LUND UNIVERSITY

Barriers to Learning in Contracting

An Empirical Exploration of Contracting Capabilities in Buyer-Supplier Relationships

Hallberg, Niklas Lars

2022

Link to publication

Citation for published version (APA):
Hallberg, N. L. (2022). *Barriers to Learning in Contracting: An Empirical Exploration of Contracting Capabilities in Buyer-Supplier Relationships*. 1-21. Paper presented at Strategic Management Society's Annual Conference 2022, London, United Kingdom.

Total number of authors:
1

General rights
Unless other specific re-use rights are stated the following general rights apply:
Copyright and moral rights for the publications made accessible in the public portal are retained by the authors and/or other copyright owners and it is a condition of accessing publications that users recognise and abide by the legal requirements associated with these rights.
• Users may download and print one copy of any publication from the public portal for the purpose of private study or research.
• You may not further distribute the material or use it for any profit-making activity or commercial gain
• You may freely distribute the URL identifying the publication in the public portal

Read more about Creative commons licenses: https://creativecommons.org/licenses/

Take down policy
If you believe that this document breaches copyright please contact us providing details, and we will remove access to the work immediately and investigate your claim.

LUND UNIVERSITY

PO Box 117
221 00 Lund
+46 46-222 00 00

Download date: 12. Oct. 2024

BARRIERS TO LEARNING IN CONTRACTING: AN EMPIRICAL EXPLORATION OF CONTRACTING CAPABILITIES IN BUYER-SUPPLIER RELATIONSHIPS

Paper presented at the Strategic Management Society's Annual Conference in London, UK, 2022

Niklas L. Hallberg

Department of Business Administration

School of Economics and Management

Lund University

PO Box 7080, 220 07 Lund; Sweden

E-mail: niklas.hallberg@fek.lu.se

Barriers to Learning in Contracting: An Empirical Exploration of Contracting Capabilities in Buyer-Supplier Relationships

ABSTRACT

Under what conditions do firms in buyer-supplier relationships learn to contract? Contract design capabilities are typically understood as a function of the contractual problems faced by firms. However, a firms' learning to contract is also likely affected by the organizational and institutional conditions in which contracts are entered. Based on five inductive case studies of buyer-supplier relationships, we explore the potential organizational and institutional learning barriers that are likely to affect the development of contracting capabilities. The result show that firms had arrived at stable contracting processes and that learning beyond this point was modest. Learning was found to be constrained by low levels of organizational integration between technical, commercial and legal tasks, reliance on contractual templates, and the perceived prominence of relational factors.

Keywords: Learning; Capabilities; Transaction cost economics

Under what conditions do firms in buyer-supplier relationships learn to contract? Transaction cost economics (TCE) states that firms in buyer-supplier relationships design contracts that mitigate the contractual hazards that are associated with the particular transaction being governed (Williamson, 1985). The learning to contract literature extends this argument by highlighting that firms over time also learn to govern relationships in a more efficient manner by developing contract design capabilities, which allows them to achieve a better match between transaction attributes and the chosen contractual framework (Argyres & Mayer, 2007; Mayer and Argyres, 2004). Contract design capabilities refer to the ability of a firm to know "how much and what kind of detail to include in a contract" and a firm is expected to "experience better contract performance if it aligns the use of various contract terms with transaction attributes following established transaction cost theory, but also if it develops contract design capabilities among appropriate groups of personnel, given the types of terms that tend to be prominent in the firm's contracts" (Argyres & Mayer, 2007: 1060-1061).

