

Contracts as Organizations

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INTRODUCTION	1
I. LEGAL AND ECONOMIC CONCEPTIONS OF CONTRACTING	5
A. CLASSICAL AND NEOCLASSICAL CONTRACT LAW & NEOCLASSICAL ECONOMICS	5
B. RELATIONAL CONTRACT THEORY	7
C. AGENCY THEORY	12
D. INCOMPLETE CONTRACT THEORY	16
II. SURVEY OF EMPIRICAL STUDIES OF CONTRACTS: 1990-2006	20
III. ORGANIZATIONAL PERSPECTIVES ON CONTRACTS	25
A. RESOURCES	25
B. LEARNING	29
C. IDENTITY	33
D. LEGITIMACY & ISOMORPHISM	37
CONCLUSION	40
APPENDIX I	41
APPENDIX II	43

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Introduction

Contracts matter,¹ and we believe that they are worthy of “serious scholarly consideration.”² Empirical studies of contracts have become more common over the past decade,³ but the range of questions addressed by these studies is narrow, inspired

¹ Contracts sometimes matter in litigation. *See, e.g.*, D. Gordon Smith, *Independent Legal Significance, Good Faith, and the Interpretation of Venture Capital Contracts*, 40 WILLAMETTE L. REV. 825 (2004) (discussing the interpretation of venture capital contracts in Delaware). For a fascinating study of the importance of formal legal rules or procedures in the Japanese tuna market, see Eric A. Feldman, *The Tuna Court: Law and Norms in the World’s Premier Fish Market*, 94 CAL. L. REV. 313 (2006). Stewart Macaulay provides a less sanguine view of the role of contracts in litigation:

There are relatively few contracts cases litigated, and those that are have special characteristics. Few of those cases litigated produce anything like adequate compensation for the injuries caused. Frequently, limitations on liability in written contracts block remedies based on the reasonable expectations of the party who did not draft the instrument. At best, formal legal procedures usually are but a step in a larger process of negotiation. Filing a complaint and pre-trial procedure can be tactics in settlement bargaining; appeals often prompt reversals and remands, leaving the parties to settle or face continuing what seems to be an endless process. When final judgments are won, often they cannot be executed because of insolvency.

Stewart Macaulay, *An Empirical View of Contract*, 1985 WIS. L. REV. 465, 468.

Contracts matter in in end-game scenarios. Robert P. Bartlett, III, *Venture Capital, Agency Costs, And The False Dichotomy Of The Corporation*, 54 UCLA L. REV. 37, 100 (2006) (arguing based on anecdotal evidence that “VC investors have few legal disputes because, when reputational incentives for cooperation fail, they have negotiated an elaborate set of contracts to address the risk of interinvestor conflict”); Lisa Bernstein, *Merchant Law In A Merchant Court: Rethinking The Code’s Search For Immanent Business Norms*, 144 U. PA. L. REV. 1765, 1800-01 (1996) (“the terms of a written contract are viewed as relevant primarily when transactors have decided not to deal again, that is, when their relationship is at an end-game”).

Contracts may contribute to economic development. Michael Trebilcock & Jing Leng, *The Role Of Formal Contract Law And Enforcement In Economic Development*, 92 VA. L. REV. 1517, 1519 (2006) (arguing that formal contract law and enforcement are important to economic development because “the presence of large, long-lived, highly asset-specific investments, as well as the prevalence of increasingly complex trade in goods and services that often occurs outside of repeated exchange relationships”).

Contracts also have symbolic functions. *See* Mark C. Suchman, *The Contract as Social Artifact*, 37 LAW & SOC’Y REV. 91, 111 (2003) (“contract rituals provide symbolic reassurance that the parties are entering into a predictable, controllable, and mutual relationship within a social order composed of voluntary arm’s-length exchanges between equally endowed strangers”). These, along with the “technical” functions of contracts, may provide assurance to contracting parties. *See*, John McMillan & Christopher Woodruff, *Private Order Under Dysfunctional Public Order*, 98 MICH. L. REV. 2421, 2421 (2000) (“Businesspeople need contractual assurance”). Barak Richman suggests an alternative formulation – “Businesspeople need transactional assurance” – to emphasize the existence of enforcement mechanisms other than courts and reputational constraints. Barak D. Richman, *Firms, Courts, and Reputation Mechanisms: Towards A Positive Theory Of Private Ordering*, 104 COLUM. L. REV. 2328, 2329 (2004).

² *Cf.* Suchman, *supra* note 1, at 851 (arguing “for serious scholarly consideration of contracts as things, that is, for the analysis of contracts as social artifacts”).

³ In a 1991 article, Glenn Hubbard and Robert Weiner observe, “The role of contractual arrangements – while important in many markets for commodities and industrial products – has not

primarily by economic theories,⁴ which focus on the role of contracts in mitigating *ex post* opportunism.⁵ We contend that economic theories do not adequately explain many commonly observed features of contracts, and we offer four organizational theories to supplement – and in some instances, perhaps, challenge – the dominant economic accounts. The purpose of this Article is threefold: first, to describe how theoretical perspectives on contracting have motivated empirical work on contracts; second, to highlight the dominant role of economic theories in framing empirical work on contracts; and third, to enrich the empirical study of contracts through application of four organizational theories: resource theory, learning theory, identity theory, and institutional theory.⁶

Outside the economics literature, empirical studies of contracts are rare.⁷ Even management scholars and sociologists, who generated the four organizational theories just mentioned, largely ignore contracts, both in theoretical and empirical analysis.⁸ Nevertheless, we assert that these organizational theories provide new lenses through which to view contracts. While economic theories of contracting focus primarily on one

received much attention in empirical work.” R. Glenn Hubbard & Robert Weiner, *Efficient Contracting and Market Power: Evidence From the U.S. Natural Gas Industry*, 34 J. L. ECON. 25 (1991).

