

PRIVATE ORDERING, SOCIAL CAPITAL, AND NETWORK GOVERNANCE
IN PROCUREMENT CONTRACTS: A PRELIMINARY EXPLORATION

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Abstract

This essay begins by observing that the master agreements that nominally govern the transactions between Mid-Western Original Equipment Manufacturers and their suppliers, are not, for the most part, designed to create legal obligations. Rather they play a role in these transactions that is akin to the role played firm boundaries in the Coase Williamson theory of the firm--they create a space that is largely free of legal governance in which private order can flourish. The essay then explains the ways that contract provisions, contract administration mechanisms, and other formal structures created by these firms, interact with forces created by repeat dealing as well as relational and structural social capital to support cooperative contractual relationships.

The essay concludes that unlike the relational contracts described by Stewart Macaulay in his seminal piece, the relational contracts between OEMs and their suppliers are not informal – indeed they rely for their effectiveness on numerous formal structures that may be far more expensive to create than it would be to draft the best contract possible; yet relational contracts offer two major advantages to those who use them. First, because the nonlegal sanctions used to sustain these relationships can be imposed without filing a lawsuit and ending the contracting relationship, they can more adequately bond the agreements' many interior promises than court imposed damages that can only be credibly threatened or collected when the breach is large enough to make

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it worthwhile to end the parties contracting relationship. Second, the interpersonal interactions and information transfers relational contracts rely on, create conditions under which key employees are more likely, over time, to come up with value creating future deals that only become visible once exchange has begun.

I. INTRODUCTION

Large industrial buyers have devised contractual structures to govern their relationships with their suppliers that while nominally contractual in the traditional sense are better thought of as private order institutions. Like diamond merchants,¹ cotton merchants,² and grain merchants³—who largely opted out of the public legal system by creating trade association-run private legal systems to resolve disputes and support trade among their members—these buyers have structured their relationships with their suppliers in ways that are designed (property and intellectual property rights aside) to make the legal system largely irrelevant to their interactions.⁴ Rather than rely on contracts that are designed to create incentives for performance and investment primarily through the prospect of court imposed monetary damages for breach, they have created contracts that are designed to keep the law (in the sense of legal enforcement of contractual obligations) largely out of their relationship with their suppliers.⁵ As one mid-western original equipment manufacturer (“OEM”) explained, “We have a Master Supply

¹ Lisa Bernstein, *Opting Out of the Legal System: Extralegal Contractual Relations in the Diamond Industry*, 21 J. Legal Stud. 115 (1992) (discussing private ordering in New York’s 47th Street diamond markets).

² Lisa Bernstein, *Merchant Law in a Merchant Court: Rethinking the Code’s Search for Immanent Business Norms*, 144 U Pa L Rev. 1765 (1996) (describing private ordering in the grain and feed business).

³ Lisa Bernstein, *Private Commercial Law in the Cotton Industry: Creating Cooperation Through Rules, Norms, and Institutions*, 99 Mich. L. Rev. 1724 (2001) (describing private ordering in the cash cotton markets).

⁴ Contracts, however, remain important to establishing and protecting intellectual property rights and the rights to physical assets (like tooling).

⁵ A similar argument has been made about the function of the legal doctrines of employment at will, see Richard Epstein, *In Defense of The Contract at Will*, 51 U. Chi. L. Rev. 947 (1984), and the business judgment rule. See Edward Rock and Michael Wachter, *Islands of Conscious Power: Law, Norms and the Self-Governing Corporation* 149 U. Pa. L. Rev. 1619 (2001).

Agreement [with our suppliers yet i]t is not a contract to buy. It is an agreement as to how we are going to do business.”⁶

More generally, like firm boundaries in the Coase-Williamson theory of the firm, the Master Agreements that nominally govern these relationships clear a space for other, extralegal modes of contract governance, to work. This essay explores the core types of contract provisions, formal governance mechanisms, and transactional structures that are created by large buyers and their suppliers to govern these relationships.⁷ It suggests that to fully appreciate their potential to affect the parties behavior in any given relationship, it is important to view these provisions against the background of the history of the interaction between the firms, the connections (if any) between and among their employees, and the network position of each firm in the network of relevant firms.

The goal of the essay is to begin to explore the ways that contract, relational social capital, and network governance interact over time to expand the type and complexity of the of bilateral commitments that contracting parties can identify and bond adequately enough to induce relationship-specific investment while maintaining stable and cooperative contracting relationships. At the same time it seeks to convince lawyers that in order to understand the power (or lack of power) of the provisions in a particular contract and to give value creating legal advice, they need to draft in the shadow of the existing pattern of network relations, or with an eye to creating contract governance devices and/or institutional structures that will, over time, create those relations where they otherwise do not exist. Finally, the essay’s exploration of the ways contracts and social capital work together to create value, reveals an important aspect of so-called relational contracting that has been largely

⁶ Unless otherwise explicitly noted, all of the quotes from interviews of Mid-Western OEMs and their suppliers were taken from over 700 pages of transcripts of interviews conducted by Josh Whitford and his collaborators that are described in, Josh Whitford, *THE NEW OLD ECONOMY: NETWORKS, INSTITUTIONS, AND THE ORGANIZATIONAL TRANSFORMATION OF AMERICAN MANUFACTURING*, at Appendix A1 References will be simply to NOE. Due to the restrictions placed on the original study by an institutional review board, identifying details about the interviewees have been replaced by general descriptions of the firm’s type and market position.

⁷ The approach taken is similar in perspective to that taken in Jeffrey L. Bradach and Robert G. Eccles, *Price, Authority and Trust*, 15 *Annu. Rev. Sociol.* 97 (1989) (rejecting the Coase Williamson theory of the firm and suggesting that “price, authhoirty, and trust are independent and can be combined in a variety of ways.”)

overlooked. It reveals that modern relational contracting in the industrial procurement context does not emerge in the shadow of a contract that is put in the drawer never to be seen again,⁸ as Stewart Maculay suggested, but rather is strongly supported and facilitated by both the contract's written terms and the highly formal contract administration mechanisms that have been developed to support the creation and implementation of these agreements.

Part II of the essay provides an overview of the master agreements that are commonly used in OEM-supplier relationships and discusses the limited damages they make available in a suit for breach of contract, damages whose incentive effects are further reduced by the fact that most such agreements are expected to give rise to long term relationships. It also explores other self-help and/or interior remedies that buyers have created to increase the likelihood that a supplier will perform as promised—such as direct regulation of the production process and the right to both withhold payment and impose a small fine for deviations from contract specifications.

Part III looks at other contract administration mechanisms, such as supplier qualification programs, supplier scorecards, and supplier development programs, that together with certain terms in the master agreements (most notably audit provisions, root cause provisions, and plant inspection provisions) and careful attention to network position, create the conditions that enable cooperative contracting relationships for producing goods to a buyers' specifications to arise and endure.

Drawing on interview evidence from a study of OEM-supplier contracts in the upper mid-west,⁹ as well as empirical studies of procurement contracts, strategic alliances, and networks, Part IV suggests that as transactors successfully get over the inevitable bumps in their initial manufacture to buyer's specification contracts and develop cooperative contracting relationships, they begin to develop relationship-specific social capital as a by product of these interactions. As this social capital accumulates, they become better able to both identify and partially bond more complex undertakings, like the co-development of new products, for which it is much harder to write a nearly complete contingent state contract with metrics for determining breach or performance. Part IV

⁸ But see, Iva Bozovic and Gillian K. Hadfield, *Scaffolding: Using Formal Contracts to Build Informal Relations in Support of Innovation*, SSRN (2012)("[A] preliminary series of 30 interviews . . . [suggests] that in traditional stable industries . . . little is invested in detailed contracting and unexpected contingencies are handled with little reference to law").

⁹ These interviews were conducted by Josh Whitford

also suggests that in many contracting contexts, the network position of the collaborating firms (sometimes referred to as “structural social capital”) can provide powerful governance constraints on misbehavior, and in contexts where the force of network governance is particularly strong, such as in biotech alliances, can even support complex and fluid contractual arrangements between firms who had no prior direct dealings with one another. More broadly, the analysis suggests that the availability of network governance expands not merely the *amount* but also the *type* of information about misbehavior that can lead to nonlegal sanctions, and therefore must be taken into account in assessing the incentive of parties to breach or perform and structuring the formal governance safeguards to be included in the agreement.

Part V concludes by suggesting that an appreciation of the ways that contract provisions and other contract governance mechanisms interact with social capital and network position, together with a clearer understanding of the true costs and benefits of relational as compared to discrete contract governance mechanisms, will enable commercial lawyers to draft better contracts, and may also, as industrial policy theorists have suggested assist industry associations and other groups in creating programs and institutions that will better support this type of commercial contracting.

II. THE WEAK SHADOW OF THE LAW

Outsourcing relationships between OEMs and their suppliers are typically governed by Master Agreements that cover many of the core legal aspects of a supply contract—such as limitations on liability, warranty, confidentiality, modification, and intellectual property. Many of these agreements, however, lack a quantity provision, making them legally unenforceable.¹⁰ In these transactions, a legally enforceable obligation only arises when a purchase order specifying a quantity is sent by the buyer and accepted by the supplier.¹¹ These purchase orders typi-

¹⁰ The Uniform Commercial Code, the statute that governs transactions in the sale of goods, provides that a contract must have a quantity provision to be legally enforceable .

¹¹ See e.g., *Master Supply Agreement between Sun Microsystems Inc. and Mitac International Corporation* (May 1, 2007) section 3.1 (“The parties acknowledge that neither this Agreement nor any Award Letter or Blanket Purchase Order will constitute a commitment to purchase any particular quantity of Products. Sun shall only be committed to purchase Products and Supplier shall only be committed and authorized to ship Product to Sun when Sun has tendered a purchase order to Supplier in accordance with an Award Letter. “).

cally include additional terms that are incorporated by reference into the Master Agreement so long as they do not conflict with it.¹² Additional details about the promised performance, the way conformity or non-conformity with the product and delivery parameters will be assessed, and any penalties for non-performance are provided in appendixes to the purchase order and/or (depending on whether services are also involved) by the terms of Statements of Work and any applicable Service Level Agreements (“SLAs”). The terms of these supplemental agreements (which are often negotiated by managers, rather than lawyers) are also incorporated by reference into the Master Agreement.

Other contract relevant specifications, whose binding or nonbinding status is sometimes explicit¹³ but often unclear, are set out in the Vendor Handbooks, Supplier’s Codes of Conduct (or Ethics), and the various sets of quality, quality control, environmental, labor-practices and social responsibility-related standards that are created by many large buyers. Regardless of the legal status of these documents, buyers expect suppliers who wish to do business with them in the future to comply with their requirements. In addition, these agreements typically require suppliers to comply with or have been certified as complying with, quality

¹² See e.g., *Master Purchase Agreement between Entropic Communications and Tellabas Operations Inc.* (July 1, 2006) at Sec. 6.2 (giving the master agreement priority over conflicting terms in purchase orders); Ingersoll Rand, *Global Supplier Quality Manual* (March, 2014) Sec. 2.0 (noting that “In the event of a conflict between the terms of this [Quality] manual and any buyer purchase order or other contract between the parties, unless the parties agree otherwise in writing, the various components of the agreements shall be given the following precedence (in descending Order of precedence): . . . the Supply Agreement. . . a purchase order . . . an applicable country/region supplement to the buyer’s terms and conditions of purchase . . . the buyer’s terms and conditions of purchase and . . . the Global Supplier Quality Manual”)

¹³ See, e.g., John Deere, *SUPPLIER QUALITY MANUAL*, JDS6223 [hereinafter “DQM”](noting that “acceptance of a John Deere purchase order constitutes acceptance of the requirements of this manual”). See also John Deere, *Terms and Conditions*, Section 11 (“Seller also warrants that its processes shall comply with the John Deere Quality Manual”); Robert Bosch LLC, *North American Terms and Conditions of Purchase* (September 1, 2010) Sec 2.2 (explicitly incorporating all of the buyer’s policies and the policies of its customers, into its master agreements with its suppliers); Carlisle Handbook, *supra* note ___ at 9 (“Acceptance of a purchase order constitutes acceptance and understanding of this Supplier Handbook.”)

and manufacturing standards set by external groups such as the International Standards Association, among many others.¹⁴

In general, the monetary remedies available to the buyer in suits for breach of contract are limited. Most procurement contracts limit damages for ordinary breaches to the contract price or some low multiple of it, and exclude both incidental and consequential damages. Damages would therefore be highly under-compensatory in the event of a supplier's breach. However, many such contracts also provide for higher recoveries for breach of intellectual property and confidentiality provisions.¹⁵ In addition, some agreements permit more extensive recoveries in instances of so-called "epidemic breach."¹⁶ An epidemic breach is a breach relating to an "epidemic failure," of a component or assembly that greatly impairs the value of the buyer's final product to his customers, typically causing health or safety-related harms that have a damaging effect on the buyer's reputation.

Even in contracts that do not specifically limit damages, court-awarded damages for breach would be under-compensatory. In addi-

¹⁴ The two most common such standards are ISO 90001 and the International Automotive Management Standard, ISO/TS 16949.

¹⁵ See e.g., *Sun Microsystems Agreement*, *supra* note __ (limiting liability for ordinary breach, as follows: "EACH PARTY'S MAXIMUM AGGREGATE DIRECT LIABILITY, WHETHER FOR BREACH OF CONTRACT OR IN TORT, INCLUDING NEGLIGENCE, WILL BE LIMITED TO THE GREATER OF TWO MILLION US DOLLARS (US\$2,000,000) OR TWO TIMES (2X) THE TOTAL FEES PAID BY SUN FOR THE PRODUCT OVER THE LIFE OF THE AGREEMENT," but providing a higher per se damage limit for breach of confidentiality, stating that, "TOTAL DAMAGES (WHETHER DIRECT, INDIRECT OR OTHERWISE)[for breach of confidentiality] SHALL NOT EXCEED \$20 MILLION ON A CUMULATIVE BASIS OVER THE LIFE OF THIS AGREEMENT.")