According to the learning to contract perspective, firms' development of contract design capabilities (henceforth, contracting capabilities) is primarily a function of the complexity of the contractual problem faced by the parties: more complex problems prompt more complex contracts, which require and lead to more developed capabilities through experiential learning processes. This raises a series of important questions concerning the magnitude and type of learning to contract that is likely to occur under different organizational and institutional conditions. Organizational learning processes are typically described as incomplete, myopic, and superstitious; and involving a multitude of biases and barriers to learning (March & Olsen, 1975; Schilling & Kluge, 2008; Levitt & March, 1988; Levinthal & March, 1993). Given the nature of learning processes, it is likely that contractual learning is not only a function of the nature or complexity of the transaction, but also by a host of other organizational and institutional conditions. Hence, based on five inductive case studies of long-term buyer-supplier

relationships, we explore potential *contractual learning barriers* that, in addition to transaction attributes, may affect the level of learning to contract and the development of contracting capabilities. The selected industries deliberately spann a broad range, including consumer products, medical devices, engineering industry, education, and research. Overall, observations in the studied cases indicate that firms reach a level of contracting capability that allow them to function in their industry, but that learning beyond this point appear to be relatively modest. It is argued that the observed level of contractual learning may be attributed to a series of organizational and institutional learning barriers. First, firms exhibited sequential contracting processes with low levels of organizational integration between the involved commercial, technical, and legal functions (see Lawrence & Lorsch, 1967). This partly disabled the feedback mechanisms between experiences made in different activities in the contracting process; such as between contractual design, technical specification, and contractual governance. Second, there were pressure to rely on standardized contractual templates for regulating commercial conditions/liabilities and technical specifications. While the use of commonly accepted contractual templates may help to settle disputes and align expectations, their use increased the cost of incrementally and locally incorporating new insights into contracts. Third, respondents at the studied firms expressed a strong support of relational rather formal contracting that downplayed the task of designing contract and optimizing individual safeguards.

METHOD

The study follows an inductive case study design (Eisenhardt, 1989; Yin, 2003) of five buyer-supplier relationships. Because of anonymity agreements, respondents and the organizations are presented using pseudonyms. Cases in a multiple case study design should ideally be selected so that they either produce similar results for predictable reasons (literal replication), or contrasting results, for predictable reasons (theoretical replication) (Yin, 2003). The five cases selected for this study represent a wide variety of organizations (in terms of

structure/processes) and industries (in terms of technology and market conditions). This was not only expected to give rise to differential types of contractual learning, but also showcase a broad variety of organizational challenges in the contracting process that might affect learning. All five cases shared the attributes of representing long-term buyer-seller relationships of a complex good or service that involved some level of bilateral dependency, conditions that are typical for complex bilateral contracting. Data was collected retrospectively for all five studied cases based on semi-structured interviews, contractual documentation, and observations. The case studies were conducted according to a pre-defined case-study protocol that specified data collection procedures, data sources (interviews, documents), and the type of questions that the collected data should answer (Yin, 2003). A total of 42 longer semi-structured interviews were conducted with the employees most closely involved in the studied relationships. Data analysis procedures were based on case study-methodology (Yin, 2003; Eisenhardt, 1989) and the method of constant comparison (Glaser & Strauss, 1967).

BARRIERS TO CONTRACTUAL LEARNING

The following section introduces the five studied cases and then goes on to explore different forms of contractual learning (changes to contracts and organization) and the *contractual learning barriers* that may impact learning to contract and the development of contracting capabilities. Table 1 provides a summary of key finding in the studied cases.

--- INSERT TABLE 1 ---

Contractual Change

Argyres and Mayer (2007) separate between five different types of terms and clauses in contracts: roles/responsibilities, decision-/control rights, communications, contingency planning, dispute resolution. Studies have shown that that contractual learning is stronger for technical and coordination-oriented terms (roles/responsibility, communication) than for legal or governance-oriented terms (decision/control rights, contingency planning, dispute

resolution) (Vanneste & Puranam, 2010). Hence, in order to accommodate an analysis of learning barriers in the contracting process, we build on the notion that the contracting process of a typical firm may roughly be divided into tasks performed in three partly overlapping functions or departments: the technical- and commercial functions hold a primary responsibility for the development of *coordination-oriented contractual terms* (roles and responsibility, communication) and the legal function hold a primary responsibility for *governance-oriented terms* (decision/control rights, dispute resolution, and contingency planning).