⁴ We use the term “economic theory” to describe the three pillars of the economic theory of contracts: incentive theory, transaction cost theory, and property rights theory. Following Bolton and Dewatripoint, we refer to transaction cost theory and property rights theory together as “incomplete contract theory.” PATRICK BOLTON & MATHIAS DEWATRIPOINT, *CONTRACT THEORY* 490-91 (2005). We discuss each of these economic theories and their implications for the empirical study of contracts in Part I, *infra*.

We do not intend to imply that the four organizational theories described in Part III are “non-economic” in any fundamental way. Rather, the basis for the distinction between “economic theories” and “organizational theories” is the disciplinary origin of each of the theories. Economic theories were developed in economics journals, and organizational theories were developed in strategy and management journals.

⁵ Oliver Williamson famously defined opportunism as “self-interest seeking with guile.” OLIVER E. WILLIAMSON, *THE ECONOMIC INSTITUTIONS OF CAPITALISM* 47 (1985). Opportunism travels under many appellations, including “moral hazard.” See PAUL MILGROM & JOHN ROBERTS, *ECONOMICS, ORGANIZATION & MANAGEMENT* 167 (1992) (defining moral hazard as a “form of post-contractual opportunism that arises because actions that have efficiency consequences are not freely observable and so the person taking them may choose to pursue his or her private interests at others’ expense”). “Moral hazard” tends to be associated with incentive theory, and “opportunism” is generally associated with incomplete contract theory, and though we vary our usage according to that custom, we view the terms as essentially interchangeable.

⁶ Robert Gibbons points to resource theory and learning theory as having “mouth-watering potential implications” for the study of firms. Robert Gibbons, *Four Formal(izable) Theories of the Firm?* 3 (working paper 2004).

⁷ See Part II, *infra*.

⁸ See Nicholas S. Argyres et al., *Complementarity and Evolution of Contractual Provisions: An Empirical Study of IT Services Contracts*, 18 ORG. SCI. 3, 3 (2007) (“[t]here has been little systematic theoretical or empirical analysis in the strategy or management literature ... of how contracts are actually designed and how their structures evolve”).

purpose of contracts – mitigating *ex post* opportunism – the four organizational theories help us understand the multiple purposes of contracts.⁹

Organizational theories attempt to explain why organizations do what they do. Contracts are a worthy object of study using organizational theories because contracts often are created by organizations, and, in turn, each contract creates a new organization.¹⁰ Our focus on contracts should not imply the primacy of contracts over other forces – markets, norms, statutes, regulations, common law, etc. – that determine the structure and governance of contractual relationships. Rather, contracts are a particular kind of social artifact that “symbolize social categories and influence and constrain social action.”¹¹ In short, contracts make organizations possible by providing an impetus for sustained collective organizing. Thus, analyzing contracts allows us to tell different theoretical stories about organizations. By empirically examining contracts using different theoretical perspectives, we gain useful insights into the social and economic processes that motivate organizational behavior. Among the expected benefits of studying contracts more closely is that we will have a better understanding of the context in which contracts are negotiated, maintained, adapted, and enforced.

In Part I we trace the development of legal and economic theories of contract, paying special attention to the nature of the empirical work generated by these theories. We begin with a description of classical and neoclassical contract law and their affinity to neoclassical economics. The prototypical contract under all of these theories was the spot contract, where the most important variables are quantity, quality, and price. In such contracts, “no relation exists between the parties apart from the simple exchange of goods.”¹² As one would expect, these theories did not inspire empirical research on the form or structure of contracts.

Indeed, the initial motivation for empirical research on contracts did not arise from a desire to understand the contracts themselves, but rather from a desire to show that contracts were embedded in social relations. Relational contract theory developed as a reaction to the unrealistic portrayal of contracts in classical and neoclassical contract law and neoclassical economics. Relational contract theory emphasizes the importance of social context in the governance of contractual relationships. Though empirical work on relational contract theory has flourished, the focus of this work is on the *non-contractual* attributes of contractual relationships, rather than on the contracts themselves.

Ironically, interest in the empirical study of contracts was inspired, in part, by relational contract theory. By rejecting the image of contracts as complete embodiments

⁹ For economists “contract theory” is “the theory of incentives, information, and economic institutions.” BOLTON & DEWATRIPOINT, *supra* note 4, at 2. Though economic analysis of contracts touches many other topics, most importantly risk and uncertainty, “contract theory” is motivated principally by concerns about *ex post* opportunism.

¹⁰ Cf. Argyres et al., *supra* note 8, at 6 (“contracts are similar to organizations in that they are mechanisms for organizing and governing business activity”).

¹¹ Beth Bechky, *Object Lessons: Workplace Artifacts as Representations of Occupational Jurisdiction*, 109 AMER. J. SOC. 724 (2003).

¹² IAN R. MACNEIL, *THE NEW SOCIAL CONTRACT: AN INQUIRY INTO MODERN CONTRACTUAL RELATIONS* 10 (1980).

of an agreement, relational contract theory made the form and structure of contracts interesting. We describe the development of the three pillars of the economic theory of contracts – agency theory, transaction cost theory, and property rights theory – each of which is motivated by the desire to explicate the mechanisms used by contracting parties to protect against *ex post* opportunism.

Having laid the theoretical foundations for the empirical study of contracts, we report in Part II on our survey of recent empirical work on contracts in leading journals in economics, financial economics, law and economics, strategy and management, sociology, and law. As already noted, these studies rely heavily on economic theory, and the questions addressed by the studies almost inevitably revolve around *ex post* opportunism.