¹⁶ Contracts typically define "epidemic failure," and/or "epidemic breach." See e.g., *Sun Microsystems Agreement*, *supra* note __ at Section 18.4.1 ("For purposes of this Agreement, "Epidemic Failure Event" shall mean the Product functional failures during the Warranty Period as set forth in this Agreement and (i) having the same or similar cause, verified by the Supplier and Sun, or an independent third party on behalf of Sun (ii) occurring within five (5) years after delivery of the Product; (iii) resulting from defects in materials, workmanship, manufacturing process or design or failure to conform with the Specifications, (iv) having a one month failure rate equal to or in excess of the rate calculation defined as two times (2x) the most current, consecutive five month (or any other mutually agreed upon, currently monitored duration) rolling average failure rate where the failure rate is calculated by dividing the number of unit fails by the unit population or installed base (Failure Rate = N unit failures / N unit population).")

tion to all of the usual difficulties of proving damages (especially lost profit), it is unlikely that courts would fully compensate buyers for the switching costs associated with qualifying a new supplier¹⁷ or the potential damage to their reputation resulting from use of a defective component that causes downstream product malfunction. The judgment proof problem is also likely to be quite severe. Most suppliers are small relative to the size of the buyer; and given that many buyers operate on the basis of just-in-time inventory practices, consequential damages might lead all but the largest suppliers to file for bankruptcy.

The most meaningful contractually sanctioned remedy the buyer has in the case of a significant breach is termination. Most master agreements give the buyer the right to terminate “for cause” without making any payments to the seller as well as the right to terminate “for convenience” so long as the buyer reimburses the supplier for his reliance expenses.¹⁸ In practice, however, buyers often compensate their suppliers’ for lost reliance expenses regardless of the reason for termination. Some do this to avoid creating a legal right of action. Others do so to soften the blow of termination on the suppliers’ business in an effort to limit the damage to their own reputation, and/or help them acquire a good reputation for treating their terminated suppliers fairly.¹⁹

Although the buyer’s right to terminate is nominally very powerful, its exercise is tempered by both anticipated switching costs²⁰ and the

¹⁷ Some of these switching costs, such as search costs and the costs of putting potential suppliers through their supplier qualification program until a suitable new partner is found, would be relatively easy to quantify. Other, potentially significant costs, would not. These include increased coordination and monitoring costs as well as the costs arising from the time it takes the buyer’s personnel to establish the types of connections and understandings with seller’s personnel that facilitate problem solving. Even more problematic from the perspective of a buyer, in contexts where a buyer’s immediate reaction to a termination would be to temporarily increase his purchases from an existing supplier, a court would likely conclude that switching costs are negligible. However, because buyers limit their buy from any one seller for good reasons, see *infra* discussion accompanying notes __-__, the buyer would still have to bear the costs of finding a new supplier at some point in the future.

¹⁸ See e.g., [insert a typical terminate for convenience clause]

¹⁹ Interview with VP of Supply Chain Management at a Health Care products company (December 2013); Conversation with in-house Health Care Outsourcing Lawyer (Conducted by Lisa Bernstein, March 2013).

²⁰ See e.g., Interview with OEM manager, NOE *supra* note __ (“A lot of times we are working with suppliers who have historical poor performance, or unacceptable performance. So why do we stay with them? Well a lot of times were

buyer's concern that if it terminates too often or at the first sign of trouble, its other suppliers and putative suppliers will be reluctant to make to make relationship-specific investments.²¹ Buyers may also choose not to terminate underperforming suppliers because it is simply cheaper for them to help a supplier (particularly if the supplier is simply having production problems rather than acting opportunistically) than it is to switch suppliers.²² As a mid-western OEM explained "It takes a lot for a supplier to get in a position where we are going to re-source their business. They almost have to make an effort . . . re-sourcing business . . . takes a lot of time, a lot of effort . . . if we are noticing problems, we will get some level of materials leadership involvement to see what the issues are."²³

Wholly apart from the damage limitation provisions found in these contracts there is another, more fundamental reason that the threat of court imposed monetary damages is far weaker in long-term (or repeat dealing) relationships than it is in discrete transactions. It is not unusual for the filing of a lawsuit for breach of contract (particularly one based on quality defects)²⁴ to be a relationship-ending event. As a consequence, a breached against buyer is unlikely to sue (or have a credible threat to sue) for breach unless the amount he can recover (net of litigation costs, switching costs and reputation costs) exceeds the present value of the marginal benefit of continuing to deal with this supplier, rather than the next best supplier, in the future. Given that the size of each purchase order in these transactions tends to be small relative to the value of the long-term relationship, suppliers realize that buyers will rarely have a credible threat to sue them in the event of a substandard delivery that

are so engineered to that supplier . . . You can't take this design, which was probably jointly developed, and go and take it to their competition . . . we have to redraw, re-text, re-everything . . . The cost of resourcing is huge. We recognized a long time ago that we have to stick with some of our conditional suppliers because of the cost of re-sourcing.")

²¹ Interview with in-house Heath Care Outsourcing Lawyer, *supra* note __

²² See e.g., Whitford, *supra* note __ at 65 ("The unwritten policy, seldom discussed publically by GM, acknowledges that the automaker is prepared to help some suppliers rather than risk part shortages . . . GM has hastened payments for parts, guaranteed future contract, postponed price cuts, offered consulting, and even raised the prices paid for components . . . The automakers do these things because they know it would be time consuming and costly to replace certain parts makers.")

²³ NOE, *supra* note __

²⁴ [Insert a note explaining the reasons why IP related disputes may not have the same effect on relationships].

falls short of an epidemic breach—that is, unless the buyer has concluded (perhaps because of a pattern of breaches over time, or the availability of a better supplier) that it is worthwhile to end the relationship. More generally, this suggests that the shadow cast by the threat of court imposed monetary sanctions on the work-a-day actions of suppliers is likely to be quite weak, even if there are no contractual limits on damages, because over an important range of purchase order values, buyer's only have a credible threat to sue for breach of a *contracting relationship*, rather than a mere *breach of contract*. As a strategic sourcing manager at a large mid-western OEM explained when asked what contract provisions actually mattered, “contracts are not about lawsuits, they are about divorce. Sometimes we just want out, making termination provisions the most important part of the deal.”²⁵

In light of the limits on damages and buyers' reluctance to terminate suppliers too quickly, it is not surprising that there are other provisions in these agreements that have the potential to at least partially restore the suppliers' incentives to perform their work-a-day obligations. Master Agreements and/or the ancillary documents they incorporate, typically have what can be understood as “interior remedy” provisions—that is, provisions that permit a buyer to withhold (thus making it a self help remedy that can be imposed without a threat of a lawsuit) both payment and a small fine when a nonconforming or late tender is made. The fine falls far short of compensating the buyer for breach, perhaps as a way of insuring that the buyer has no incentive to impose the fine unless performance is truly nonconforming. While some firms impose these fines whenever delivery is nonconforming, others only impose them when a problem occurs several times or the supplier ignores a request to provide a plan to eliminate a documented problem. As one procurement manager explained, her firm tended to impose these fines only when the relationship the supplier was deteriorating and/or she wanted to get the attention of managers higher up in the organization in the hope that they would correct the underlying problem.²⁶

²⁵ Interview with a high ranking strategic sourcing manager at a large mid-western OEM (conducted by Lisa Bernstein, May 5th, 2014)

²⁶ Interview with Procurement VP, *supra* note __. See also, Ian Stuart, Paul Deckert, David Mcutcheon, Richard Kunst, *A Case Study: A Leveraged Learning Network*, Sloan Management Review (Summer 1998) at 85 (noting that while Allen Bradley, a manufacturer of factory automation parts, adopted a plan to penalize noncompliance with quality metrics by fining suppliers an amount equal to the cost of remedying the defect, it ultimately decide to report, but not collect, the amount of the would be fine in an effort, “to use the figures to foster awareness rather than to assess penalties.”).

Even with these additional sanctions in place, however, other steps buyers take to ensure performance suggest that from the buyer's perspective the force of *mere promises to perform* is too weak to induce optimal performance. Buyers have developed a number of other ways--akin to direct regulation and/or the intra-firm management techniques associated with hierarchy²⁷-- to increase the likelihood of performance.²⁸ These methods, which are quite costly to administer, take a variety of forms, including specification of the types of manufacturing processes to be used²⁹ as well as intense monitoring (or participation) by buyer-employees³⁰ or third-party auditors, certifiers, or calibrators and/or

²⁷ Outsourcing lawyers used to recommend that buyers include provisions specifying bonus payments to particular supplier employees when certain performance metrics were met. See Interview with Outsourcing Lawyer (July 2014). However, this practice ended when lawyers became concerned that such provisions might lead courts to conclude that the supplier's employees were also employees of the buyer and as such entitled to additional benefits. In some industries, however, it remains common for contracts to specify the identity of key personnel and to require buyer approval for any changes.

It is not uncommon for buyer's to dictate not only the final characteristics of the goods to be purchased, but also the manufacturing methods to used in their production as well as the quality control procedures (and documentation they produce), and corrective action methods, used in the relevant supplier plant. Some buyers require the suppliers to describe the skills sets needed by their manufacturing personnel, and then to provide documentation that all employees working on the goods have been trained to these standards. See Ingersol-Rand, QM at 2.1 (Training).

²⁸ The decision to use "boots on the ground" measures is a complex calculus, and is not driven solely, or even primarily by the weakness of monetary remedies. Sometimes problems are cheaper or easier to detect and/or cheaper to fix when they are discovered during the production process rather than after the goods have been tendered to the buyer and/or used in the final assembly.

²⁹ It is not uncommon for buyer's to dictate not only the final characteristics of the goods to be purchased, but also the manufacturing methods to used in their production as well as the quality control procedures (and documentation they produce), and corrective action methods, used in the relevant supplier plant. Some buyers require the suppliers to describe the skills sets needed by their manufacturing personnel, and then to provide documentation that all employees working on the goods have been trained to these standards. See Ingersol Rand, QM at 2.1 (Training).

³⁰ Contracts tend to give buyers the right to enter supplier's (and their supplier's) plants to "provide for access to quality system documentation, quality records as well as the ability to conduct audits, verify product and processes." See, United Technologies, Supplier Quality System Requirements (2012) at 1.

buyer-employee boots on the ground at the suppliers' production facilities.

For example, John Deere's contracts, like those of other mid-western OEMs, require suppliers to produce products according to the John Deere Quality Manual. This manual consists of eighty-eight pages of detailed manufacturing process-related requirements;³¹ it also carefully specifies many points in the production process where Deere personnel must either be present and/or sign off on the completion of a stage of the production process before the supplier is permitted to move on to the next stage. For example, before a part is produced, a "Design, Process and Assembly Review" must be held. This review includes "a meeting which confirms all expectations of the product or services prior to a physical build. John Deere teams initiate this review as early as possible before tooling release."³² Similar meetings must be held for every new product as well as when there are significant changes to existing products. In addition, when the product to be made "cannot be verified by subsequent monitoring or measurement,"³³ the supplier must submit a verification warrant validating the "qualification of processes, qualification of equipment and personnel, and use of defined methodologies and procedures, requests for records and re-validation," after which John Deere reviews the submission and approves or rejects the verification warrant.³⁴ More generally, a look at John Deere's detailed requirements (some of which are merely codifications of generally accepted good manufacturing processes) show an effort to import governance mechanisms associated with intra-firm hierarchy into the governance of cross-firm transactions.

OEMs, however, differ widely with respect to the extent of this oversight and intervention. Some firms do relatively little,³⁵ out of a concern that if they intervene too much, suppliers will attempt to blame them for

³¹ See DQM *supra* note __. In addition, the manual itself in turn incorporates THE JOHN DEERE SUPPLIER CODE OF CONDUCT (covering topics like child labor, health, safety, human rights and more); John Deere Standards, and the John Deere Restricted Materials List. See also: Navistar, Navistar Integrated Supplier Quality Requirements (Nov.1, 2013) (a 29 page manual covering most of the same subjects as the Deere manual); Ingersoll Rand, Global Supplier Quality Manual (same); Kohler, Global Supplier Quality Manual (covering the same subjects as the Deere manual but in somewhat less detail).

³² DQM *supra* note __ at Section 7.2.1 at 11.

³³ DQM, *supra* note __ at 19

³⁴ DQM, *supra* note __ at 19

³⁵ Interview with VP Supply Chain, *supra* note __

any undesirable outcomes. Others engage in intense intervention and oversight either at the beginning of a contracting relationship or when a new product is introduced but lessen their engagement as the relationship develops.³⁶

The core point is that parties do not simply contract, wait for delivery, accept or reject, and then sue if cure is not forthcoming. Rather, they interact throughout the production, delivery, and quality assessment process to try and catch problems sooner rather than later and work together to solve problems rather than threatening one another with lawsuits. It is in this respect that many of the work-a-day practices in the manufacturing world today echo the findings of Stewart Macaulay's seminal study,³⁷ only with a subtle difference—the work-a-day practices may look informal, but are, in reality, shaped and supported by the provisions of highly formal written agreements and a variety of formal contract administration mechanisms.

In sum, in the procurement context, the transactors' legally enforceable contract is of limited use to buyers in terms of going to court to obtain compensatory legal remedies for breach. The contracts are also of limited value to suppliers. As one midsize supplier to a large midwestern OEM aptly observed, "[t]he contract is just a formalized handshake that says that your intention is to put business in here . . . You get long term agreements, but [they are of limited value because] I can't outspend them in court."³⁸

³⁶ See e.g., Osram Sylvania, *GLOBAL AUTOMOTIVE LIGHTING: SUPPLIER HANDBOOK*, at 15 (describing how firms move from "Material Inspection Depart Quarantine," status where incoming product is extensively tested to "ship to stock," status where it is not); National Instruments, *NI SUPPLIER HANDBOOK*, at 9 (describing their Dock-to-Stock Program and explaining that "The direct path to stock is our goal and we expect our suppliers' cooperation. Material is qualified as a result of successful incoming inspection lot history . . . Material that is dispositioned as 'nonconforming supplier fault' may require inspection for future receipts until qualified again").