Contractual documentation may function as a repository for knowledge gained from previous contractual experiences (Mayer & Argyres, 2004). In addition to contractual documentation, firms are also expected to develop contract design capabilities based on knowledge held differentially across functionally specialized employees, such as managers, engineers, and lawyers (Argyres & Mayer, 2007). These previous findings indicate that contractual learning primarily occurs at the level of changes in written artifacts and the level of individual functional knowledge held by different employees. Interestingly, observations in the five studied cases indicate that contractual learning was rather modest in terms of significant changes in contractual templates and/or changes in the roles and tasks performed by key employees. All of the studied firms appeared to have reached a sufficient level of contracting capability to function properly in their industry, and beyond this level, learning appeared to be modest and not involve major changes in individual tasks. Among other things, this was a result of having developed clear roles for different groups of employees in the contracting process, which roughly followed functional divisions between commercial (sales, procurement, business development), technical (production, quality, R&D) and legal personnel (lawyers, legal counsels). While experiential learning directly associated with a specific professional role is likely to be present over time, it was typically downplayed by respondents who viewed themselves as sufficiently qualified within their specialized role to handle most new situations

that could arise in relation to a specific contractual partner. Hence, the type of complexity and novel challenges that may prompt individual learning was not primarily associated with the performance of specialized functional tasks within professional roles, but rather with the structural challenges that are associated with handling interfaces between specialized functional tasks in the contractual process.

The contracts regulating the studied relationships had been subject to changes in all cases. These changes involved contractual duration (CON), scope (MED), quality specifications (MAN), technical specifications of responsibilities (EDU), and liquidated damages clauses (RES). In two of the studied cases, the contractual changes were directly associated with exogeneous changes in transaction attributes. This involved the renegotiation of the contract between ConComp and Alpha where the duration of the contract was significantly extended following increases in Alpha's dedicated capacity and relationship-specific investments. A similar pattern could be observed in MedComp's relationship with its contract manufacturer Beta, where the contract was renegotiated in order to reduce the scope of the outsourcing contract (insourcing) following an increase in MedComp's production volume (frequency). Overall, these contractual changes were consistent with the predictions of the basic TCE-model. However, in the case of ManComp', a contractual renegotiation and amendment was made concerning the specification of quality requirements. This was largely driven by a technical coordination-failure concerning the applicability of certain standards and national regulations. Similarly, observations in the case of EduComp showed changes of contractual terms regulating the parties' responsibilities with respect to the property that could not be attributed to exogenous changes in transaction attributes. The project between ResComp and their supplier Epsilon involved a contractual renegotiation concerning the original liquidated damages clauses and how they should be applied in the case of unforeseen delays and coordination-problems. This change could not be attributed to changes in transaction attributes, but rather new insights made

during the project. Hence, in line with previous research, contractual changes observed in the studied cases also involved endogenously driven refinement of coordination-oriented terms. However, as illustrated by ResComp's renegotiation of liquidated damages terms, which was not associated with changes in transaction attributes, governance-oriented terms may also be subject to contractual learning. In line with previous research (e.g., Vanneste & Puranam, 2010), the observations lend some support for the notion that endogenous contractual change is most closely associated with the refinement of technical coordination-oriented terms, although the relationship appear to be far from perfect.

Functional Silos, Sequential Decision-Processes, and Feedback

Previous research indicates that the division of labor in the contracting process affects learning to contract in terms of where in the organization contractual knowledge is likely to be developed. The results of this study indicate that, not only the division of labor, but also the specific interaction patterns between categories of employees in the contracting process affect the type of learning that is likely to occur.

Commercial-Technical Differentiation. The organizational integration of commercial and technical personnel in the contracting process is vital for setting up an adaptive response to coordination- and governance- oriented challenges (Lawrence & Lorsch, 1967). Commercial and technical functions are typically organized in separate departments that may differ significantly in terms of knowledge, incentives, educational background, and professional roles. The level of commercial-technical integration in the contractual process varied across the studied firms. MedComp stands out in this regard because of its small scale and informal organization, which allowed it to overcome many of the typical difficulties associated with technical-commercial integration by simply, on an *ad hoc*-basis, involving all relevant department heads in major decisions that affected the relationship with its contract manufacturer. In the larger organization ConComp, commercial-technical integration in the