Despite the centrality of opportunism to economic theory, economists debate amongst themselves the importance of opportunism as a motivation for contractual form and structure. When Oliver Williamson imagines relationships in a world without opportunism, he sees little that we would recognize as a sophisticated contract, but only a “general clause, to which both parties would agree, to the effect that ‘I will behave responsibly rather than seek individual advantage when an occasion to adapt arises’”¹³ Meanwhile, Ronald Coase has eschewed opportunism as a meaningful motivation for contractual structure, suggesting that reputational constraints usually prevent opportunistic behavior.¹⁴ This disagreement has caused some economic theorists to attempt an “opportunism-independent theory of the firm,”¹⁵ which presumes that “contracts can have functions beyond merely those of incentive alignment to prevent wrongdoing.”¹⁶

We do not attempt to describe the role of opportunism in motivating contractual form or structure, but we contend that contracts have many functions beyond the technical task of aligning incentives. In Part III we present four organizational perspectives on contracts. While space does not permit a complete examination of any of the organizational perspectives in a specific contractual context, we offer several potential applications of each organizational perspective to real-world contracts.

¹³ Oliver E. Williamson, *Transaction-Cost Economics: The Governance of Contractual Relations*, 22 J.L. & ECON. 233, 241 (1979). Williamson does not say that contracts would be superfluous. Indeed, the general clause that he describes would appear in a contract. Williamson also asserts that “the gaps in long-term, incomplete contracts could be faultlessly filled in an adaptive, sequential way” by the use of such a clause. Moreover, the notion that the parties might have “occasion to adapt” suggests that they have committed to a course of action via contract.

¹⁴ Ronald H. Coase, *The Nature of the Firm: Influence*, 4 J. L. ECON. & ORG. 33, 44 (1988) (“the propensity for opportunistic behavior is usually effectively checked by the need to take account of the effect of the firm’s actions on future business”).

¹⁵ See, e.g., Harold Demsetz, *The Theory of the Firm Revisited*, 4 J. L. ECON. & ORG. 141 (1988).

¹⁶ See, e.g., James H. Love, *On the Opportunism-Independent Theory of the Firm*, 29 CAMBRIDGE J. ECON. 381 (2005).

I. Legal and Economic Conceptions of Contracting

Contract law comprises a set of technical rules that, among other things, prescribe the requirements of contract formation,¹⁷ provide certain bases for avoiding performance of contracts,¹⁸ and describe various legal and equitable remedies for breach of contract.¹⁹ Economic analysis of contract law strives “to provide an explanation of existing legal rules, and to provide a basis for criticizing or defending those rules.”²⁰ For present purposes, we are not interested in the doctrinal content of contract law *per se*, nor are we interested in economic analysis of contract law.²¹ Instead, we are interested in the conceptions of contracting that undergird both legal doctrine and economic theory. In the following sections, we describe briefly the development of those conceptions and the effect of that development on empirical studies of contracts.²²

A. Classical and Neoclassical Contract Law & Neoclassical Economics

Classical contract law comprised a set of general principles, from which rules governing specific cases could be derived.²³ Though the development of classical contract law was a group effort, it is most closely associated with Samuel Williston. Through his renowned treatise²⁴ and his later work on the first *Restatement of Contracts*,²⁵ Williston constructed a system under which contracting parties with more-or-less equal bargaining power engaged in arm’s-length bargaining over discrete transactions. The obligations of the parties were expressed in documents, which memorialized completely the agreed-upon terms of the deal.

¹⁷ RESTATEMENT (SECOND) OF CONTRACTS chs. 2-5 (1979).

¹⁸ RESTATEMENT (SECOND) OF CONTRACTS chs. 6-8, 11-12 (1979).

¹⁹ RESTATEMENT (SECOND) OF CONTRACTS ch. 16 (1979).

²⁰ Eric A. Posner, *Economic Analysis of Contract Law After Three Decades: Success or Failure?*, 112 YALE L.J. 829, 830 (2003).

²¹ Economic analysis of contract law is one of many theoretical approaches to the subject. For a useful survey of contemporary theories of contract law, see STEPHEN A. SMITH, *CONTRACT THEORY* (2004). See also Nathan Oman, *Unity and Pluralism in Contract Law*, 103 Mich. L. Rev. 1483 (2005) (presenting a “strategy for reconciling the values of autonomy and efficiency into a single theory”).

²² Generally speaking, theory motivates empirical work. We observe this rather starkly in empirical studies of contracts. Often, when scholars encounter a puzzle, they assume that the solution lies in economic theory. See, e.g., Robert Daines & Michael Klausner, *Do IPO Charters Maximize Firm Value? Antitakeover Protection in IPOs*, 17 J. L. ECON. & ORG. 83, 85 (2001) (“Under the assumption that IPO-stage charters maximize firm value, the widespread use of [anti-takeover provisions] suggests that [such provisions] are often efficient. We therefore look for such an efficiency explanation.”).

²³ Readers may recognize this as the oft-told tale of “conceptualism” in American law. For much fuller descriptions, see Thomas C. Grey, *Langdell’s Orthodoxy*, 45 U. PITT. L. REV. 1 (1983); Felix S. Cohen, *Transcendental Nonsense and the Functional Approach*, 35 COLUM. L. REV. 809 (1935); and Roscoe Pound, *Mechanical Jurisprudence*, 8 COLUM. L. REV. 605 (1908).

²⁴ SAMUEL WILLISTON, *THE LAW OF CONTRACTS* (1920).

²⁵ RESTATEMENT OF CONTRACTS (1932).

Williston and his cohorts were formalists,²⁶ though their formalism was borne of pragmatism.²⁷ They believed that contract law should serve as a “rough-and-ready device to help practical people achieve their commercial goals with elementary justice.”²⁸ Like most students of contract law, however, their method for ensuring the relevance of their work to real-world contracts might best be described as *casual empiricism*.²⁹

Neoclassical contract law is generally associated with the legal realists, most importantly Arthur Corbin³⁰ and Karl Llewellyn, and is embodied in Corbin’s celebrated treatise,³¹ the Restatement (Second) of Contracts,³² and the Uniform Commercial Code.³³

²⁶ Richard H. Pildes, *Forms of Formalism*, 66 U. Chi. L. Rev. 607, 608-09 (1999) (“To the classical formalists, law meant ... a scientific system of rules and institutions that were complete in that the system made right answers available in all cases; formal in that right answers could be derived from the autonomous, logical working out of the system; conceptually ordered in that ground-level rules could all be derived from a few fundamental principles; and socially acceptable in that the legal system generated normative allegiance.”).