³⁷ See Stewart Macaulay, *Non-Contractual Relations in Business: A Preliminary Study*, 28 *Am. Sociology Rev.* 55 (1963) (quoting interviews that reflect the informality and flexibility of day-to-day contracting behavior and the desire of businessmen to keep lawyers and references to "the contract" out of their transactions).

³⁸ NOE *supra* note __, And, another supplier noted that even when a long term contract of a specified duration was used, "most customers have come back in and violated those kind of agreements . . . [they] say, "we know we negotiated this deal, however, business conditions have changed and we need your help, partner, to help us out of this situation . . . so, long term contracts,

Given the limited ability of contracts and the associated threat of court imposed damages to create incentives for performance, it is important to explore the wide variety of other mechanisms used to govern these exchanges. These mechanisms, some of which are created or supported by the provisions in the transactors' formal contracts—despite the lack of a credible threat to enforce them in court—can best be understood by exploring the ways they affect the flow of information between firms (and between their employees) as well as the ways that they create or leverage the forces of repeat dealing, social capital, and the network position largely, though not entirely, outside the shadow of the law.

III. FACILITATING THE EMERGENCE OF COOPERATIVE CONTRACTING RELATIONSHIPS

Large industrial buyers have created a variety of formal contracting mechanisms, internal contract administrative mechanisms, and other institutional structures that make it possible for cooperative contracting relationships—that is, relationships where shirking is minimized and opportunistic behavior adequately controlled—to arise and endure largely outside of the shadow of the law. The most important such mechanisms are described below.

1. Preconditions for Cooperation to Emerge

In order for cooperation to emerge in the OEM procurement context, both the buyer and the supplier must decide to cooperate at the outset of their contracting relationship, and each must also believe that the other will do the same. Thereafter they must each respond to cooperation with cooperation, and defection, or a certain number of defections, with either defection or gradated defection.

A buyer and supplier's initial expectation that their contracting partner will cooperate is created in part by buyers' supplier qualification programs. These highly structured programs require potential suppliers to provide: detailed financial information, including, in many instances, cost and profit margins; information about the identity of their other contracting partners and the percentage of their output they sell to each;³⁹ contact information for references from both current and past buyers; and documentation that their quality control systems have been

they sound nice and are nice things to talk about, but we have found that there are problem in our customers adhering to those contracts." *Id.*

³⁹ See e.g., Questionnaire *infra* note __

third-party verified⁴⁰ (or in some firms self-verified) to comply with international or other standards. Suppliers are also required to commit to opening their plants for buyers' inspection both before and after a contract is entered into.⁴¹ Individual managers also investigate potential suppliers through their more informal business contracts as well as through the web and business press.⁴²

Supplier qualification programs are costly for a buyer to administer and expensive for a putative supplier to complete. Both parties are aware that if they do not find one another to be desirable contracting partners, this investment will be lost. They are also aware that when they do find the other to be qualified and begin to transact, they will both face significant switching-costs if either of them decides to exit the relationship. As a consequence of this and, perhaps, other forces,⁴³ they are each likely to begin the relationship by cooperating and to assume that their contracting partner will do the same. Since these relationships begin with very small purchase order amounts, amounts that only increase with good performance, each party realizes that in the early purchase orders, the likelihood that the other would be able to obtain a large enough payoff from defecting to make it desirable to incur these switching costs, is small. Each party is therefore likely to begin early production rounds by cooperating. In addition, the fact that buyers will

⁴⁰ See e.g. Doing Business with Harley-Davidson, Suppliers Quality Systems Requirements, (last checked 5/28/24) (requiring tier 1 suppliers to be ISO 9001 certified).

⁴¹ See infra text accompanying notes __-__ Some firms ask suppliers to permit them to take pictures during their site visits, See Quality Management System Supplier Information Form, from large healthcare company (provided to researcher December 2013).

⁴² See e.g., Hewlett Packard, SUPPLY CHAIN RESPONSIBILITY: OUR APPROACH at 4 (explaining that "insight from . . . press articles . . . may affect our assessments of supplier risk.)

⁴³ Mark Fichman and Daniel A. Levinthal, *Honeymoons and the Liability of Adolescence: A new Perspective on Duration Dependence in Social and Organizational Relationships*, 16 *Academy of Management Rev.* 442 (identifying factors including, but not limited to, "favorable prior beliefs, trust, goodwill, financial resources or psychological commitment," that together give rise to an "initial stock of assets," that in turn create a honeymoon period, defined as a "suspension of the threat of a relationship ending," at the outset of commercial relationships, but providing limited empirical support from business settings, outside of one study that found such a period to exist at the outset of auditor-client relationships but needs to be viewed with caution as the negative market signal sent by firms who change their auditors early in a relationship might well account for the effect).

often have their own employees present at least during the initial production runs, further increases the likelihood that each party will enter the relationship with a reasonable belief that the other will cooperate.

2. Conditions for Maintaining Cooperation

The most important condition for the maintenance of commercial cooperation is that the transactors themselves must be able to agree on what constitutes cooperation and what constitutes defection and be able to distinguish acts of cooperation from acts of defection. The biggest threat to continued cooperation is the possibility that a transactor will misclassify an act of cooperation as an act of defection and thus set off a series of actions and reactions that lead to the disintegration of the contracting relationship.⁴⁴ Given the detail in these contracts and the fact that buyers' expect strict compliance as regards quality, on time delivery, and a host of logistics-related metrics, the potential for relationships to unravel due to either a supplier's misunderstanding of a buyer's needs or a buyer's mistaken classification of operational outcomes is omnipresent; yet buyers have developed ways to reduce both of these risks and moderate their responses to bad outcomes in ways that are designed to facilitate continued cooperation without opening the door to opportunism.

Large buyers take many steps to reduce the likelihood that suppliers will misunderstand either their contract requirements, or their unwritten expectations (which may be as or more important to the prospect of long-term cooperation as the written requirements). Even the most highly detailed contracts routinely incorporate or are supplemented by

⁴⁴ Bernstein has explored the role played by clear contracts, institutional efforts to promote common knowledge, and the availability of formalist adjudicators whose decisions are predictable in sustaining cooperation in the shadow of the cotton industry's well developed private legal system, See Bernstein, *Cotton Industry*, supra note __. Similarly, Bozniak and Hadfield, supra note __ recognize that written contracts can support, or in their terms "scaffold," cooperation even when they are rarely (and are rarely expected to be) legally enforced. However, in their account (unlike the one presented here) both lawyers and the content of contract law play a central role in enabling the written agreement to scaffold cooperative exchange. As they explain, cooperation can be achieved because "a distinctive body of *contract law* and practice [that includes "formal legal doctrine" as well as the "norms and rules of contract analysis"] coordinates the interpretation of ambiguous and multi-dimensional events by the parties to a contractual relationship," thereby enabling "those events to be classified in a binary fashion as 'breach' or 'not breach,'" (5) and reducing the "variance associated with the estimates of the likelihood that contracting events will be classified as breach or not."

numerous sets of supplier manuals that are available on the buyer's websites and are often accompanied by webinars, power point presentations, or summaries that explain them.⁴⁵ For example, John Deere's quality manual is supplemented by a Webinar that provides an overview of the manual's requirements and highlights those "critical requirements" that all suppliers are expected to strictly observe and whose violation will "put the supplier at the highest risk of violating the Purchase Order Terms and Conditions."⁴⁶

These large buyers also take additional steps to educate their suppliers. Caterpillar operates a "Supplier Development College," which offers both webinars and live classes. Some of these classes are designed to increase suppliers understanding of Caterpillars' contract requirements and while others are designed to educate them about the latest industrial techniques, regulatory requirements, and quality control methods.⁴⁷ Many OEMs also have supplier development programs where they send consultants into suppliers plants to help them understand what improvements are needed and/or how improve their production methods to increase quality and/or reduce costs.⁴⁸ At companies of all sizes, regardless of the availability of these extraordinary resources, suppliers also come to understand their buyers' needs and expectations through the process of negotiating product specifications and the provisions of SLAs, including the key performance indicators that will be used to assess performance. The information learned in these negotiating sessions is viewed by many as being as or more important

⁴⁵ See e.g., GE ENERGY SUPPLIER QUALITY RESOURCE BOOK (March 2006) (providing an overview of quality requirements but warning that "[t]he information contained herein has been compiled for the convenience of the GE Energy supply base. The specific applicable requirements are defined in the purchase orders, contracts, terms and conditions, drawings, and specifications relevant to a purchase. As such, this document is not a substitute for a rigorous contract and document review by the supplier as part of the process to fulfill an order.")

⁴⁶ DQM at 3.

⁴⁷ See e.g., Supplier Development College, <https://supplierconnect.cat.com/wps/portal/catconnect/SDC> (describing onboarding classes for new suppliers that teach them how to do business with Caterpillar; courses on aspects of manufacturing ranging from asbestos control to lead to crane safety; and a class "Meeting Customer Expectations." Similarly, John Deere provides "classes for the Supplier Quality Manual, John Deere Standards, and Enterprise Product Delivery Process and Supply Chain Integration." See DEERE QUALITY MANUAL AT 6.2.9.

⁴⁸ See e.g., JD CROP: JOHN DEERE COST-REDUCTION OPPORTUNITIES PROCESS (describing Deere's supplier development programs).

to the successful governance of these relationships as the final written agreements that reflect the understandings they reach.⁴⁹

Buyers also use a formal contract administration mechanism, the Supplier Scorecard,⁵¹ to rate each supplier in terms of their compliance with relatively objective performance metrics as well as the buyer's assessment quality of the contracting relationship more generally.⁵² The core metrics that make up the bulk of most scorecards are on-time performance, cost, quality, and customer service. The buyer then uses these metrics to create a quarterly composite score, which it then uses to determine the business opportunities (if any) that it will make available to the supplier in the next quarter. By rating on a quarterly rather than purchase order-by-purchase order basis, and creating a composite score for the quarter, buyers are less likely to overreact to isolated bad outcomes.

Under the scorecard system, suppliers with the highest rating are eligible for new business. Those with adequate ratings can keep their existing levels of business, but are expected to improve. And suppliers with lower ratings are warned that their business will decrease if improvements are not quickly made. It is only after a few rounds of low ratings (accompanied, in transactions with the largest buyers, by consulting services designed to improve their operation) that suppliers are terminated.⁵³ This mechanism enables buyers to reward suppliers for their performance, and impose carefully graduated monetary sanctions on

⁴⁹ See e.g., Naomi Karten, HOWE TO ESTABLISH SERVICE LEVEL AGREEMENTS ("A properly established SLA fosters improved communication between the two parties. . .the very process of *establishing* an SLA helps to strengthen communication, so that the parties come to better understand each others' needs, priorities, and concerns"). See also International Association of Contract and Commercial Managers, [insert].

⁵¹ This scorecard method was also used by some of the buyer's in Macaulay's 1963 study, see Macaulay, *supra* note __ at 63 ("Some industrial buyers go so far as to formalize this sanction by issuing 'report cards' rating the performance of each supplier. The supplier rating goes to the top management of the seller organization, and those men can apply internal sanctions to salesmen, production supervisors or product designers if there are too many 'D's' or 'F's' on the report card.").

⁵² See e.g., National Instruments' Supplier Scorecard Assessment Criteria (2011) (defining the allocation of points on the company supplier scorecard and indicating that only subjective element, the score for "customer service and support," was allocated only 10 out of 100 points.").

⁵³ See Richard Menhorn, NCR: Supplier Scorecard Procedure (June 25, 2010) (describing the operation of the NCR company's scorecard).

them for non-performance without having to end the contracting relationship to do so. Because these sanctions do not benefit the buyer, and are in fact costly for him to impose – as he has to secure other sources of supply to cover reduced quantities – he is unlikely to impose them unless the supplier has in fact underperformed.⁵⁴

Quarterly business review meetings held to discuss the scorecard.⁵⁵ These meetings facilitate communication between buyer and seller representative. Buyers share their perspective on the scorecard and suppliers are encouraged to ask questions, dispute various ratings, and talk to buyers about their plans to improve in critical areas. As a consequence of these often extensive discussions, a supplier is less likely to respond to even a buyer's mistaken judgment about the quality of its performance with defections of its own – that is, a supplier is much less likely to mistakenly conclude that its scorecard rating (and any associated reduction in business) is an independent defection on the part of the buyer. The scorecard together with the quarterly business review therefore serve as a useful, though far from foolproof, way of heading off a mistaken series of echoing defections that has the potential to end an otherwise beneficial contracting relationship.

To ensure that suppliers who reach the highest grade have an incentive to maintain high-level performance, firms have created supplier-of-the-year awards. These awards are covered in the business press,⁵⁶ and

⁵⁴ [on the benefits of decoupling]

⁵⁵ These metrics and the quarterly meetings held to discuss them may also be valuable because they provide a largely objective measure of the suppliers' performance that may help mitigate the familiarity and friendship effects of relationships between the buyers and suppliers employees on business decision making within each firm. As the buyer's employees responsible for the account share information within their firm, the "story" they tell about the supplier will have to be one that is consistent with the objective metrics which should reduce though not eliminate the effect of purely friendship-based (as opposed to performance-based based) loyalties See infra notes __-__ and accompanying text.