handling of suppliers had been addressed in a more formalized way by organizing their procurement unit into in small business development teams that were each responsible for a small set of suppliers. Each team included a commercially oriented business developer and a technically oriented production engineer. In ManComp and EduComp, questions of commercial-technical integration had been addressed by the creation of inter-functional project organizations for managing the customer- and supplier relationships. In both cases, these projects were headed by a person from the technical function while the earlier phases of negotiating the contract was mainly managed by a commercial business unit. However, despite the efforts to achieve higher levels of commercial-technical integration, there were still a clear organizational and temporal divide between commercial and technical units in terms of tasks and responsibilities, where respondents from the commercial function actively distanced themselves from later technical and production-oriented phases in the contractual process, whereas respondents from the technical side distanced themselves from the early phases focused on contract negotiation and design.

Establishing a reciprocal intra-organizational interface between the commercial and technical functions may be difficult because of departmental differentiation and the typical temporal sequencing of commercial and technical activities in the contractual process where early activities, such as negotiations and contract design, are normally managed by the commercial function, whereas later operational activities (e.g., production, delivery, quality assurance) are handled by the technical function. High levels of organizational differentiation combined with a sequential process may prevent effective learning if learning concerning early design choices is contingent on outcomes and experiences made in later activities (and, to some extent, *vice versa*). This observation, which was most evident in the project-oriented cases of ManComp and EduComp, highlights an interesting element of previous research on contracting capabilities related to the separation between *contract design* and *contract governance* (e.g.,

Argyres & Mayer, 2007). It is reasonable to assume that firms learn to *design* contracts through the concrete feedback they get from *governance* experiences. In fact, in all studied cases, respondents highlighted learning experiences related to the execution and governance of contracts, whereas activities directly related to the design or wording of the formal contract was described as a mere formality that was a direct consequence of previous governance experiences and the specific nature of the relationship. Learning was thus primarily associated with the contract governance/execution phase (*ex post*), rather than with the contract design phase (*ex ante*). Hence, we argue that organizational commercial-technical differentiation in the contractual process constitutes an important learning barrier in many organizations that prevents feedback from later technologically oriented stages of the process, where outcomes and problems related to functionality and quality usually can be observed, to early commercially driven stages of the process where the terms of trade are decided and contracts are drawn up.

> **Proposition 1**: Organizational differentiation between commercial- and technical functions in the contractual process reduces learning by disabling feedback of relevant specialized knowledge gained during different temporally separated activities in the contractual process.

Commercial-Legal Differentiation. Contractual design and governance involve a significant legal elements related to the verifiability and enforceability of the commitments made in the contract. Turning the legal function into a proactive agent in commercial- and technical processes is a challenge for many firms (Bagley, 2008). The studied cases illustrate many of these challenges and show how they may affect learning, especially concerning the use and development of governance-oriented terms and clauses. For example, in ConComp and ManComp, which were both larger and mature organizations, the inhouse legal function had a well-specified role in contractual processes as a gatekeeper that was involved in developing

templates and approving contracts before they were signed. Hence, the legal function had a rather narrow role in the overall process with limited interaction with other functions beyond providing contractual templates and approving, and potentially revising contractual drafts. This was largely a result of the organizational set-up of the legal function operating as a corporate support function that was organizationally and geographically separated from both commercial and technical units. ResComp's relationship with Epsilon stood out compared to the other studied cases by involving extensive and project-specific/customized governance-oriented terms (e.g., contingency planning tied to liquidated damages) that had been developed by their legal unit in negotiation with Epsilon. Interestingly, ResComp also stood out with respect to the extent that the legal function was directly involved throughout the contractual process and in terms of how the legal function was closely integrated with the commercial function (by means of organizationally integrating legal counsels directly into the procurement unit instead of placing them in an independent support unit).