²⁷ Mark L. Movsesian, *Rediscovering Williston*, 62 WASH. & LEE L. REV. 207, 213-14 (2005) (for Williston “formalism’s appeal lies in the fact that it promotes the important everyday benefits of simplicity, predictability, and comprehensibility”).

²⁸ *Id.* at 216.

²⁹ Mark Movsesian describes Williston’s views on empirical legal scholarship as follows:

[W]hile he shows no inclination to do empirical work himself, Williston has surprisingly good things to say about law in action. Williston argues that empirical research, particularly on procedural issues, can provide “necessary information on which the development of the law may properly proceed.” ...

Still, Williston thinks that practical problems inherent in empirical scholarship counsel caution. “It is generally impossible to obtain a controlled experiment of the effect of a legal rule,” he writes. “So many factors enter into the ultimate result that reasonable certainty as to the effect of the rule is hard to obtain.” That does not mean that empirical work should cease, only that scholars should be wary of relying too heavily on studies that are frequently ambiguous. Fortunately, he believes, some of the practical benefits of traditional legal analysis do not require scientific confirmation. Common sense suggests that, all things being equal, simplicity, predictability, and logical coherence in law promote social welfare. As a result, Williston argues, the burden is on the Progressives. Unless empirical work clearly shows that traditional legal reasoning leads to bad social results, jurisprudence should stick to standard doctrinal arguments.

Id. at 271-72.

³⁰ Corbin was generally treated by the Realists as one of their own. See Roscoe Pound, *A Call for a Realist Jurisprudence*, 44 HARV. L. REV. 697 (1931); Karl Llewellyn, *Some Realism About Realism -- Responding to Dean Pound*, 44 HARV. L. REV. 1222, 1224 n. 35 (1931). See also WILLIAM TWINING, KARL LLEWELLYN AND THE REALIST MOVEMENT 26-40 (1973). However, Corbin is sometimes portrayed as outside the movement. For example, Friedrich Kessler observed that Corbin “was rather critical of [the Realist Movement’s] tenets, and particularly of the position that decisions were not determined by rules and principles.” Friedrich Kessler, *Arthur Linton Corbin, Remarks by Friedrich Kessler*, 78 YALE L.J. 517, 519 (1969).

³¹ ARTHUR L. CORBIN, CORBIN ON CONTRACTS (1952).

³² RESTATEMENT (SECOND) OF CONTRACTS (1979). This work was begun in 1962 and completed in 1979. Corbin died in 1967 at the age of 93, but he served as a consultant on the RESTATEMENT, and his influence is widely acknowledged, including by the Reporters. See Robert Braucher, *Freedom of Contract and the Second Restatement*, 78 YALE L.J. 598, 616 (1969); E. Allan Farnsworth, *Ingredients in the*

The distinguishing attributes of neoclassical contract law include the doctrine of unconscionability, the duty of good faith, trade usage, and the increased use of reliance as a basis for liability. Each of these innovations suggests a more socialized conception of contract than appears in classical contract law. Nevertheless, both classical and neoclassical contract law rely heavily on a stylized image of exchange involving two roughly equal parties.

This image also appears in neoclassical economics, in which the paradigmatic exchange is exemplified by the Edgeworth Box. In this model, two parties allocate two goods between themselves, and the box is used to represent those allocations graphically. Though any point within the box is a feasible allocation, the fundamental insight illustrated by the box is that any exchange that improves the welfare of one of the parties without reducing the welfare of another is Pareto optimal. The exchanges represented in the Edgeworth Box do not allow for uncertainty or asymmetric information. As a result, contracts are viewed as complete. Not surprisingly this view of exchange relationships did not encourage empirical study of contracts.

B. Relational Contract Theory

When Stewart Macaulay began teaching Contracts at the University of Wisconsin Law School in 1957, he was 26 years old.³⁴ He had never practiced law, and he did the sensible thing by adopting the casebook used by his more experienced colleagues: LON FULLER, BASIC CONTRACT LAW.³⁵ Macaulay's father-in-law – Jack Ramsey, the retired General Manager of S.C. Johnson & Son – was not impressed with the casebook. According to Macaulay, Ramsey “thought that much of it rested on a picture of the business world that was so distorted that it was silly.”³⁶

To assist Macaulay in gaining real-world perspectives on contracts, Ramsey arranged for a series of meetings with corporate executives that became the basis of Macaulay's seminal article, “Non-Contractual Relations in Business: A Preliminary Study.”³⁷ As indicated by the title, Macaulay focused on *non-contractual* relations – how

Redaction of the Restatement (Second) of Contracts, 81 COLUM. L. REV. 1, 3 (1981). See also, Restatement (Second) of Contracts vii (1981) (ALI Director Herbert Wechsler, noting that the reporters had “elaborate written notes” from Corbin).

³³ Karl Llewellyn was the Chief Reporter for the Uniform Commercial Code and the principal drafter of Articles 1 (General Provisions) and 2 (Sales). Many histories of the drafting of the Uniform Commercial Code have been written. For a recent effort, see Allen R. Kamp, *Downtown Code: A History of the Uniform Commercial Code 1949- 1954*, 49 BUFF. L. REV. 359 (2001); Allen R. Kamp, *Uptown Act: A History of the Uniform Commercial Code: 1940-49*, 51 SMU L. REV. 275 (1998).

³⁴ Stewart Macaulay, *Crime and Custom in Business Society*, 22 J. L. SOC. 248, 248 (1995).