⁵⁶ Despite widespread coverage in the press, empirical evidence on the effect on suppliers' businesses of winning these awards is conflicting. Compare Kevin B Hendricks and Vinod R. Singhal, *Quality Awards and the Market Value of the Firm: An Empirical Investigation*, 43 *Management Science*, 415, 430. (1996) (looking solely at buyer quality focused awards given to public companies and finding no abnormal returns on the day after the announcement) and Kevin B Hendricks and Vinod R. Singhal, *Firm Characteristics, Total Quality Management, and Financial Performance*, 19 *J. Operations Management*, 269, 280 (2001) (using a different methodology and finding that winning a buyer granted quality award resulted in a 28.24% "mean percent change in operating income."). See also Arash Azadegan and Dinesh Pai, *Industrial Awards as Manifests of Business Per-*

are sometimes considered a hallmark of quality by other buyers when they are selecting suppliers.⁵⁷ By announcing the award, the buyer confers a benefit on the supplier who can then use it to solicit other business, something that he might otherwise be prohibited from doing by the confidentiality provisions often found in master agreements.⁵⁸ Buyers also obtain a prospective benefit from the granting of these awards. One a suppliers' name is publically associated with the buyer, a supplier who fails to achieve the same public status with the buyer in subsequent years will suffer reputational harm, thus creating an incentive for him to continue to perform at a high level in the future.

The incentives created by the scorecard are also reinforced by buyers' practice of granting status designations, like "partner-level"⁵⁹ supplier or "certified" supplier to suppliers who continue to meet or exceed their contracts' specified performance criteria. Some of these designations come with a valuable benefits, such as better or more extensive information sharing, more frequent contact, dock-to-stock status,⁶⁰ and the award of business even when they are not the low bidder so long as they are within a specified range of the low bidder.⁶¹ In addition, some

formance: An Empirical Assessment, J. Purchasing & Supply Management 14 (2008) (drawing on data from the semiconductor sectors on buyer awards of many types, and concluding "that awards are an indicator of long-term supplier performance," and that "operational awards show direct association with ROE, [while] product awards show direct association with sales growth.")

⁵⁷ Interview Dec with SC manager sk (noting that while not determinative in the selection of a new supplier, she would sometimes give the receipt of these awards some weight) ed Peterson.

⁵⁸ See e.g., *infra* note _ (noting the confidentiality provision in a contract between John Deere and one of its largest suppliers)

⁵⁹ See e.g. John Deere, *ACHIEVING EXCELLENCE: A STRATEGY FOR WORLD-CLASS SUPPLIER RELATIONSHIPS* at 4.

⁶⁰ See *supra* note __, and SLOAN GLOBAL SUPPLIER QUALITY MANUAL (7-2013 Rev. 6, 2013) at 4 (noting that "certified" suppliers get 'dock-to-stock' status . . . [and are] exempt from the receiving inspection process at Sloan facilities"); CARLISLE HANDBOOK, *supra* at 20 (same).

⁶¹ For example, at the Ariens Corporation, certified suppliers receive "preferential treatment from the OEM. . . While [they] are expected to come up with cost saving ideas, they enjoy partnership style relationships with Ariens, particularly in engineering. In bidding, if they can come within five percent of the lowest bid, they get the order." See Jeffrey Rickert, Jowel Rogers, Darya Vassina, Josh Whitford and Jonathan Zeitlin, *Common Problems and Collaborative Solutions: OEM-Supplier Relationships and the Wisconsin Manufacturing Partnership's Supplier Training Consortium*, (June 2000) at 17. See also, Aberdeen Group, *THE SUPPLIER PERFORMANCE MEASUREMENT BENCHMARKING REPORT* (December

buyer questionnaires for new suppliers ask if the supplier is a “certified” supplier to any of its customers,⁶² thereby making such certification a valuable business asset.

The Master Agreements also have provisions designed to improve the accuracy of the buyer’s assessment of the supplier’s performance. They give buyers the right to: inspect the suppliers’ plant with⁶³ or without notice;⁶⁴ review and audit its quality control systems⁶⁵ and quality control reports;⁶⁶ and audit its books and/or other records.⁶⁷ While books and records are always subject to manipulation, and suppliers do

2002) (noting that “enterprises often give new business proposals (i.e., “bids”) from preferred suppliers additional weight, allowing preferred suppliers to win new business without necessarily being the lowest priced offer”).

⁶² See e.g., Supplier Questionnaire for Ceredyne Corp. at 4 (asking prospective suppliers “is your facility a certified supplier for any other customer. . .if yes please provide customer name if possible”).

⁶³ Carllisle Handbook, supra note __ at 8 (reserving a right of access with notice to the plants of all suppliers and their sub-contractors as well).

⁶⁴

⁶⁵ See DQM supra note _ at 8.2.2 at 22 (“Deere reserves the right to conduct a quality system assessment at the supplies facility . . . Deere would expect access to a supplier’s personnel, documentation, __and test facilities.”); see also *Primary Contract Manufacturing Agreement between JDS Uniphase and Fabrinet* (January 1, 2008) Sec. 10.1 (setting out broad inspection and quality control rights as well as requiring “reasonable access to its staff including technical staff, to determine the identity and scope of Improvements and New Technology whether solely or jointly developed by Supplier, which JDSU reasonably believes Supplier has not adequately disclosed in accordance with this Agreement.”)

⁶⁶ See e.g., John Deere Quality Control Manual incorporated by reference into all John Deere Purchase Orders, at 4.2.4 at 5 (requiring “all quality records” including but not limited to twenty five enumerated types, to be “readily accessible upon required by a John Deere representative.”)

⁶⁷ See e.g., *Fuel Supply Agreement between Petro Truckstops and Petro Stopping Centers*, Sec. 3 (March 9, 2007)(“Each party shall . . . maintain and make . . . books and records available for at least two (2) years after the termination of this Agreement for possible inspection, copying, extracting and/or audit by the other party. Each party . . . shall have the right not more than once every six calendar months to review and, through an independent certified public accounting firm . . . to conduct audits with respect to the books, records, and all other documents and materials in the possession or under the control of the other party relating to this Agreement.”).

play games along these dimensions,⁶⁸ the provisions nevertheless give buyers important (if not perfect) information that they can use to more accurately determine if certain types of contract provisions are being violated.

In the procurement context, buyers also care deeply about the reasons for poor quality, late delivery, or any other type of subpar performance. The reason for a breach is likely to influence the buyer's response. One time breaches due to one-off manufacturing glitches are often largely ignored. Breaches due to systematic production problems (even large ones) that the buyer thinks can be remedied are initially met with offers of technical assistance,⁶⁹ sometimes at the buyer's expense. And, opportunistic breaches or breaches caused by operational difficulties that cannot be remedied are typically met with the harshest responses, including termination for cause. To enable buyers to determine the causes of particular breach, most contracts give buyers the right to demand a "root cause analysis," when nonconforming goods are delivered or certain types of other problems arise. A root cause analysis is "a tool designed to help identify not only *what* and *how* an event occurred, but also *why* it happened."⁷⁰ It can therefore help a buyer more accurately determine not only the reason for a particular breach but also whether the type of process problems that caused it are amenable "to

⁶⁸ See e.g., Signcraft (explaining, when asked if they give up their costing information to their largest OEM buyers, "somewhat, we take our material. . . then we just have a dinosaur way of doing labor costs. . . we don't break it down. The upshot is that [the OEM] can't see the margins."); romeo (explaining that when they were compelled to give their costing data to a large OEM, "we've done it to such an extent that they had an extremely hard time understanding it," and noting this was a deliberate tactic.). Suppliers are especially willing (games they consider fair when OEMs get to aggressive in the price reductions they demand); Bassler (explaining that while the overall margins they reveal across all parts they make for a buyer are roughly accurate, the data related to a particular product are less accurate to avoid push back from buyers.)

⁶⁹ As one OEM explained, even when there are "big problems," the firms "philosophy is to work with them [the supplier] to fix the problem. Obviously if they can't fix it over some period of time or it continues to be one that comes back. Then the partnership we thought we had, we don't have anymore so we have to find another option." navistar

⁷⁰ James J. Rooney and Lee N. Vanden Heuvel, *Root Cause Analysis for Beginners*.

specific] workable corrective measures that [will] prevent future events of the type observed.”⁷¹

Together, these audit/oversight and root cause provisions reduce the likelihood that a buyer will mistakenly classify a one-off industrial mishap as defection and thus set off a chain of reactions that either terminate or severely damage the parties’ relationship. They also make it possible for these contracts to condition on information that in their absence would not be observable and would only be verifiable through the filing of a lawsuit and the conduct of civil discovery. As a consequence, audit and root cause provisions together both expand the range of commitments that can be extra-legally enforced and significantly reduce the likelihood of a buyer mistakenly filing suit or terminating a supplier based only on his best guess of what civil discovery would reveal.⁷² They therefore add a measure of stability to these contracting relationships.

3. Cooperation Reinforcing Practices

In the context of make-to-spec procurement contracts all of the basic pre-conditions for creating and maintaining cooperation are met and buyer-supplier relationships, while not perfect, tend to last for a considerable length of time. Nevertheless, given the amount of information large buyers require their suppliers to disclose not only formally as part of the supplier qualification process, but also informally as a condition of expanding the parties’ business relationship, there are many ways that buyers can take advantage of suppliers once contractual relationships have begun. Among other things, they can press for changes to production processes, demand price reductions (other than those that

⁷¹ Id. It is not uncommon for the supplier questionnaires used during the supplier qualification process to ask whether the supplier has established root cause analysis procedures. See e.g., AFF International Supplier Questionnaire (asking whether the supplier has a structured process for conducting root cause analysis). In addition, some buyers reserve the right to be present during and/participate in the conduct of the root cause analysis. See e.g., SUPPLIER HANDBOOK: CARLISLE INTERCONNECT TECHNOLOGIES at 22

⁷² The provisions are necessary because even if it were in the suppliers’ interest to reveal this information, in the absence of these provisions the information would likely remain private--the individual employee who would have to release the information as well as the lawyer who would likely have to sign off on it would face tremendous personal “second guess risk” from authorizing the release of this information, and therefore would be unlikely to do so. However, when these provisions are included they remove the second guess risk and failure to comply with the provisions will therefore send a negative signal.

are required as part of the contract), and/or deviate from the expected order quantity. In addition, as discussed further below, as these relationships move from make-to-spec to more complex relationships where suppliers take responsibility for design, co-design or aspects of sub-assembly, numerous other risks either emerge or become more salient, leaving suppliers (and in certain circumstances buyers) quite vulnerable.

In this context, buyers cannot contractually bind themselves not to engage in opportunistic behaviors; yet they have found an effective (though imperfect) extralegal way more to make their promise to behave cooperatively more credible—namely, by encouraging or creating ties among their suppliers and giving them the opportunity to meet, spend time together, and exchange information. By creating these ties, buyers make it more likely that any opportunism on their part will become widely known through the supply base, thereby damaging their reputation and their existing contractual relationships. As a consequence, in contexts where these connections between suppliers exist, large buyers are able to post their reputation as at least a partial bond against their own misbehavior.

Harley Davidson, is one company that actively encouraged the creation of a network among its suppliers. In the mid-1980's Harley developed and funded a Supplier Council, consisting of "16 suppliers which, as a group, represent a cross section of Harley-Davidson's supply base of more than 400 OEM Suppliers . . . [that] meets 4 times a year in conferences that last 2-3 days," with each member contracting 9-12 other first tier suppliers to get their views about the company's actions.⁷³ Although the effort was motivated by the company's desire to diffuse best practices and to create "a very intimate relationship with [its] suppliers,"⁷⁴ it had the incidental effect of making it possible for the company to more credibly promise its suppliers that it would not behave opportunistically. Harley and its suppliers both know that if Harley acted op-

⁷³ See Kevin R. Fitzgerald, "Harley's Supplier Council Helps Deliver Full Value," *Purchasing* vol. 121 No. 3 (September, 5 1996) at 5. Harley rotates the members of the Council every few years, a practice that (together with the many other firms the suppliers deal with) should help ensure that "group think" does not emerge.

⁷⁴ NOE, *supra* note __ For example, one Harley supplier when asked if he shared costing data and other information with Harley, he replied that he would explaining that "I think Harley Davidson is pretty easy to deal with, I don't have any issues, I think Harley is a good customer." Nelson And as another supplier noted, Harley was not as ruthless as the auto companies in demanding price cuts and that his firm is "in it for the long haul with Harley who is allowing them both to make profits and they are pretty happy with them." *id.*

portunistically to a supplier, word of its misdeeds was likely to quickly spread throughout this group.⁷⁵ By making any opportunistic actions it took towards any one supplier, more rather than less visible to other suppliers, the existence of the Supplier Advisory Council, enabled Harley to post its reputation as a bond to behave cooperatively, something that was particularly valuable to it as it attempted to compete with larger volume buyers for its suppliers' loyalty and attention.⁷⁶

The now defunct Digital Equipment Corporation (DEC) is another company that facilitated the creation of a network that incidentally enabled it to more credibly commit not to behave opportunistically towards its contract or alliance partners. DEC, which pursued a strategy of entering into strategic alliances with many small companies,⁷⁷ held an annual conference where all of its alliance partners could meet and learn about one another. During these meetings, DEC's partners often decided to enter into alliances with one another and used DEC managers as reference checks for capability and trustworthiness. These conferences increased business opportunities for DEC's partners and created two types of network governance benefits for DEC itself. First, as additional network connections were created among DEC's partners, the non-legal sanction each partner would suffer if they acted opportunistically toward DEC increased. If DEC were to retaliate by spreading negative gossip about the partner's behavior, it might well both destabilize the current alliances the partner had with other DEC affiliated partners and reduce the business opportunities the partner could potentially take advantage of at the next DEC convention. Second, by promoting the growth of a network among its suppliers (both a network of actual alliance transactions and an setting in which gossip could flow among its network of alliance partners) DEC bound itself to post more of its reputation as a bond against *its own misbehavior* in its relationships with its alliance partners—thus making it a more attractive alliance partner. By creating and strengthening the network among its alliance partners,

⁷⁵ [need to think through how this might whitewash small breaches and exacerbate big ones].