One responsibility of the legal function is to make sure that the firm avoids excessive risks and that the firm's dealings with external actors is documented in a verifiable and enforceable way. Commercial activity, on the other hand, often builds on successfully handling uncertainty on grounds or calculations that are not verifiable. This basic tension between the priorities of the legal- and the commercial functions is likely to pose an organizational integration challenge for firms in the contractual process. Lack of integration between the commercial and legal functions may thus result in situations where the legal function is involved only at the last stage when everything is negotiated and ready, or that the legal function is left completely outside contractual choices that concern important commercial matters. Both these outcomes are likely to affect contractual learning negatively because contractual safeguards and governance-oriented terms will under these conditions likely not be analyzed in direct relation to the overall commercial terms and set-up of the transaction. The likelihood that the firm will try out new

contractual safeguards and learn from the experience is significantly lower if it applies a sequential decision-process where the legal and the commercial aspects of the contract are analyzed separately. A sequential process where the legal function is only involved during certain limited tasks, such as the finalization of the contract, effectively breaks the feedback mechanisms concerning what governance-oriented terms that do actually work for a given transaction type. It is thus suggested that if the legal function, which is the main knowledge repository concerning governance-oriented terms, is not an active in the design of the overall commercial and technical structure of the relationship, there will be significantly less opportunities for introducing novel governance-oriented terms in the contract that are tailored to the specific transaction. Similarly, if the legal function is not active in the *ex post* phase of the contract, the feedback mechanism concerning what contractual terms that do actually work will be significantly weakened.

> **Proposition 2**: Organizational differentiation between commercial- and legal functions in the contractual process reduces contractual learning concerning governance-oriented terms by limiting the use of novel contractual safeguards that are adapted to the commercial structure of the transaction.

Standardization of Inter-Organizational Contractual Interfaces

Observations in the studied cases indicate that there are strong tendencies towards relying on a standardized contractual interface with other firms through the use of different forms of contractual templates. Such templates can be firm- or industry specific. The benefits of standardization may be based on both internal efficiency-concerns and the need to establish commonly accepted mechanisms for external coordination and incentive alignment. Internally, firms seek to establish standard operating procedures and routines in order to simplify decision-making, settle internal disputes, and minimize friction between competing departmental

interests (March & Simon, 1958; Nelson & Winter, 1982). Contractual templates support these processes by establishing an internally accepted framework for how the firm transacts with external parties, such as buyers and suppliers (Zbaracki & Bergen, 2010), where internal roles and responsibilities are clearly delineated. Externally, contractual templates provide related benefits in terms of reducing negotiation costs and uncertainty concerning the underlying transaction. In other words, the parties to the transaction know what to expect based on a contractual template that has stood the test of time, not only in transactions with a particular exchange partner, but also more generally across a wide range of firms and transactions. However, extensive reliance on standardized templates may also constitute an important barrier to local adaptation and learning in contracting. While standardized problem-solving often provide a significant up-side in terms of efficiency and knowledge retention (Fiedler & Welpe, 2010); historically useful templates may also be associated with a down-side in terms of rigidity and inducing resistance to change (Leonard-Barton, 1992).

All the studied firms relied on standardized contractual templates that limited the possibility of incrementally and locally adapting governance-oriented terms to new insight made in individual transactions or relationships. For example, ConComp's overall competitive focus was standardization of activities and cost efficiency, which also created a strong internal demand for standardized supplier interfaces and relatively rigid company-wide contractual templates. According to respondents, ConComp's template had been around for decades and there was basically no internal flexibility in how these may be used for regulating supplier relationships. The reliance on contractual templates was equally strong in MedComp, however, mainly for different reasons related to their size and internal resource-constraints, which led management towards relying on available industry templates to regulate their relationship with the contract manufacturer. In both ManComp and EduComp, the contractual templates that they relied on were typically supplied by their exchange partners. Respondents at EduComp

explained that relying on a template from an industry association provided by the property developer was a convenient way to reduce negotiation- and information costs in the exchange relationship.