³⁵ LON FULLER, BASIC CONTRACT LAW (1947).

³⁶ Macaulay, *Crime and Custom*, *supra* note 34, at 249.

³⁷ Stewart Macaulay, *Non-Contractual Relations in Business: A Preliminary Study*, 28 AM. SOC. REV. 55 (1963).

parties regulated their behavior without the assistance of written contracts.³⁸ During the course of his interviews, he found that “many, if not most, exchanges reflect no planning, or only a minimal amount of it, especially concerning legal sanctions and the effect of defective performances.”³⁹ If problems arose, the parties often negotiated to a solution without relying explicitly on the written contracts or threats of legal sanctions.⁴⁰

Ian Macneil later referred to Macaulay’s famous article⁴¹ as a “demolition effort” that cleared the way for relational contract theory.⁴² When Macaulay and Macneil first met at a summer workshop for young contracts teachers held at New York University in 1962, Macaulay already had written *Non-Contractual Relations in Business*,⁴³ and Macneil was writing doctrinal pieces about contract law.⁴⁴ Macneil’s renowned work on

³⁸ Despite Macaulay’s focus on non-contractual relations, he does not argue that contracts are irrelevant. Indeed, he observed that “many business exchanges reflect a high degree of planning” through formal contracts. *Id.* at 60.

³⁹ *Id.* at 60.

⁴⁰ Macaulay observed:

Disputes are frequently settled without reference to the contract or potential for actual legal sanctions. There is a hesitancy to speak of legal rights or to threaten to sue in these negotiations. Even where the parties have a detailed and carefully planned agreement which indicates what is to happen if, say, the seller fails to deliver on time, often they will never refer to the agreement but will negotiate a solution when the problem arises apparently as if there had never been any original contract.

Id. at 61.

⁴¹ Fred R. Shapiro, *The Most-Cited Law Review Articles Revisited*, 71 CHI.-KENT L. REV. 751 Table I (1996) (ranking the article 15th on the list of “Most-Cited Law Review Articles of All Time”).

⁴² Ian R. Macneil, *Relational Contract: What We Do and Do Not Know*, 1985 WIS. L. REV. 483, 509. Macneil observed:

We cannot reach the question of what holds together the various transactions in which manufacturers engage until we explode the myth that legal sanctions, or fear of them, constitute the social glue. Only then can we ask what replaces legal sanctions, or, as Macaulay put it, why relatively non-contractual practices are so common. Macaulay’s tentative answers, although confined to the manufacturers he studied, provide a start on developing more general relational principles.

Id. James Fox identifies various strands of relational contract theory:

There is law-and-economics based relational contract theory, Ian Macneil's foundational relational contract theory and its cousin law-and-society relational contract theory, libertarian relational contract theory, and liberal communitarian relational contract theory.

James W. Fox, Jr., *Relational Contract Theory and Democratic Citizenship*, 54 CASE W. RES. L. REV. 1, 5-6 (2003). For our purposes, the distinctions among these versions of relational contract theory are less important than their unifying feature, namely, an emphasis on the social context of the contracting relationship. *Id.* at 6.

⁴³ Macaulay presented the paper at a meeting of the American Sociological Association held in Washington D.C. immediately following the NYU workshop. Email from Stewart Macaulay to Gordon Smith (October 3, 2006).

⁴⁴ See, e.g., Ian R. Macneil, *Power of Contract and Agreed Remedies*, 47 CORNELL L. Q. 495 (1962); Ian R. Macneil, *Exercise in Contract Damages: City of Memphis v. Ford Motor Company*, 4 B.C.

“relational contracts” did not begin to emerge for several years,⁴⁵ with the earliest pieces emanating from his work in Africa⁴⁶ and his “first systematic formulation”⁴⁷ of relational contract theory appearing in 1974.⁴⁸

The essential elements of relational contract theory are fairly simple to summarize, albeit at the loss of much nuance.⁴⁹ According to Macneil, “contracts” are “relations among people who have exchanged, are exchanging, or expect to be exchanging in the future.”⁵⁰ This is not a *theory of relational contracts*, but rather a *relational theory of contracts*. The difference is intended to suggest that “[a]ll exchange occurs in relations.”⁵¹

IND. & COMM. L. REV. 331 (1963); Ian R. Macneil, *Time of Acceptance: Too Many Problems for a Single Rule*, 112 U. PENN. L. REV. 947 (1964).

In this formative stage, Macneil developed a “general dissatisfaction with the classical law” of contracts. David Campbell, *Ian Macneil and the Relational Theory of Contract*, in IAN R. MACNEIL, *THE RELATIONAL THEORY OF CONTRACT: SELECTED WORKS OF IAN MACNEIL* 3, 6 (David Campbell ed. 2001).

⁴⁵ Ian R. Macneil, *Relational Contract Theory: Challenges and Queries*, 94 NW. U. L. REV. 877, 877 (2000) (referring to “the work I have been doing with relational contracts since the mid-1960s”). In the meantime, Macaulay continued to work on the socio-legal study of contractual relationships. *See, e.g.*, Stewart Macaulay, *Changing a Continuing Relationship Between a Large Corporation and Those Who Deal With It: Automobile Manufacturers, Their Dealers, and the Legal System*, *Law and Society*, 483 WIS. L. REV. 3 (1965); Stewart Macaulay, *Private Legislation and the Duty to Read -- Business by IBM Machine, the Law of Contracts and Credit Cards*, 19 VAND. L. REV. 1051 (1966).