⁷⁶ Navistar, a large mid-western OEM also has a supplier council made up of its largest suppliers that meets with the company president four times a year.

⁷⁷ DEC's activities in creating this forum for its alliance partners to meet is described in, Ranjay Gulati, *Social Structure and Alliance Formation Patterns: A Longitudinal Analysis*, 40 Administrative Science Quarterly 619 (1995).

DEC created an important network-aided governance structure for its many strategic alliances.⁷⁸

The examples of DEC and Harley suggest that firms can actively create networks that have the potential to provide governance benefits in their relationships with their suppliers.⁷⁹ These networks better enable buyers to post their reputations as at least a partial bond against misbehavior, thereby reducing the extent of the governance problems created by the non-contractibility of various aspects of these deals.

The credibility of a buyer's commitment not to behave in ways that would jeopardize its suppliers' financial stability or continued operation is further strengthened by a common business practice among buyers — namely their refusal to contract if the amount they anticipate wanting to purchase is more than 20%-30% of the supplier's output.⁸⁰ As a purchasing manager of one such buyer explained, her firm sometimes experienced large changes in the downstream demand for their product and wanted to be able to vary their buy when this occurred or when one of their suppliers got a lower scorecard rating.⁸¹ However, they wanted to be able to do so without causing their supplier severe financial harm or pushing him into bankruptcy.⁸² Doing either of these things would

⁷⁸ The existence of this network suggests that a DEC lawyer who was trying to determine what types of formal governance mechanisms to include in an alliance agreement who did not pay attention to the network position of the particular partner might include governance provisions that were expensive and unnecessary, or fail to include governance mechanisms that while costly could nonetheless add value to the deal.

⁷⁹ These examples are illustrations of the idea of network closure. See Ronald S. BROKERAGE AND CLOSURE, [insert]

⁸⁰ For the twelve OEMs in the study of OEMs and their suppliers, information about the percentage of their suppliers revenue that their contracts amounted to was available for eight of them and only two of the top three supply relationships for the companies exceeded 20% of the suppliers revenue. For the companies that follow, the percentage of the three suppliers with the largest percentage of revenue related to the OEM contract is given in parenthesis: Navistar (33%, 16%, 6.2%); Arvin Meritor (99.11%, 16%, 1.2%); Ingersoll-Rand (10.5%, 5.1%, 3.1%); John Deere Horicon (14%, 13%, 6.2%); Harley Davidson (12%, 2.2%, 1.58%); Osh-Kosh (8%, 4.4%); Kohler (24.08, 10%); CNH (.15%. .10%).

⁸¹ VP of Healthcare Company, *supra* note ___.

⁸² One large OEM confirmed that they wanted their suppliers to sell to many others so that "they will remain healthy," even when demand goes down, and noted that if a supplier offered to deal exclusively with them they would say "that is a bad idea. We would like to be a substantial customer to you, but we

likely damage the buyer's reputation, make their other suppliers less likely to make relationship-specific investments, and force the buyer to bear the cost of switching to another supplier when demand picked up. This, in turn, would weaken the credibility of the buyer's threat to reduce their buy from a particular supplier due to low scorecard ratings, and also make their threat to terminate less credible. She explained that when the buy was kept under 20% she could give her "supplier a giant nudge or kick in the pants, but would not be able to hit him with a hammer."⁸³ In addition, when buyers keep the buy percentage low, the supplier's threat to exit the relationship if the buyer behaves opportunistically is more credible, which in turn creates an incentive for the buyer not to misbehave.

4. Conclusion

The analysis presented here has suggested that there are many contractual and informational structures built into buyer-supplier relationships that are likely to promote cooperative contracting relationships in make-to-spec procurement contracts. Nevertheless, the core conditions associated with successful cooperation suggest that it will be more easily achieved with respect to some types of obligations than it will be for others.

More specifically, cooperation will be easiest to create in contexts where there is an objective metric for determining whether a particular act is an act of defection or an act of cooperation. And, it will be easiest to maintain when the difficulties that are likely to arise in the relationship are ones where once identified, a solution (whose effectiveness can also be objectively measured) can be implemented that will eliminate the difficulty on a go forward basis. Conversely, cooperation will be most difficult to create and maintain in contexts where it is impossible to describe the good to be designed and produced and/ or to define

don't want your to be dependant on us for your liability." Ingersoll Similarly, another OEM when asked whether he wanted his suppliers to diversify their customer base said, Yes form a technology standpoint, from a supplier health standpoint. . .our goal is to be with the best suppliers in terms of quality and tech, we encourage our suppliers to work with others, we have suppliers that work with our competitors, but we manage it." Cotler

⁸³ VP of Heathcare Company, supra note __. This company also asks it supplier to "give the names of your most important COMPANYs for reference, including percentage of your sales to them," and to opine on "what would be the mutual dependence that you perceive to be acceptable in a business relationship with Company." Quality Management System, Supplier Information form from Heath care company (confidential).

what constitutes cooperation or defection at any given point of time. In the management literature, problems that can be documented with relatively objective metrics and solved on a go-forward basis in ways whose success can be objectively documented, are referred to as “problems,” while those that involve difficulties that are likely to recur and require the exercise of judgment throughout a relationship are called “paradoxes.”⁸⁴ Generally speaking repeat dealing forces are quite effective in governing contracting relationships where the most serious issues will relate to “problems,” while they are far less effective in governing relationships where the core concerns relate to “paradoxes.”

Recognizing the fundamental differences between problems and paradoxes suggests that, standing alone, the governance mechanisms used in make-to-spec procurement contracts are unlikely, when used in transactions between new contracting partners, to be able to support the creation of more complex joint endeavors, such as those involving joint product development since these transactions will continually give rise to situations where one or both parties must make repeated judgment calls with respect to issues that involve tradeoffs with distributional impacts. However, as discussed further in Part IV, the governance mechanisms discussed above, do far more than merely provide governance benefits in the transactions in which they are used. When implemented over time, these mechanisms have the ability to create two distinct types of benefits for the contracting parties. First, they create the conditions that can promote the emergence of trust-based relationship-specific social capital that can, in turn, improve contract governance in make-to-spec transactions and make it possible to govern more complex endeavors, like joint product development, where paradoxes abound.⁸⁵ Second,

⁸⁴ For an accessible overview of the contrasts between managing “problems,” and managing “paradoxes,” see Doltich, Cairo, and Cowan, *THE UNFINISHED LEADER* (2014).

⁸⁵ Three leading contract theorists, however, have suggested that contracts *can* endogenously create trust-based social capital, even in contexts in which the initial transaction between the parties is one where paradoxes predominate. This suggestion finds empirical support in a set of 10 transactions explored by three leading contract theorists in a series of articles. See Ronald J. Gilson, Charles F. Sabel & Robert E. Scott, *Braiding: The Interaction of Formal and Informal Contracting In Theory, Practice and Doctrine*, 110 Colum. L. Rev. 1377 (2010) [hereinafter “*Braiding*”]; Ronald J. Gilson, Charles F. Sabel & Robert E. Scott, *Contracting For Innovation: Vertical Disintegration and Inter firm Collaboration*, 109 Colum. L. Rev. 431 (2009) [hereinafter “*Vertical Integration*”]; and Ronald J. Gilson, Charles F. Sabel & Robert E. Scott, *Contract and Innovation: The limited Role of Generalist Courts in the Evolution of Novel Contractual Forms*, 88 NYU L. Rev. 17 (2012). Looking with great care at the language of these agreements these authors con-

clude that “parties today often treat trust as endogenous, as an object of contracting rather than as a precondition . . . [and] write contracts in which they manifestly intend to establish a deeply collaborative relation, where little or none existed before.” *Braiding* 1404. They point to two types of contract provisions as providing the agreement’s most important contract governance mechanisms. First, are provisions that are designed to operationalize a “commitment to an ongoing mutual exchange of information designed to determine if a project is feasible, and if so, how to best implement the parties joint objectives.” *Braiding* at 1403. Second, are “contract referee mechanism[s]” that require unanimity for key decisions and requires that disputes be referred up the chain of command if they cannot be resolved at lower levels. *id.* However, a closer look at the contracting relationships surrounding the contracts explored in these articles, suggests reveals that that pre-existing relational social capital between the transactors and/or structural social capital (that is, the network position of the firms), was present in all but one of these contracting relationships and may therefore, as the theory discussed in the text suggests, also have played a large role both in both the initial governance of these agreements and in transactors’ willingness to have entered into them.

Three contracts involved companies who had been doing business with one another long enough before the studied transaction for relationship-specific social capital to have developed. Prior to the *Phoenix Technologies Ltd. & Intel Corp, Supply Contract* (Dec. 18, 1995) the parties had been doing business since at least 1979, had been co-developing products since at least 1988, see, Ed Scannell, “Phoenix Ships MCA-Compatible BIOS” *InfoWorld* (Aug. 1, 1988). They also had strong connections to common customers as both supplied the same makers of generic personal computers, see Michael W. Miller, “IBM PC Clones Multiply Amid Price Battles,” *Wall St. Journal*, June 17 1986. Moreover, on the day this agreement was signed, Intel purchased 11 million dollars of Phoenix Stock, thereby introducing an additional and potentially important governance mechanism into the mix. See, *Phoenix Technologies Ltd. & Intel Corp, Common Stock and Warrant Purchase Agreement*, (Dec. 18, 1995). Similarly, the parties to the *Allstate Insurance Co. & Acxiom Corp., Data Management Outsourcing Agreement* (March 19, 1999), had been dealing with one another for at least six years prior to this contract. See Acxiom Corporation History at Funding Universe, <http://www.fundinguniverse.com/company-histories/acxiom-corporation-history/> (last checked July 5, 2014). And, prior to the *John Deere & Co. & Stanadyne Corp., Long Term Agreement* (Dec. 14, 2001), which these authors viewed as a prototype agreement that “help[ed] to establish and maintain a long-term supply arrangement,” *Vertical Integration* at 458, for the purpose of understanding contract governance, the transactors had been doing business for at least 50 years. See AMERICAN SOCIETY OF MECHANICAL ENGINEERS, ROTARY DISTRIBUTOR FUEL INJECTION PUMP (April 1998) at 3.

Another three contracts took place between a buyer and an entity it had recently spun off, again suggesting that pre-contractual relationship-specific social capital was present. For background on the *Apple Computer, Inc. & SCI Systems Inc., Fountain Manufacturing Agreement* (May 31 1996), see “Apple

as connections between buyer and seller personnel form in the shadow of these mechanisms, some employees in each firm are likely to begin to exchange both tacit and explicit information that they would not have

Agrees to Sell Big Manufacturing Plant," *The New York Times* (April 5, 1996); For background on the *American Axle & Manufacturing Inc. & and General Motors Co., Component Supply Agreement* (June 5, 1998, see Joseph P. Ritz, "New Firm Offers to Buy GM Saginaw Plants Facilities in New Buffalo, Tonawanda, St. Catharine's Affected UAW Officials Angry," *The Buffalo News*, at A1 (Sept 10, 1993) (six former GM employee's sat on the American Axle board of directors); and, finally for background on the *Boeing Co. & Spirit Aero Systems Inc., General Terms Agreement*, (June 30, 2006), See Boeing Company 2005 Annual Report at 28

Two of the contracts were biotech alliances. As discussed in the text, *infra text* accompanying notes __-__, the structure and governance of these types of agreements is strongly affected by another sort of social capital, namely structural social capital (that is the transacting firms position in a network of relevant firms). However, inter-personal social capital was also present in both of these transactions. In the *Pharmacoepia & Bristol-Myers Squib, Collaboration and Licensing Agreement* (Nov. 26, 1997) the Director of Biology at Pharmacoepia had spent the previous seven years at Bristol-Myers as a high-ranking scientist. See, Sue Rodney, "Pharmacoepia, Inc. Announces Senior Management Appointments." *PR Newswire*, Nov. 01, 1996. <http://search.proquest.com/docview/450067348?accountid=14657>. In the *Warner-Lambert Co. & Ligand Pharmaceuticals Inc., Research, Development and License Agreement* (Sept 1, 1999) two members of Ligand's board of directors, had previously held high-ranking executive positions at Parke-Davis, a Warner subsidiary and the division responsible for administering this agreement. See http://google.brand.edgaronline.com/EFX_dll/EDGARpro.dll?FetchFilingHtmlSection1?SectionID=710530-245119-257816&SessionID=Ykj5FFiwbt7-HA7 (last checked July 9, 2014). In addition, Ligand had done business in the past with Parke-Davis before it merged into Warner.

The remaining co-development contract, the *Nanosys, Inc. & Matsushita Electric Works, Ltd., Development Agreement* (Nov. 18, 2002 dealt with nanotechnology. It involved a business strategy on the part of the R&D centered company Nanosys that could not work without entering into a significant number of strategic alliances with large partners who could produce and market products using their technology. The need to partner with these large firms (some of whom transacted with one another and whose employees often moved from firm-to-firm) situated the transaction in a network of firms that further reduced the likelihood that Nanosys would intentionally breach the contract they entered into with their first large partner Matsushita Electric Works.

Finally, the remaining contract, did not involve any co-development, it was merely a sale of an airplane to an end user see *AVSA S.A.R.L. & New Air Corp., Airbus A320 Purchase Agreement* (Apr. 20, 1999).

been either willing or able to exchange in the absence of the contract between their firms' contract and/or the personal contact between them. This exchange of information creates the conditions under which the individuals (known in the social capital literature as "brokers") who have information about the needs, internal language, and culture of *both* firms, become more likely to identify additional opportunities for inter-firm value creating projects or exchanges—opportunities they would have been unlikely to identify had their firms structured their first exchange as an arms length transactions that eschewed relational governance.