The effect of contractual templates on contractual learning arguable differ across coordination- and governance-oriented terms. Coordination-oriented terms are often technically oriented and aim at establishing a verifiable specification of the product or service being exchanged, whereas governance-oriented terms are legally or commercially oriented and aim to distribute risk/payments between the parties (e.g., based on safeguards against potential contingencies). Because of their different functions, coordination-oriented and governance-oriented terms are likely subject to different constraints concerning their potential standardization across multiple transactions and parties. Standardization of technical and coordination-oriented clauses is of course viable, and highly desirable, in cases where the nature of the exchanged good or service is identical. When the underlying technology or transaction change, so do the technical specifications. Governance-oriented terms, however, are of a more generic character, and thus, do not naturally follow changes in the underlying technology or transaction. This implies that governance-oriented terms are generally more susceptible to rigid forms of standardization than coordination-oriented terms, and that such standardization will restrict local incremental learning concerning governance-oriented terms by preventing local and incremental adaptation of contracts.

> **Proposition 3**: The use of contractual templates reduces contractual learning concerning governance-oriented terms by increasing the cost of local and incremental adaptations of the contractual safeguards stated in the template.

Trust and Perceived Prominence of Relational Factors

Respondents in all the studied firms expressed a strong support for relational rather than formal contracting and downplayed the task of designing contracts and optimizing safeguards. The preference for relational governance was in some cases attributed to national culture and explicitly contrasted with other contractual traditions, such as the American. In other cases, it was attributed to the nature of the industry where, for example, a small number of buyers/sellers and repeated transactions created personal ties and a strong sense of trust and transparency between the parties. Respondents generally made a distinction between governance-oriented terms or safeguards, which were viewed as formal "necessities" that could be standardized and handled by lawyers, and coordination-oriented terms, which incapsulated a broader framework for what had been agreed between the parties, which was not necessarily limited to the formal wording in the contract but could also include emails, protocols, references in quality systems, standards, etc. These priorities also corresponded with the differential amount of managerial attention given to developing and changing coordination- and governance-oriented terms, respectively.

For example, respondents a ConComp highlighted that supplier relationships are not managed through formal contracts, but rather, through trust, respect and developing a solid relationship. Hence, rather than viewing the contract as a means of proactively forming the relationship with suppliers, the long-term contracts that were entered with prioritized suppliers were viewed as a consequence of well-functioning and trusting relationship where strategic alignment between the parties had already been established prior to entering the contract. Respondents in MedComp also downplayed the role of their contracts as formal safeguards or governance-mechanisms in favor of a more relational approach where the contract is viewed as a framework establishing a common understanding between the parties. Hence, according to a respondent, the primary function of the contract is not to provide a formal safeguard that MedComp can point to in the case of conflict. In fact, according to the respondent, s/he had

never been in a situation with a supplier where they had to go back to the wording in the contract in order to settle a dispute.

The result of previous research on the relationship between trust and contractual detail is mixed (Mellewigt, Madhok & Weibel, 2007; Poppo, Zheng Zhou, & Zenger, 2008). While trust may reduce the need for formal contractual safeguards in favor of relational governance, it also lowers the cost of information-sharing and coordination, which increase incentives to engage in more elaborate communication, and thus a potential refinement of coordination-oriented terms. The positive effect of trust on contractual complexity is in many cases driven by the technical functions of the contracting firms. High levels of trust will lead to more open-hearted discussions on the best ways to improve technical solutions in the exchange relationship, and thus potentially also more extensive terms related to the parties' roles/responsibilities and communication. On the other hand, the effect of trust on governance-oriented terms is likely to be negative because there is less need to include complex governance-oriented terms when the contractual partner's behavior is predictable. Observations made in the studied cases indicate a potential differential effect of trust on coordination- and governance oriented contractual complexity. Trust was typically highlighted as a primary mechanism for managing relationships, while the importance of governance-oriented terms and contractual safeguards were downplayed by respondents. As discussed before, on an organizational level this observation corresponds with the rather limited role of the legal function in the contracting process, which as the primary repository of knowledge concerning governance-oriented term was more or less absent from the process (MED, EDU) or given limited tasks in the contractual process related to providing templates and approving contractual drafts (CON, MAN). Interestingly, respondents at ResComp stood out compared to respondents in the other cases in terms of not emphasizing trust and relational factors as a key mechanism, which also matched their more extensive use governance-oriented terms in the contract. This pattern of observations

involving high levels of trust and low levels of contractual change in governance-oriented terms indicate a potential positive learning dynamic concerning the development of coordination-oriented and lower levels of experiential leaning concerning the design and development of governance-oriented terms.

