaucracy, market, clan and adhocracy forms of governance.

The proposed framework also has some important implications for the management of alliances. Firms seeking to increase alliance performance would benefit from a better understanding of the details and relationships of contractual complexity, partner goal congruence, and performance ambiguity as well as their influence on the governance form for the partnership. In assessing the determinants of contractual complexity, goal incongruence, and performance ambiguity, and accounting for the here proposed relationships, firms would be able to identify and employ governance structures that better support their strategic intentions. In practice, governance forms are not clear cut; they are a combination of various mechanisms that have been employed. However, the influences discussed here of antecedent factors and subsequent choices made by the alliance partners shape the governance form as one that can be described as bureaucracy, clan, market or adhocracy. To know how different aspects of the alliance relationship influence this process gives alliance managers the possibility to purposefully craft governance and to avoid implementing mechanisms that undermine the effectiveness of the governance form that suits them best. Hence, firms could evaluate the strategic importance, prior ties, asset specificity, partner search costs, and their agreements regarding time boundedness of the alliance and model contractual and non-contractual governance mechanisms accordingly.

The limitations of this study provide some challenging opportunities for future research. First and foremost, the proposed framework is lacking empirical evidence. Further studies should focus on examining the hypothesized effects of contractual complexity and its antecedents. This should include dynamic or longitudinal studies of alliances to better understand the different resulting and shifting alliance governance forms over time. Secondly, the theoretic perspective of our framework is limited. While we focus on organizational control theory to explain the interplay of contractual complexity and governance form in alliances, there might be other aspects of alliance governance in addition to goal incongruence and performance ambiguity that are important to consider. Hence, expanding on the model presented here offers a plethora of additional research opportunities that upcoming research could address. There is, for example, a lack of studies in the field of alliance governance that focuses on alliance implementation from an organizational behavior perspective (Ariño & Reuer, 2006a). Future research could, therefore, look at the implications of the relationships proposed here and examine how they relate to other alliance phenomena such as various types of alliance dynamics at the individual or group level, process dimensions of collaboration, and the organizational and managerial context of alliance formation and management including managerial capabilities, leadership behavior, and the functioning of teams within and across organizations.

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