The next section explores the ways relationship specific social capital is created, provides evidence of its importance to transactors, and discusses its ability to enable transactors to both identify and support contracting relationships in contexts riddled by paradoxes.⁸⁶ It also discusses empirical evidence demonstrating that another type of social capital, structural social capital, which arises from the network structure⁸⁷ surrounding a pair of transactors, can provide additional governance benefits that can support cooperative contracting even in contexts where the transactors are strangers, paradoxes abound, and credible threats to sue are absent.

IV. Social Capital and Network-Based Governance

A. Social Capital

The governance provisions described above do a good job in creating and maintaining cooperative contracting relationships; yet problems nevertheless arise as mistakes are made and buyers' needs change. These frictions, however, may have a positive side because the ways transactors deal with them has the potential to contribute to the development of their relationship. It is through the process of solving these problems that the buyer and the supplier's employees meet and begin to form interpersonal ties and exchange both tacit⁹¹ and explicit informa-

⁸⁶ Although repeat dealing cannot eliminate paradoxes, it can make them easier to deal with over time as the firms come to understand one another's processes, constraints and lexicons in ways that promote convergence of understandings. See Burt ___and sources cited therein.

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⁹¹ See Ranjay Gulati, *Does Familiarity Breed Trust? The Implications of Repeated Ties for Contractual Choice in Alliances*, 38 *Academy of Management J.* 85, 90 nn. 3 (1995 (defining tacit knowledge as "knowledge that . . . typically resides in

tion about their respective organizations' needs, values, and routines. These interactions, if successful, have the potential to give rise to the formation of relationship-specific social capital, which in turn gives rise to trust, defined for these purposes as "the expectation that both actors will behave in a mutually acceptable manner, including an expectation that neither party will exploit the other's vulnerabilities."⁹²

The theoretical literature on social capital identifies several ways this type of trust may emerge, most notably through: the exchange of information;⁹³ the formation of personal ties among the firms' employees (and their associated character assessments and loyalties);⁹⁴ the emergence and observance of norms of reciprocal flexibility;⁹⁵ the making of reciprocal relationship-specific investments;⁹⁶ and the acquisition of experience in successful problem solving. Although social capital theorists differ in the emphasis they place on each of these potential sources of trust-based relationship-specific social capital, a recent overview of this literature concluded that despite the many different reasons advanced to explain its emergence, "a broad consensus across a wide range of literature argues that continued and repeated exchange generates a valuable asset that is both 'created and leveraged through rela-

patters of relationships, norms, information flows, ways of making decisions, and other organizational factors.")

⁹² Sinead Roden and Benn Lawson, *Developing Social Capital in Buyer-Supplier Relationships: The Contingent Effect of Relationship-specific Adaptations*, 151 *Ind. J. Production Economics* 89-99 (2014).

⁹³ Ranjay Gulati and Martin Gargiulo, *Where Do Interorganizational Networks Come From?* 104 *Am. J. Sociology* 1439, 1445 (1999) (concluding based on extensive interviews among participants in strategic alliances that "personal relationships among key individuals have played a crucial role in producing trust between organizations in Japanese industrial groups . . . and in contractual relationships.")

⁹⁴ See Gulati and Gargiulo *supra* note __ at 1455 ("Beneath the formalities of contractual agreements, multiple informal interpersonal relationships emerge across organizational boundaries, which facilitate the active exchange of information and the production of trust that foster inter-organization cooperation.")

⁹⁵ See e.g., Gulati 1995, *supra* note __ at __ (suggesting that through ongoing interactions firm learn about each other and develop trust "around norms of equity.")

⁹⁶ Footnote to the article on reciprocal investment

tionships' that provides assurances against the threat of ex-post opportunism, and that facilitates adaptation and problem solving."⁹⁷

In practice it may be that all of these sources of trust matter.⁹⁸ Indeed, lawyers negotiating information technology outsourcing contracts have developed a carefully structured and iterated negotiating process that typically lasts sixth months to a year and artfully combines most of the elements identified by social capital theorists as contributing to the accumulation of trust. By the time the contract is ready for signature, the parties have learned about one another's business culture and had an opportunity to see if their corporate cultures are compatible (a process sometimes referred to as mutual value discovery);⁹⁹ have been faced with working through a series of increasingly difficult issues involving both problems and paradoxes; and have developed an ethos of transparency in their interactions, interactions that are structured to include not only lawyers and executives, but also, after the initial negotiating sessions, the members of the business teams that will implement the contract. At the conclusion of the negotiations, care is taken to emphasize that "trust" is central to the transaction, but that careful writings are also needed to memorialize understandings in case either party experiences a change in key personnel. Although such an approach might be used in procurement contracts to build the social capital needed for paradox laden joint development agreements between strangers, the lead time needed to implement it might be too long to be useful with respect to many types of components (like electronics).

Moreover, it is important to note that although the social capital literature is marked by a lack of both consensus and analytical clarity about precisely how and why previous dealings create trust and thereby influence both a buyer's willingness to deal with a supplier and the terms on which it is willing do so, the importance and impact of prior dealings on current decision making about who to deal with and on what terms, has been empirically documented in the industrial procurement context.

⁹⁷ Daniel W. Elfenbein and Todd R. Zenger, *What is a Relationship Worth? Repeated Exchange and the Development and Deployment of Relational Capital*, 25 K. Org. Sci., 222, 224 (2014).

⁹⁸ For an integrated overview of the sociological/social capital approach to trust see Burt, *supra* note __ at Ch. 3.

⁹⁹ For an example of an information technology outsourcing contract where a similar mutual negotiation/value discovery process was used to negotiate and structure a deal, see Information Services Group, *IT Infrastructure Outsourcing Helps Shell Lower Cost, Drive Increased Efficiency*.

1. *Industrial Procurement and the Effect of Prior Contracting Relationships*

One study examined the reverse auctions conducted by the procurement department of a large mid-western industrial firm.¹⁰⁰ In advance of the bidding, all auction participants were prequalified as being able to supply the good in question at the desired quality level. The goods were primarily “commodity parts that can be well specified in a contract.”¹⁰¹ After bidding closed, the winning bid was chosen by corporate procurement managers in consultation with “officers and divisional staff” (who had in turn consulted plant managers). This process was designed to reduce “the scope for private benefits or friendship ties to influence these outcomes,” an institutional feature that the study’s authors viewed as providing “additional confidence that the results . . . [of the study] reflect the relationships true economic value to the firm.”¹⁰² As they explained the “collaborative nature of the selection process, transparency of alternatives and decisions and organization norms requiring careful justification of supplier choice all worked together to limit the influence of private interests or personal affinity in supplier selection.”¹⁰³

Even in this context where the goods were largely homogeneous and steps were taken to depersonalize exchange, the existence and length of prior dealings (if any) between the buyers and the bidding suppliers

¹⁰⁰ Daniel Elfenbein and Todd Zenger, *What is a Relationship Worth? Repeated Exchange and the Development of Relational Capital*, 25 *Organizational Science* 222 (2014).

¹⁰² Elfenbein and Zenger, *supra* note __ at 223 For a study that also found a large effect of prior transactions on willingness to transact again in the context of strategic alliances, see Gulatti and Gargiulo, *supra* note __ at (drawing on “longitudinal data on strategic alliances in a sample of American, European, and Japanese organizations in 3 industries over a 20 year period,” and demonstrating that “the probability of a new alliance between specific organizations increases with their prior mutual alliance, common third parties, and joint centrality in an alliance network.”)

¹⁰³ Elfenbein and Zenger, *supra* note __ at 228

influenced which supplier was awarded the contract and the price premium the buyer willing to pay over the lowest bid.

The study found that “the value created by past exchange is economically meaningful.” In particular, the authors’ estimates indicate that increasing relationship length between buyer and supplier from the mean in the sample (roughly 7 months) to one-standard-deviation above the mean (roughly 30 months) “is associated with an increase in willingness to pay of 8.5% (95% confidence interval: 5.2-14.9%).”¹⁰⁴ And, consistent with the theories articulated above, the study also found that the greater the risk of ex-post exchange hazards, the greater was the effect of past dealing on premium the buyer was willing to pay.

2. Trust, Relational Capital, and Contract Governance

Many empirical studies from the management and organizational behavior literature explore the way trust is created in commercial relationships and attempt to measure the extent to which trust-based social capital can (or cannot) substitute for other, more formal contract governance mechanisms—such as taking an equity stake in the strategic alliance¹⁰⁵ context or using a fixed price rather than a flexible cost-plus

¹⁰⁴ *id.* Similarly, a European-Israeli Mechanical Engineer/businessman in the specialty machine business (that is a company that makes machines to solve other company’s engineering problems) a context where the functional abilities of the machine to be produced can be specified, but what is to be produced cannot be described, reported that the companies he has dealt with in the past are willing to pay him at least a 15% premium over the lowest bidder, due to the quality of his past performance. (Interview with Bernstein, September 2014). In addition, in some countries, defense contracting related requests for proposals only invite bids from companies that they have dealt with for a specified number of years.[check hs docs]

¹⁰⁵ A widely cited study that explores the connection between trust and the use of equity in strategic alliances is Gulati, 1995 *supra* note __ at __. Drawing on a study of strategic alliances “formed between 1970 and 1989 in the biopharmaceutical, new materials and automotive economic sectors by American, European and Japanese firms” the paper concludes that “there is . . . strong evidence that repeated alliances between two partners are less likely than other alliance to be organized using equity,” a finding that it attributes to the “role of inter-firm trust that emerges from repeat alliances between the same partners.” However, this conclusion should be viewed with caution. As the paper itself points out, while interview evidence supports the conclusion that trust explains the decreased likelihood of taking an equity stake in repeat transactions, the quantitative empirics presented cannot rule out the possibility that this is due simply to the fact that “two firms will prefer a non-equity alliance only when

pricing mechanism in an oil and gas transaction.¹⁰⁶ Yet even the most prominent of these studies are flawed in terms of their animating theoretical assumptions about contract¹⁰⁷ and/or limited in their implica-

they already have an equity alliance . . . [because] once two firms share one hostage it obviates the need for additional hostages." Id 94

¹⁰⁶ Kenneth S. Corts and Jasjit Singh, *The Effect of Repeated Interaction on Contract Choice: Evidence From Off-Shore Drilling*, 20 J. L. Econ. & Org. 230 (2004) (concluding that "repeat dealing decreases incentive problems (like moral hazard) more than it decreases contracting costs," based on a study which found that in contracts between oil and gas companies and well drillers, "high-powered turnkey contracts govern 28% of projects between parties who have not worked together before, but only 15% of repeat contracts," which tended to rely on cost-plus contracts)

¹⁰⁷ As a leading social capital theorist explained in defining trust, "the two definitional qualities are that trust is a relationship with someone (or something if the object of trust is a group, organization, or social category) *in which contractual terms are incompletely specified. The more unspecified, taken-for-granted the terms, the more that trust is involved.*" (emphasis added) Ronald S. Burt, *BROKERAGE AND CLOSURE* (2000) at 93. A similar conception runs through many of the leading empirical studies of trust and contract; yet there are reasons to seriously question the suggestion that a more complex or detailed contract is an indication of a less trusting relationship and the implicit assumption that the terms specified in a written agreement will necessarily be complied with through the force or shadow effect of the law.

First, as discussed in the text, *supra* notes _ to __ and accompanying text, a detailed contract may be the outcome of a negotiation process that was deliberately structured to build trust-based social capital. In these settings, a longer contract (if it results from these trust building activities) may indicate more rather than less trust. Second, when dealing with a trusted contracting partner, you are more likely to be able to access the operational benefits of clarity and specificity (benefits that arise both within and across the contracting firms) without the downside inflexibility risk that is often associated with very detailed provisions – if you trust your partner to be flexible in contexts where implementing the precise provisions does not make business sense, you are more likely to use precise terms. Third, when lawyers draft contracts they rarely start from a blank slate. Rather, they begin with a template, and tinker with it to adapt it to the individual transaction. Detail that is not necessary, but also not harmful, tends to remain in these agreements even when it is unnecessary, thereby weakening the connection between detail and trust that would be more likely to exist if contracts (as the sociological and organizational behavior literatures seem to assume) were drafted anew for each transaction and included only those provisions the parties themselves viewed as necessary. Moreover, even if the contracts were drafted anew, the lawyers would insist on the inclusion of many provisions that would be unnecessary from the perspective of parties' private (and perhaps trust-based) calculus, simply because they want

tions due to aspects of their study design. Nevertheless, interview evidence from an extensive study of procurement contracting in the upper Midwest together with interview evidence from variety of other contracting and strategic alliance settings, while too anecdotal to be definitive, suggest that trust-based relationship-specific social capital plays an important role in work-a-day contractual behavior and influences firm decision making in ways that likely effect the value of these commercial relationships.

The interview-based study of Midwest OEMs¹⁰⁸ and their suppliers revealed many consistent ways that these transactors perceived trust,

to avoid second guess risk. Fourth, clear contracts can also support trust-based relationalism by providing focal points that support norms of reciprocity, as for these norms to function properly, the transactors need to have at least a rough mental account of who is the giver and who is the taker. When these mental accounts become seriously unbalanced, or transactors' perceptions of their balance fall out of alignment, and transaction breakdown is more likely to occur – when this dynamic is recognized, there is no necessary connection between contract detail and trust. Fifth, transactors who dealt with one another on a repeat basis over a long period of time might also choose to include more detailed descriptions of the desired performance, even if their trust in one another were either increasing or remaining constant. The managers who negotiate the detailed provisions in scope of work and service level agreements might (if they are good agents) choose memorialize in writing the things they learned about one another's expectations, needs, and operations, for two reasons (1) to reduce the interruptions caused by changes in personnel – in which case the length of the contract might be an indication of the importance of their tacit understandings; (2) to ensure that accurate information about the deal flows through both their own and their partner's hierarchy of operations in a consistent way. Although at the outset of the relationship, the employee who set up the deal (the "broker" see note __supra) might want to keep terms vague, so that they remain indispensable to the administration of the deal and are better able to capture the individual returns associated with brokerage, over time, they will want to find new opportunities to broker so would be expected to be more willing to specify the operational aspects of the deals they created. See e.g., Nicholas S. Argyres, Janet Bercovitz, and Kyle J. Mayer, *Complementarity and evolution of Contractual Provisions: An Empirical Study of IT Services Contracts*, 18 *Org. Sci.* 3 (2007) (demonstrating in the context of a long term supply contract in the electronics industry that the SOWs became more detailed over time and came to reflect what the parties learned from one another). Finally, as for the assumption that specified provisions will be complied with due to the force of the law, it is simply false. The mere fact that something is specified in a contract, even completely specified, does not in reality mean that they will be done, unless there is some other force motivating performance, like reputation, morality, or coercion of other sorts.