⁴⁶ IAN R. MACNEIL, *CONTRACTS: INSTRUMENTS OF SOCIAL CO-OPERATION – EAST AFRICA* (1968); Ian R. Macneil, *The Tanzania Hire-Purchase Act*, 2 E. AFRICAN L.J. 84 (1966). Macneil spent two years teaching law in Africa, funded by the Ford Foundation and a Fulbright Fellowship. His time there was part of a larger “law and development movement” that envisioned legal reform as the catalyst for economic development. This vision, coupled with the belief that developing nations were not producing lawyers equipped with the requisite skills, led to an emphasis on legal education, as described by Thomas Carothers:

Programs emphasized legal education, particularly the goal of trying to recast methods of teaching law in developing countries in the image of the American Socratic, case-oriented methods ... [and] encouraged lawyers and legal educators in developing countries to treat the law as an activist instrument of progressive social change.

THOMAS CAROTHERS, *AIDING DEMOCRACY ABROAD: THE LEARNING CURVE* 24 (1999).

⁴⁷ Ian R. Macneil, *Relational Contract Theory as Sociology: A Reply to Professors Lindenberg and de Vos*, 143 J. INST. & THEORETICAL ECON. 272, 273 n. 4. (1987).

⁴⁸ Ian R. Macneil, *The Many Futures of Contracts*, 47 S. CAL. L. REV. 691 (1974). Macneil continued to develop relational contract theory after 1974, partly in response to critiques of the 1974 article, but in 1987, Macneil wrote, “None of these changes alters the fundamental nature of the theory, and I would worry more if there had been no changes.” Macneil, *Sociology*, *supra* note 47, at 273 n. 4.

⁴⁹ Macneil described relational contract theory time and again, usually making adjustments along the way. An excellent introduction to his work is provided by IAN R. MACNEIL, *THE RELATIONAL THEORY OF CONTRACT: SELECTED WORKS OF IAN MACNEIL* (David Campbell ed. 2001).

⁵⁰ Macneil, *Sociology*, *supra* note 47, at 274.

⁵¹ *Id.* With regard to this point, David Campbell has observed:

There is a sharp contrast between the profundity of Macneil’s work and the, as he himself recognizes, still disappointing reception of that work. So far as this is an intellectual

Exchange relations occur “in various patterns along a spectrum ranging from highly discrete to highly relational.”⁵² The primary determinants of the placement of a contractual relationship on this spectrum are the duration of the relationship, the thickness of future ties between the contracting parties, and the clarity of future rights and obligations. Regardless of the position on the spectrum, every contractual relation comprises certain behaviors, and the patterns of behavior across many relations gives rise to norms.⁵³

Other legal scholars were slow to embrace Macaulay and Macneil.⁵⁴ When the derivative legal scholarship began to emerge, much of it focused on the implications of relational contracting theory for legal doctrine.⁵⁵ Though Macneil described his method

matter, it can largely be put down to the widespread interpretation of Macneil that he claims there is a separate “relational” category of contracts. This is, at best, thought to be a claim about a perhaps interesting but certainly marginal category or contracts other than classical or discrete contracts. Macneil is widely thought to have described a “spectrum” on which relational contracts are placed at the opposite pole to classical or discrete contracts. But though there certainly is warrant for this interpretation of Macneil, the main intended thrust of his work is not so much to distinguish the relational from the discrete contract but to reveal the relational constitution of all contracts.

Campbell, *supra* note 44, at 5.

⁵² Macneil, *Sociology*, *supra* note 47, at 275.

⁵³ The creation of norms by contracting parties takes place against a background “social matrix,” which consists of “the common sociality essential for all human activity [including shared meanings and language] and the political limits to self-interest which prevent economic competition from decaying into war ... or parasitism.” See Campbell, *supra* note 44, at 14.

⁵⁴ Robert Gordon once referred to the work of Macaulay and Macneil as “remarkable, if up until now rather lonely, accomplishments.” Robert W. Gordon, *Macaulay, Macneil, and the Discovery of Solidarity and Power in Contract Law*, 1985 WIS. L. REV. 565, 578. As suggested by this comment, work on relational contract theory prior to 1985 was sparse, and Stewart Macaulay has observed, “It is my impression that writers in our field have paid much more attention to Ian’s work since Gordon wrote, and, in my view, people should not attempt to write about contracts until they have studied Macneil.” Stewart Macaulay, *Relational Contracts Floating On A Sea Of Custom? Thoughts About The Ideas Of Ian Macneil And Lisa Bernstein*, 94 NW. U. L. REV. 775, 776 (2000).

⁵⁵ Papers published in the NORTHWESTERN UNIVERSITY LAW REVIEW in connection with the symposium entitled “Relational Contracting Theory: Unanswered Questions” reveal the dedicated interest in legal doctrine among those who write about relational contracts. See, e.g., Jay M. Feinman, *Relational Contract Theory in Context*, 94 NW. U. L. REV. 737, 737 (2000) (“I want to situate Macneil’s relational contract theory within the story of the development of contract law”); Eric Posner, *A Theory of Contract Law Under Conditions of Radical Judicial Error*, 94 NW. U. L. REV. 749, 751 (2000) (“If Macneil is right, and courts cannot resolve contractual disputes by discovering initial contractual intentions on the basis of documents and other evidence, cannot use such intentions (even if they exist) to guide behavior late in the life of a relational contract, cannot enforce contracts in a way that maximizes their value ex ante, cannot fill in gaps by imagining the hypothetical bargain – then what should the courts do?”); Robert E. Scott, *A Case for Formalism in Relational Contract*, 94 NW. U. L. REV. 847, 847 (2000) (“the central task in developing a plausible normative theory of contract law is to specify the appropriate role of the state in regulating incomplete contracts”); and Richard E. Speidel, *The Characteristics and Challenges of Relational Contracts*, 94 NW. U. L. REV. 823, 838 (2000) (“a continuing challenge is for courts to recognize the special characteristics of relational contracts and to develop a set of default rules that are more responsive to the problems that those characteristics generate”).

in vaguely empirical terms,⁵⁶ his relational contract theory was highly abstract and did not include explicitly any contracts as primary data.⁵⁷ To the extent that relational contract theory inspired empirical work among law professors, that work tended to focus on the non-contractual dimensions of contractual relationships.⁵⁸ The overarching lesson from these studies is that “[l]egal doctrine and legal recourse often matter very little . . . , since most transactions are governed, in practice, by informal community norms, enforced by informal social sanctions.”⁵⁹

Not surprisingly, Macaulay’s and Macneil’s sociological approaches found an audience beyond the legal academy among economic sociologists and management

Macneil planted the seeds of this doctrinal research agenda in the “Postscript” to *The Many Futures of Contract*, *supra* note 48, at 805. Provoked by several readers of a late draft of the article, Macneil offered some preliminary thoughts on possible connections between relational contract theory and the “real world.” *Id.* at 806. He framed the issue in terms of the “legal implications of the proposed theoretical analysis,” *id.* at 807, and he used two legal rules as illustrations.