> **Proposition 4**: Trust in an exchange relationship is negatively associated with contractual learning concerning governance-oriented terms and positively associated with contractual learning concerning coordination-oriented terms.

CONCLUDING DISCUSSION

The observations made in this study indicate that contractual learning may be relatively modest for firms who have reached a level of contracting capability that allows them to function properly in their industry. This can be partially attributed to organizational and institutional learning barriers related to technical-commercial integration, commercial-legal integration, standardization of contractual templates, and the level of trust between parties. Previous research has highlighted the importance of matching the development of different types of contractual provisions with knowledge that resides differentially across engineers, managers, and lawyers (Argyres & Mayer, 2007) and the fact that contractual learning tends to be stronger for technical clauses than for governance-oriented clauses (Vanneste and Puranam, 2010). The observations and theory developed in this paper generally supports these propositions. However, results also indicate that organizational design and low levels of integration between key firm functions in the contracting process may constitute barriers preventing firms from learning to contract. Another factor that was found to reduce the parties' incentives to engage in contractual development was a strong reliance on standardized contractual templates. While standardized templates may themselves constitute a repository of knowledge and improve both internal (across departments) and external (across firms) incentive alignment, they may also

constitute significant barriers to local and incremental contractual development. This is particularly true for governance-oriented terms that lend themselves more easily to complete standardization than transaction-specific coordination-oriented terms that naturally vary across different types of products and services. There is extensive previous research on the issue of contractual complexity and the relationship between formal and relational contracting (e.g., Poppo & Zenger, 2002; Ryall & Sampson, 2009). Respondents in this study generally expressed support for relational rather formal contracting and downplayed the more legalistic tasks of optimizing contractual safeguards. The high levels of trust in the studied relationships were found to support learning concerning coordination-oriented terms based on openhearted dialogue between technical and commercial personnel in the involved firms, while at the same time reducing the perceived need to invest in the development of contractual safeguards.

REFERENCES

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

Bagley, C. E. 2008. Winning Legally: The Value of Legal Astuteness. ***Academy of Management Review***, 33: 378-390.

Eisenhardt, K. (1989). Building Theories from Case Study Research. ***Academy of Management Review***, 14: 532-550.

Fiedler, M., & Welpe, I. 2010. How organizations remember? The influence of organizational structure on organizational memory. ***Organization Studies***, 31: 381-407.

Glaser, B., & Strauss, A. (1967). ***The Discovery of Grounded Theory: Strategies for Qualitative Research***. Chicago: Aldine publishing company.

Lawrence, P. R., & Lorsch, J. W. 1967. Differentiation and Integration in Complex Organizations. ***Administrative Science Quarterly***, 12: 1-47.

Leonard-Barton, D. 1992. Core capabilities and core rigidities: A paradox in managing new product development. ***Strategic Management Journal***, 13: 111-125.

Levinthal, D. A., & March, J. G. 1993. Myopia of Learning. ***Strategic Management Journal***, 14, 95-112.

Levitt, B., & March, J. G. 1988. Organizational Learning. ***Annual Review of Sociology***, 14: 319-340.

March, G, & Olsen, J. P. 1975. The uncertainty of the past: Organizational learning under ambiguity. ***European Journal of Political Research***, 3: 147-171.

March, J. G., & Simon, H. A. 1958. ***Organizations***. Wiley.

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

Mellewigt, T., Madhok, A., & Weibel, A. 2007. Trust and formal contracts in interorganizational relationships: Substitutes and complements. ***Managerial and Decision Economics***, 28: 833-847

Nelson, R. R., and Winter S. G. (1982). ***An evolutionary theory of economic change***. Cambridge, MA: Belknap Press.