¹⁰⁸ For a description of this data source see Whitford, supra note __

interpersonal social capital, and reputation to be relevant to their contracting behavior. Among the most important and consistent viewpoints expressed were that: interpersonal relationships make it easier to solve problems;¹⁰⁹ trust led suppliers to reveal more accurate costing and technological information to buyers,¹¹⁰ buyers were more willing to do co-design with suppliers they trusted;¹¹¹ suppliers were more willing to make specific investments when they trusted buyers;¹¹² and reputation information about buyers' contracting behavior was actively sought by suppliers.¹¹³ These findings were reinforced by the widely held perception across numerous suppliers that turnover in buyer personnel was detrimental to the smooth functioning of relationships and made them less likely to share accurate costing information and participate in buyer-sponsored supplier development programs.¹¹⁴

¹⁰⁹ One supplier noted that upon entering into a contracting relationship, it tried to "spread like a virus" forming interpersonal relationships across all levels of the buyer's operation," because having strong relationships across a buyer's operations, including "manufacturing, engineering, management to some extent, marketing . . . all over the place . . . helps us solve problems." Romeo.

¹¹⁰ milsco. And Romeo One supplier noted that it was the sole source of a product to a trustworthy OEM that never bid out anything it designed to other suppliers and that as a consequence they shared costing data and worked harder to improve products. They attributed part of their relationships not only with buyer personnel but people throughout the buyers hierarchy from the president to the production line, but noted that they do not do the same for another OEM who dual sources the product and who they do not really trust. Romeo. Hg seats trust is really about sharing info.

¹¹¹

¹¹² See WTMP, at 33-34 (discussing and quoting suppliers' views of the connection between OEM past behavior, trust, and their willingness to make relationship specific investment). One firm noted that they were willing to make relationship specific investments to get more business from John Deere but they were not willing to do the same when dealing with the auto companies, because while the auto companies "talk partnership . . . but they could be out[of the relationship] in a second, so we are very careful about the investments we make for their parts. We have learned anything can go." Bassler.

¹¹³ Mayville, One supplier who was considering working with the John Deere supplier development program explained that before deciding whether to participate, he wanted to visit the plant of another local supplier that had been part of the program, noting that among other things he really wanted to know if Deere in fact shared cost savings 50-50 as they claimed.

¹¹⁴ [insert marked quotes]

Although the governance forces created by interpersonal social capital are valuable in many contexts, they may also create some costs. Managers might favor certain suppliers out of feelings or friendship or loyalty, even when they are not the best supplier available. Friendship might also result in the toning down of the type of criticism that is often needed to improve production methods.¹¹⁵ In contexts like the procurement of standardized goods where the forces of repeat dealing and the contract mechanisms discussed above are sufficient to result in contract compliance, buyers might be best off partially depersonalizing exchange like the mid-western industrial firm did in the reverse auction discussed above and as some OEMs do by constantly rotating their buyers' assignments. In contrast, in contexts where paradoxes are more prevalent and contractual hazards are therefore less contractable, the increased security and flexibility generated by intense interpersonal loyalties among employees in the buyer and seller firm, may, on balance, be highly desirable from the perspective of contract governance despite the costs it involves.

3. Brokerage

The contract governance mechanisms that enable relational contracts to flourish in industrial procurement markets are expensive to implement, and their use, as discussed above, creates a risk that a buyer will stay with a supplier even when a better deal is available. Yet buyers and suppliers can and do encourage interpersonal connections between their employees even in transactions where arms-length contracts and contract governance structures could effectively govern the deal. The reason they do so is simple: when the right types of employees on both sides of the transaction develop personal relationships and exchange information, they may be able to identify opportunities to create value — both within the original transaction and in future transactions-- that would not have been visible to them prior to their first deal.¹¹⁶

¹¹⁵ [Over time, long standing relationships may effected by the same type of group think that can pervade an internal division of a firm, yet the risks are somewhat attenuated in the outsourcing context as the supplier continues to interact with other buyers and buyers who do not sole source will learn things from other suppliers of the same or similar goods that can work against the emergence of group-think across all of their supply relationships. Indeed, the avoidance of group think may be one of the major benefits of outsourcing.]

¹¹⁶ Sometimes firms enter into confidentiality agreements that permit them to exchange information prior to entering into their first contract. See e.g., OE/P&A SUPPLIER CONFIDENTIALITY AGREEMENT, between ATC lighting and Harley (April 2003) (reflecting the terms of Harley's standard modularized supplier agreements, and noting that "this confidentiality Agreement is to

Under the umbrella of their first transaction both firms' employees are more likely than they would have been prior to the first transaction to exchange the type of information (and, over time, to appreciate its meaning against the background of the operations, culture, and specialized language of the other organization¹¹⁷) that will enable them to identify additional ways to create joint value.¹¹⁸ In the language of social capital theory this is called engaging in "brokerage." As these opportunities are identified, and the relational social capital needed to take advantage of them is created¹¹⁹ (though in some contexts less quickly than is desirable),¹²⁰ the length of the perceived shadow of future dealing be-

establish the confidentiality. . .during the supplier evaluation period and before, during and after the supply relationship, if any") In the language of social capital theorists the contract (or some part of it) transactors on both sides of the relationship to engage in brokerage (defined as ' ') by bridging structural holes that would not have been visible to them prior to their initial contracting relationship. See Burt, [insert]. Before the first contract between two firms, many of the value creating opportunities between them will not be visible to their employees, because intra-firm information sharing constraints

¹¹⁷ See Ronald S. Burt, *BROKERAGE AND CLOSURE: AN INTRODUCTION TO SOCIAL CAPITAL* (OXFORD PRESS, 2005) at 17 ("Opinions and behaviors within a group are often expressed in a local language, a dialect fraught with taken-for-granted assumptions shared within a group. The local language makes it possible for people in the group to exchange often-repeated data more quickly . . . [yet] the more specialized the language within groups . . . the greater the difficulty in moving ideas between groups.")

¹¹⁸ The first contract between two firms may have a value that is not evident on its face. If the contract authorizes the sharing of information between firms (or their employees) that in the absence of the contract would not have been shared, the contract (whatever its merits in the particular deal it governs) may have a secondary function. By enabling employees to learn about one another's operations, the contract may enable them to see additional opportunities to initiate value-creating undertakings, opportunities that they would not have come across in the absence of the contract due to their respective employers' confidentiality policies. In the terminology of social capital theory, the contract can be understood making "structural holes" more evident to transactors than they would be in the absence of the contract, and thus either encouraging brokerage or increasing the risk of a productive accident. See Burt *Brokerage and Closure*.

¹¹⁹ Social capital theorists call this engaging in brokerage.

¹²⁰ See Burt, *Brokerage* supra note __ (suggesting that opportunities for brokerage are often identified before the trust needed to take advantage of them has developed). See also, See e.g., Evelyne Vanpoucke, Ann Vereecke, and Kenneth K. Boyer, *Triggers and patterns of integration initiatives in successful buyer-supplier relationships*, 32 *J. Operations Management*, 15 (2014) at Table 2 (demonstrating

tween the transactors lengthens, which, in turn, makes it less likely they will breach or behave opportunistically in their current dealings. This in turn suggests that aspects of agreements and firms contract administration procedures that dictate how often buyer and supplier personnel interact¹²¹ and at what levels of the organization together with the breadth of the confidentiality constraints each firm imposes on its employees, may be quite important to both the value of future deals and the governance of present deals.¹²² Indeed, parties to these deals often contract with the prospect of the potential for future deals explicitly in mind. As one OEM executive explained, “with the partners we’ve had, that we have developed. . .we not only look at what they have today, we think [about whether] we can develop a product in the future.”¹²³

B. Network Governance

Wholly apart from the type of relationship specific social capital discussed above, which might build too slowly to be useful in many transactional contexts,¹²⁴ there is another type of social capital – variously referred to as “network capital” or “structural social capital”¹²⁵ – that derives from a firm or firms’ position in the relevant network of firms that may have profound effects on these contracting relationships. To understand the ways that structural social capital influences transactions, it is useful to look at its effect on contract compliance and governance writ large, and then to explore how it interacts with contract-related decision

through six longitudinal studies of contracting relationships that sufficient trust to support moving from the “exploratory” stage – that is, the make to spec stage where there is no expectation of long term dealings – to the “expansion” stage which is “triggered by a high level of trust,” and involves some degree of integration between the parties, took from about four to fifteen years, and that an additional five or more years were needed for full knowledge sharing).

¹²¹ [Do a note here with examples of these clauses and provisions]

¹²² Discuss the detail in which these things are set out, while acknowledging that the interactions serve other goals as well.

¹²³ [Navistar]

¹²⁴ Burt, *supra* note __ at 94-97, an 104-105 (explaining that trust builds slowly and might not grow fast enough to keep pace with the value creating opportunities seen by brokers)

¹²⁵ See Ronald S. Burt, Martin Kilduff and Stefano Tasselli, *Social Network Analysis: Foundations & Frontiers on Advantage*, 64 *Annual Rev. Psychology* 527,529 (2013) (“Network firms associate with advantage constitute social capital”). For a taxonomy of the ways that social capital is variously defined that provides an entry into the literature see Peter Moran, *Structural vs. Relational Embeddedness: Social Capital and Managerial Performance*, 26 *Strat. Mgmt J.* 1129 (2005).

making and contract provisions at a more micro level so as to enable firms to harness their power to achieve a variety of ends that cannot be attained solely through explicit contracting.

1. Biotech Alliances and Network Governance in a Market Context

One context in which the power of network governance has been most carefully documented is in biotechnology alliances. One study looked at over “38000 alliance transactions between pharmaceutical firms and biotechnology research firms, ” a transaction type where “agreements are fraught with moral hazard, asymmetric information, and other contracting problems.”¹²⁶ It found that both firms’ positions in the relevant network of firms significantly effected the size of the equity stake (which is generally regarded as alliance governance mechanism) that the large pharmaceutical company takes in its alliance partner.

There are two important dimensions of a firm’s position in a network. The first is centrality, which is defined conceptually as “a large number of connections to firms, which, in turn, are each linked to many other firms.”¹²⁷ In theory the more central a firm is, the more deeply embedded it is in the pattern of communication in the network, and the greater is its power to quickly and effectively spread the word if its alliance partner acts opportunistically. The study found that “when one of the counterparties is deeply embedded with [the network, that is, central to it] the deals they consummate are less likely to involve equity participation and typically entail lower amounts of equity when equity is used.”¹²⁸

The second dimension of two firms position in a network is their proximity to one another. Two firms are said to be more proximate “when fewer intermediaries separate two counterparties.”¹²⁹ In theory, proximity, should decrease the equity stake because “More proximate firms are closer to one another in the alliance network, which means that each firm can obtain information about the other through a small number of links in the network,”¹³⁰ and that the ability of the large pharmaceutical firm to sanction the biotech firm will in turn be stronger,

¹²⁶ David T. Robinson and Toby E. Stuart, *Network Effects in the Governance of Strategic Alliances*, 23 J. L. Econ. Org., 242 (1___) . For the mathematical definition of centrality used to quantify it in the study see id. at ___

¹²⁷ id. at 249

¹²⁸ id. at ___

¹²⁹ id. at ___

¹³⁰ id. at ___

since the biotech firms, “set of current and past collaborators are its more likely trading partners.”¹³¹ Consistent with these predictions the study found that as “proximity increases, equity participation (measured by size and propensity) diminishes.”¹³² However, the effect of centrality was five times as large as the effect on proximity.

The study also found that both proximity and centrality were more powerful predictors in alliances between privately held firms, which suggests that the information carried by the network indeed influenced the structure of the alliance.

More broadly, the study documents the ability of structural social capital (network position) to function as a contract governance device with the potential to sanction and therefore to deter opportunism. It also suggests that network governance can and does work, even in contexts where detailed information about transactors’ behavior is *not* widely available and the information that is available publically, namely outcomes, is too noisy (give the low probability of success in such ventures and the wide variety of reasons they fail) to convey useful information to putative contracting partners. Indeed, one of the main advantages of network-based governance and one of the key insights of the network literature, is that the information that flows through networks need not be either directly observable to, or verifiable by, the recipient to have an impact on the way the recipient views the subject of the information.¹³³

¹³¹ *id.* at 249

¹³² *id.* at __

¹³³ Several leading contract theorists, see note __*supra*, have largely dismissed the role network governance in the context of biotech alliances, noting that “[w]hile we recognize the role of reputation as one element of switching costs, we remain skeptical about the extent to which reputation can carry the weight [this study] assign[s] to it. Most important, it is extremely difficult for third parties, however well connected, to observe the conduct of the parties. Suppose a venture fails. Given the very low likelihood of finding a successful drug, the most reasonable inference is that the outcome is the result of bad luck, not poor skills or bad faith.” See *Vertical Integration*, *supra* note __ at nn123. This criticism, however, assumes that the network can only transmit information about the success or failure of the project. It does not fully appreciate the breadth of the information networks can convey (including information that is neither observable nor verifiable) about the transactors and their behavior. See also Gulati and Gargiulo, *supra* note __ (concluding based on a interview evidence and a quantitative study of alliance transactions that “the information that flows through the alliance network is not only trustworthy, but also timely,” and noting that according to one manager “we and our prospective partner must know about each other’s needs and identify an opportunity for an alliance

Interview evidence from studies of strategic alliances in a variety of industries and high-tech contracting contexts, is consistent with the biotech study's findings about the force of network governance and the existence of the reputation transmission channels identified. This evidence suggests that managers routinely rely on network-provided information (including, aggregate assessments of potential partners' business reputations) and their potential partner's position in the relevant network of firms when selecting alliance or contracting partners. As one manager explained, "In some cases . . .our [existing alliance] partner may refer us to another firm about whom we were unaware . . . An important aspect of this referral business is of course about vouching for the reliability of that firm. Thus, if one of our longstanding partners suggests one of their own partners as a good fit for our needs, we usually consider it very seriously."¹³⁴ And, as a senior manager at Cadence Technologies explained emphasizing the interplay of reputation information and network position, "We had included ODI in our final list based on its technological competence. But then we were interested in knowing more about their business integrity and support structure. Once we realized that they had prior relationships with IBM and Erickson, with whom we also had prior technology partnerships, we called managers within those two and had extensive conversations about ODI. It turned out that IBM had in fact earlier picked an ODI competitor, whom we were also considering, and subsequently reversed their decision and picked ODI. These factors were very important in our decision to pick ODI."¹³⁵ Interviews with managers also provide support for the idea that reputation information not only flows through networks, but also travels quickly. As one manager of a high tech firm explained, "If we were to have a major breakdown in our relationship with HiTech Computer, within thirty days that would be well known thorough the industry in New England."¹³⁶ Additional examples abound.