Macneil acknowledged, “it is quite plain that acceptance of this analysis as a jurisprudential framework would work no general overthrow of present transactional contract doctrines.” *Id.* at 813. Indeed. As noted by Melvin Eisenberg, “there is no law of relational contracts.” Melvin A. Eisenberg, *Why There is No Law of Relational Contracts*, 94 NW. U. L. REV. 805 (2000). Eisenberg makes more than a descriptive claim. He concludes: “What relational contract theory has not done, and cannot do, is to create a law of relational contracts.” *Id.* at 821.

⁵⁶ Ian R. Macneil, *Relational Contract Theory: Challenges and Queries*, 94 NW. U. L. REV. 877, 879 (2000) (recounting that he “was simply exploring and trying to make sense of reality, the reality of what people are actually doing in the real-life world of exchange”)

⁵⁷ For additional important works in the development of relational contract theory, see Ian R. Macneil, *Contracting Worlds and Essential Contract Theory*, 9 SOC. & LEGAL STUD. 431 (2000); Ian R. Macneil, *Exchange Revisited: Individual Utility and Social Solidarity*, 96 ETHICS 567 (1986); Ian R. Macneil, *Bureaucracy and Contracts of Adhesion*, 22 OSGOODE HALL L.J. 5 (1984); Ian R. Macneil, *Economic Analysis of Contractual Relations: Its Shortfalls and the Need for a “Rich Classificatory Apparatus,”* 75 NW. U. L. REV. 1018 (1981); Ian R. Macneil, *Contracts: Adjustment of Long-Term Economic Relations Under Classical, Neoclassical, and Relational Contract Law*, 72 NW. U. L. REV. 854 (1978).

⁵⁸ For important early works, see ROBERT ELLICKSON, *ORDER WITHOUT LAW: HOW NEIGHBORS SETTLE DISPUTES* (1991); Lisa Bernstein, *Opting Out of the Legal System: Extralegal Contractual Relations in the Diamond Industry*, 21 J. LEGAL STUD. 115 (1992); Keith J. Crocker & Scott E. Masten, *Pretia Ex Machina? Prices and Process in Long-Term Contracts*, 34 J. L. ECON. 69 (1991).

Now such studies are commonplace. *See, e.g.,* Carl J. Circo, *Contract Theory and Contract Practice: Allocating Design Responsibility in the Construction Industry*, 58 FLA. L. REV. 561 (2006); Carol A. Heimer, *Responsibility in Health Care: Spanning the Boundary Between Law and Medicine*, 41 WAKE FOREST L. REV. 465 (2006); Nestor M. Davidson, *Relational Contracts In The Privatization Of Social Welfare: The Case Of Housing*, 24 YALE L. & POL’Y REV. 263 (2006); George Dent, *Lawyers And Trust In Business Alliances*, 58 BUS. LAW. 45 (2002); Lisa Bernstein, *Private Commercial Law in the Cotton Industry: Creating Cooperation Through Rules, Norms, and Institutions*, 99 MICH. L. REV. 1724 (2001); Ronald J. Mann, *Verification Institutions in Financing Transactions*, 87 GEO. L.J. 2225 (1999); Pauline T. Kim, *Bargaining With Imperfect Information: A Study Of Worker Perceptions Of Legal Protection In An At-Will World*, 83 CORNELL L. REV. 105 (1997).

⁵⁹ Suchman, *supra* note 1, at 96.

scholars.⁶⁰ Scholars utilized this approach to understand how relational attributes, such as trust and reciprocity, enhanced inter-firm cooperation and improved the performance of partnering firms.⁶¹

Sociologists attempt to explain social action,⁶² but contracts typically have been viewed as an exogenous variable in the analysis of social action.⁶³ Stated another way, contracts often are treated as the “law on the books,” while the behavior of the contracting parties is analyzed as the “law in action.” Implicit in this dichotomy is the assumption that the “law on the books” is secondary to other forces in explaining human behavior.⁶⁴ Perhaps we should not be surprised to find, therefore, that sociologists largely ignore contracts.⁶⁵

C. Agency Theory

When economists speak of “relational contracts,” they imagine “self-enforcing” agreements, meaning that “some credible future punishment threat [other than judicial enforcement] in the event of noncompliance induces each party to stick to agreed terms.”⁶⁶ Agency theory is not *relational* in this sense, but it contemplates an economic

⁶⁰ See, e.g., Mark Granovetter, *Economic Action and Social Structure: The Problem of Embeddedness*, 91 AM. J. SOC. 481 (1985); Siegwart Lindenberg, *Contractual Relations and Weak Solidarity: The Behavioral Basis of Restraints on Gain-Maximization*, 144 J. INST. & THEORETICAL ECON. 39 (1988); Brian Uzzi, *The Sources and Consequences of Embeddedness for the Economic Performance of Organizations: The Network Effect*, 61 AM. SOC. REV. 674 (1996); John P. Esser, *Institutionalizing Industry: The Changing Forms of Contract*, 21 L. & SOC. INQUIRY 593 (1996).