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

Poppo, L., Zheng Zhou, K., Zenger. T.R. 2008. Examining the Conditional Limits of Relational Governance: Specialized Assets, Performance Ambiguity, and Long-Standing Ties. ***Journal of Management Studies***, 45: 1195-1216.

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

Schilling, J., & Kluge, A. 2008.Barriers to organizational learning: An integration of theory and research. ***International Journal of Management Review***, 11: 337-360.

Vanneste, B. S., & Puranam, P. 2010. Repeated interactions and contractual detail: Identifying the learning effect. ***Organization Science***, 21: 186-201.

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

Yin, R. K. (2003). ***Case Study Research. Design and Methods***. Third edition. Thousands Oaks, California: Sage Publication, Inc.

Zbaracki, M. J., & Bergen, M. (2010). When Truces Collapse: A Longitudinal Study of Price-Adjustment Routines. ***Organization Science***, 21: 955-972.

TABLE 1

SUMMARY OF EMPIRICAL FINDINGS

	CONComp	**MEDComp**	**MANComp**	**EDUComp**	**RESComp**
Firm and industry	ConComp is a large European consumer goods company	MedComp is small European Medtech company	ManComp is a large European engineering company	EduComp is a large European education company	ResComp is a large European research organization founded as a limited liability company
Contractual partner	Alpha is a one of ConComp's largest and oldest component suppliers (until termination)	Beta is a midsized contracts manufacturer that has been supplying MedComp from its founding (until termination)	Gamma is a large European company in the energy sector and one of ManComp's oldest customers (projects)	Delta is a small property developer and long-term supplier of EduComp (projects)	Epsilon is large European engineering company and one of ResComp's key equipment suppliers (project)
Major contractual change	Contract duration extended following relationship-specific investments (exogeneous change of governance terms)	Reduction of contractual scope (insourcing) following volume increase (exogeneous change of technical terms)	Revised specification of quality specifications based on new experiences concerning standards (endogenous change of technical terms)	Revised technical specifications (room function) based on new experiences (endogenous change of technical terms)	Renegotiation of liquidated damages terms following delays and coordination problems (endogenous change of governance terms)
Major organizational change	Change to a product-based organization to strengthen technical knowledge (from geographical organization)	No major change	Change to technically oriented project organization to facilitate commercial-technical integration	Creation of technically oriented project organization to facilitate commercial-technical integration	Organizational change that departmentally integrated legal and commercial functions
Technical-Commercial specialization and integration	Alpha relationships managed by highly integrated procurement teams including technical and commercial specialists	Beta relationship managed by tightly integrated management team including technical and commercial specialists	Gamma relationship managed by technically-oriented project group. Sequential process where early activities are managed by business unit and later activities by production unit	Delta relationship managed by technical project group. Sequential process where early activities are managed by business development and later activities by technical project coordinator	Epsilon relationship managed by technical project group with integrated support of procurement department
Legal-Commercial specialization and integration	Legal specialists control contractual templates and approves final contract drafts. No engagement in contractual negotiations and design.	Ad hoc use of external law firm for checking finalized contractual draft. No involvement of legal specialists in the design and negotiation of contract	Legal specialists are involved in commercial negotiations and approve final contractual draft	Legal specialists are not involved in the contracting process with Delta	Legal and commercial specialists work together in integrated procurement department
Standardization and templates	Strong reliance on standardized templates that constrain incremental and local contractual adaptation	Use of publicly available industry-standard contractual templates	Gamma (and other customers) provides contractual template	Delta provides standardized commercial contractual template. Technical contract continuously adapted	Original Epsilon contract template provided by external law firm and adapted by internal legal specialists
Trust and relational governance	Emphasis on relational contracting reduce perceived need of contractual safeguards. Strong focus on commercial terms.	Emphasis on relational contracting reduce perceived need of contractual safeguards. Strong focus on commercial terms.	Emphasis on relational contracting reduce perceived need of contractual safeguards. Strong focus on commercial terms.	Emphasis on relational contracting reduce perceived need of contractual safeguards.	Strong focus on technical specifications and contractual safeguards