By making it possible for transactors to access and rely on the reputational assessment of other members of their network even when the information they convey is neither directly observable to nor fully verifi-

together in a timely manner . . .Our partners from past alliances are one of our most important sources of timely information about alliance opportunities out there, both with them and with other firms with whom they are acquainted.")

¹³⁴ Ranjay Gulati, *The Dynamics of Alliance Formation*. Unpublished doctoral dissertation, Harvard University, Cambridge, MA (1993)

¹³⁵ Gulati 1993, supra note _ at _.

¹³⁶ Andrea Larson, *Network Dyads in Entrepreneurial Setting: A Study of the Governance of Exchange Relationships*, 76 *Administrative Science Quarterly*, 76 (1992).

able to the recipient, the network makes it possible for the transactors to impose non-legal sanctions for misbehavior on the basis of types of information that cannot be used by either the legal system or other types of adjudicatory fora to do so. As a consequence, when a transaction is embedded in strong a network, the potential impact of the information that flows through the network on contract governance and future opportunities for trade, must be taken into account by lawyers both when drafting contracts and when advising clients about the likely effects of various types of misbehavior.¹³⁷

A final important aspect of network governance is that its disciplining effect can extend to all of the commitments made in a contracting relationship, not just those whose violation would give the breached against party a credible threat to terminate the relationship and file a lawsuit. That is, even if the legal system worked well, damages were set at an optimal amount, and the judgment proof problem were taken out of the equation, as long as the filing of suit were considered a relationship ending event, the availability of network based governance would add value to contracting relationships by giving transactors improved (though perhaps not optimal) incentives to comply with more aspects of their agreement and refrain from taking opportunistic actions that while not serious enough to end the relationship, nevertheless impose harm on their contracting partner.

2. Industrial Procurement and Network Governance in a Local Context

Wholly apart from market wide network effects of the sort documented by the biotech study, industrial buyers appear to have a keen interest in knowing and understanding the more local network of contractual relationships surrounding their suppliers. Large firms frequently require suppliers, sometimes as a condition of doing business, and other times as part of a Request For Proposals or Request for Quali-

¹³⁷ The observation that information will be conveyed through networks does not necessarily mean that all of the information will be accurate from an objective point of view. As information passes through social networks its content is altered by peoples' propensity to filter what they say according to standard rules of etiquette that tend to slant opinions expressed by the speaker to those thought to be held by the listener. As a consequence of this, information tends to "echo" and move towards extreme poles of trust and distrust. Although the importance of echo has been demonstrated within firms, how it might work in reference checks between firms that are currently dealing with one another is less clear and is likely, in any particular case, to be influenced by the amount of trust between the speaker and the listener as well as the tone of their relationship. See Burt, *supra* note__at Ch. 4.

fication, to disclose the identity of their most significant contracting partners and any partners who might be considered competitors of the buyer, along with the amount of their output they sell to each, together with the percent of their output the proposed deal would be.¹³⁸ The notion that knowledge of a suppliers' network connections has value to putative buyers is also suggested by the confidentiality provisions that large buyers often include provisions in their contracts – provisions that forbid their suppliers from disclosing even the mere existence of the supply relationship without the buyers express consent.¹³⁹

There are a number of reasons that knowledge of network structure is valuable to buyers. First, it helps them assess the supplier's bankruptcy risk. If a supplier sells a large portion of its output to a buyer who is known to be opportunistic or who operates in an industry where there is highly variable and unpredictable downstream demand for its product, the buyer may well have the power to bankrupt or seriously jeopardize the supplier's business. Second, this information can sometimes help a buyer assess the cost of monitoring quality or overseeing the suppliers' production line. If, for example, the supplier is selling the good to a firm in a regulated industry where components must meet

¹³⁸ For example, one company asks all potential suppliers, "Do you deliver to competitors of COMPANY . . . if so, please tell us. . . Please give the names of your most important COMPANYS [you deal with]. . .including percentage of your sales to them. . .[and] In your perception, what would be the mutual dependence that you perceive to be acceptable in a business relationship with COMPANY? (Expressed as percentage of sales, market position, relation to competitors, etc." Large International OEM (name withheld on request) Over the past few years, however, this information has become more widely available. The Bloomberg Business database now has this information for all public companies and their public suppliers. For privately held suppliers, the database contains partial information on who they sell to, and some analyst generated estimates of the volume of trade. Another start up, Spiderbook.com which is currently in beta testing also trolls the web for public information from both the SEC and the trade press and compiles information about buyer and suppliers webs of commercial relationships.

¹³⁹ See, e.g., Supply Agreement between John Deere & Titan Tire Company, (April 15, 2011) at CI 22 ("Unless required by law or by government regulation, it is agreed that no press release, public announcement, confirmation, or other information regarding supply orders for the Products under this Agreement, or the fact that negotiations for new products or increased quantities for existing order are occurring, will be made by Titan without the prior written approval of Deere or by Deere without the prior written approval of Titan.") See also Phoenix and Intel Contract *supra* note ___ at sect 8.2 (providing for similar confidentiality).

precise specifications (such as the production of a MRI machine) or to a buyer like John Deere who exercises detailed oversight of its suppliers' production lines, the monitoring costs of buying from that supplier will be far lower than if the firm were not selling to these types of buyers. Third, network information may also impact the value of particular contract provisions. For example, some large OEMs who sole source some parts are concerned about suppliers holding them up on price, so they include a most favored nation pricing provision in their contracts, giving them the right to buy the goods at the lowest price the supplier charges to any other buyer. The suppliers' local network can dramatically affect the value of this provision. If the supplier is selling the good to only four other firms who are all sole-sourced to it, the clause is of little value. On the other hand, if the supplier is selling the good to 50 buyers a significant number of whom multi-source the part, the most favored nations clause makes it far less likely that the supplier will be able hold the buyer up on price. Fourth, because buyers enter into these relationships hoping that the supplier they choose will not only be able to supply the goods they need at the time of contracting, but also the goods they will want in the future, whether the supplier sells to firms in one or multiple industries will be relevant to the buyers evaluation of the prospect that he will be able to supply the goods desired in the future. Sometimes buyers want to purchase from a supplier who sells the part to others in its industry since this makes it more likely the seller will pool the non-intellectual property tacit knowledge from other industry members and stay on the technological cutting edge. In other situations, buyers prefer to purchase from suppliers who sell to many industries, and can therefore pool the tacit knowledge from buyers who operate in different industries and are thus likely to give the seller a broader range of new insights than he would get from firms in a single industry that likely have largely overlapping tacit information to share.

3. Conclusion

The theory and evidence presented here suggests (but does not in any sense prove) that relationship-specific social capital and network position are likely to play a key role in the emergence and governance of procurement contracts with a joint development component, much as they do in strategic alliances. At a minimum however, it is strong enough to suggest that in at least some contracting contexts, contract theory (and the work of practicing lawyers) needs to be expanded to take into account the effects social capital and network governance. Recognizing that networks have the power to credibly (though not absolutely) transmit information that is neither observable nor verifiable, and to at least partially bond obligations whose violation is not serious

enough to lead to termination of an otherwise valuable contracting relationships, suggests that integrating an understanding of networks into contract theory has the potential to provide a better understanding of the ways that nonlegal sanctions work, which should, in turn, reveal ways to unlock the power of nonlegal sanctions by both choosing transactional partners who occupy central network positions and tailoring particular contract terms to make reputation a more potent force.

V. CONCLUSION

This essay has drawn on information about the structure of procurement contracts, empirical studies of strategic alliances, and interviews with both buyers and suppliers to begin to explore the contractual mechanisms that in combination with social capital and network structure enable large buyers and their suppliers to create and maintain cooperative contracting relationships largely outside of the shadow of the law and the legal system. Its description of the contract administration institutions, market structures, and contract provisions that are used to support the creation and use of relational contracts in the industrial procurement context stands in sharp contrast to the largely informal and rule of thumb type approaches to relational contracting articulated by the interviewees in Stewart Macaulay's seminal study.¹⁴⁰ Indeed, taken together, recognizing the crucial role played by the contract administration mechanisms discussed here in creating and supporting relational governance suggests that cost of relational governance is far higher than is generally appreciated.¹⁴¹ Conversely, recognizing that relational governance is not only valuable for governing the transaction at hand, but also enables the contracting parties to identify future value creating opportunities that they might otherwise have failed to see while simultaneously generating the types of relational capital that can, over time, successfully bond increasingly complex undertakings, suggests that its

¹⁴⁰ Macaulay, *supra* note __.

¹⁴¹ Moreover, even in the New York diamond industry where the social capital underlying contractual relationships has an organic basis in the religious and community ties among its members, Diamond Dealers Club, the bourse where most transactions are concluded, has adopted written rules and created enforcement institutions (that include both mediation services, arbitration tribunals, and ways of publicizing noncompliance with arbitral awards, to support these agreements, see Bernstein, *Diamonds*, *supra* note __, and the same is true of the cash cotton industry which was deeply embedded in the culture of the old south, yet created a variety of rules, information channels, and dispute resolution channels to govern trade.

benefits might also be greater than commonly appreciated.¹⁴² Together these observations should be useful to lawyers who are thinking about

¹⁴² The arguments advanced in the text have implications for the management literature's perspective on when relational contracts should be used and how they create value for the transactors in certain transactional contexts. Those writing from a management perspective attribute four major benefits to the use of self-enforcing relational contracts: first, a decrease in contracting costs stemming from a reduced need for specification (and with it more effective deterrence since all possible sources of opportunism can rarely be specified in a contract); second, a decrease in monitoring costs "because self-enforcement relies on self monitoring rather than external or third party monitoring;" third, a reduction in "the costs associated with complex adaptation, thereby allowing exchange partners to adjust the agreement on 'on the fly' and to adjust to unforeseen market changes;" and forth that "self enforcing agreements are superior to contracts at minimizing transactions costs over the long run because they are not subject to the time limitations of contracts," which are assumed to be valid over only a specified period of time. See Jeffrey H. Dyer and Harbir Singh, *The Relational View: Cooperative Strategy and Sources of Interorganizational Competitive Advantage*, 23 *Academy of Management Review* 660 (1998). However, as the description and analysis presented here suggests, in the early rounds of dealing between parties, trust is most likely to evolve when obligations are well specified, and accurate and transparent measurement tools are used to judge compliance. These measurement mechanisms are costly to create and administer yet are overlooked by theorists who tend to focus on the costs of governing a contract when the cost of developing the relationship-specific capital that supports it has already been borne. Furthermore, the monitoring costs involved in self-enforcing agreements are unlikely to be lower than in contracts designed to be enforced in court because in both contexts it is a contracting party not a third party who must detect any breach. As for the purported "adjustments on the fly," these are routinely made against the background of formal contracts sometimes informally and sometimes through the filing and acceptance of a change order or a contractual modification. Finally, once it is recognized that the use of Master Agreements followed by purchase orders is the dominant mode of doing business in these markets, the claim that contracts have built-in time limitations, ceases to be an important consideration. Moreover, even when contracting parties do use time limited contracts, many aspects of these agreements are determined by the buyers standard terms and conditions as well as the variety of handbooks and manuals, and it is routine for parties to simply enter into agreements extending former agreements, making re-contracting costs in these contexts far lower than these theorists implicitly assume. If these rather illusory benefits were the most important benefits created by relational governance, it would not be worth its cost in a great many transactional contexts once the costs of the formal and other supports it requires to function among complex organizations are taken into account; yet recognizing that legally enforceable contracts cannot, no matter how well specified they are, meaningfully govern certain types of obligations—for example

the costs and benefits of various types of outsourcing arrangements and contract governance mechanisms.

In closing, however, it is important to note that while the relational governance structures described here are in wide spread use, their operation does not lead to anything close to a theoretically first-best world. The switching costs and reputational forces that lead transactors to prefer to stay with existing partners, rather than seek out new ones who might provide better products at a lower cost, creates lock-in based inefficiencies, and relationships do break down. Moreover, as information moves through networks, particularly when the exchange of information take place via interpersonal social gossip it may be subject to certain types of distortions that have been demonstrated to arise within firms and that might well effect information communicated across firms as well. As a consequence, additional research is needed identify contexts where transactors, business associations, or governments should encourage the creation of networks and to suggest how these networks are best created and structured.

the interior promises in a complex agreement, or a paradox type of obligation – it becomes clear that there are contexts where relationalism may be worth even its cost, properly reckoned.