⁶¹ The literature on the performance effects of relational contracting is extensive, but some examples include Brian Uzzi, *Social Structure and Competition in Interfirm Networks: The Paradox of Embeddedness*, 42 ADMIN. SCI. Q. 35 (1997); Akbar Zaheer and N. Venkatraman, *Relational Governance as an Interorganizational Strategy: An Empirical Test of the Role of Trust in Economic Exchange*, 16 STRAT. MGMT. J. 373 (1995); Jeffrey H. Dyer and Harbir Singh, *The Relational View: Cooperative Strategy and Sources of Interorganizational Competitive Advantage*, 23 ACAD. MGMT. REV. 660 (1998).

⁶² See MAX WEBER, *THE THEORY OF SOCIAL AND ECONOMIC ORGANIZATION* 88 (The Free Press 1947) (defining sociology as “a science which attempts the interpretive understanding of social action in order thereby to arrive at a causal explanation of its course and effects”).

⁶³ In this regard, contracts are treated like legal sanctions, reputational threats, social bonds, or any other control mechanism.

⁶⁴ See Macaulay, *Empirical View*, *supra* note 1, at 467 (“Contract planning and contract law, at best, stand at the margin of important long-term continuing business relations.”).

⁶⁵ Cf. Argyres et al., *supra* note 8, at 3 (speculating that the lack of empirical work on contracts in the strategy or management literature “may be due in part to the heavy emphasis in the management literature on the role of trust in interorganizational relationships, which follows from Macaulay’s (1963) classic work on noncontractual relations in business, and the corresponding skepticism about the importance of business contracts in governing interorganizational relationships”).

Mark Suchman recently outlined a “multipronged artifactualist research agenda” that would emphasize the “serious scholarly consideration of contracts as *things*.” Suchman, *supra* note 1, at 91. His “contract-as-artifact” approach “would ask what we might learn about social structure and exchange relations if we were to think of these documents as significant social artifacts in their own right.” *Id.* at 96.

⁶⁶ BOLTON & DEWATRIPOINT, *supra* note 4, at 461-62 (2005). Of course, agreements of this sort need not be “contracts” at all in a legal sense. See RESTATEMENT (SECOND) OF CONTRACTS § 1 (1981) (“A

relationship that is more complex than the simple exchange of goods or services of neoclassical economics. In simplest terms, agency theory highlights problems that arise in relationships between economic principals and economic agents.⁶⁷

Legal scholars tend to associate agency theory with the concept of “agency costs” as described in the oft-cited article by Jensen and Meckling,⁶⁸ but the heavy lifting of formalizing agency theory was performed by Bengt Holmström, Paul Milgrom, and Jean Tirole.⁶⁹ Generally speaking, agency theory focuses on the incentives of agents to act in ways that maximize the value of their contractual relationships. Under this view, the role of contracts is to adjust the agent’s incentives,⁷⁰ usually by structuring compensation to vary within a range of potential outcomes or by creating myriad “monitoring” or “bonding” mechanisms to ensure the fidelity and effort of an agent. The primary obstacle to this incentive structuring is the potential for “moral hazard”⁷¹ – the risk that agents will underinvest time, energy, or assets (“shirking”) or that an agent will

contract is a promise or a set of promises for the breach of which the law gives a remedy, or the performance of which the law in some way recognizes as a duty”). Economists typically use the term “formal contracts” when they wish to impart the notion of legal enforceability. *See, e.g.,* George P. Baker et al., *Relational Contracts and the Theory of the Firm*, 117 Q. J. ECON. 39, (2002) (distinguishing relational contracting from “formal contracting (i.e., contracting enforced by a third party, such as a court)”). Lawyers and legal scholars typically use the term “formal contract” to denote written, fully integrated contracts. *See, e.g.,* Alan Schwartz & Robert E. Scott, *Precontractual Liability and Preliminary Agreements*, 120 HARV. L. REV. 661, 703 (2007). “Informal contracts,” by contrast, are incomplete agreements, but they are still enforceable. Otherwise, they would not be “contracts.” This distinction between formal and informal contracts in legal discourse traces back at least to Williston. *See* Movsesian, *supra* note 27, at 263.

Four forces encourage relational exchange: reputation, continuity, trust, and history. Though economists often emphasize the calculative motives for action (reputation and continuity), the other forces (trust and history) are seen by sociologists as more important. *See* Stephen J. Carson et al., *Uncertainty, Opportunism, and Governance: The Effects Of Volatility and Ambiguity on Formal and Relational Contracting*, 49 ACAD. MGMT. J. 1058, 1060 (2006).

⁶⁷ Robert Gibbons calls incentive theory an “accidental theory of the firm” because “[i]nstead of focusing on the make-or-buy problem that motivated [incomplete contract theory], this work focuses on an incentive problem between a principal and an agent.” Gibbons, *supra* note 6, at 9.

⁶⁸ Michael Jensen & William Meckling, *Theory of the Firm: Managerial Behavior, Agency Costs, and Capital Structure*, 3 J. FIN. ECON. 305 (1976).

⁶⁹ Bengt Holmstrom, *The Firm as Subeconomy*, 15 J.L. Econ. & Org. 74 (1999); Bengt Holmstrom & Paul Milgrom, *The Firm as an Incentive System*, 84 AM. ECON. REV. 972 (1994); Bengt Holmstrom & Paul Milgrom, *Multitask Principal-Agent Analyses: Incentive Contracts, Asset Ownership, and Job Design*, 7 J.L. ECON. & ORG. 24 (1991); Bengt Holmstrom & Jean Tirole, *Transfer Pricing and Organizational Form*, 7 J.L. ECON. & ORG. 201 (1991).

⁷⁰ Benito Arruñada et al., *Contractual Allocation of Decision Rights and Incentives: The Case of Automobile Distribution*, 17 J. L. ECON. & ORG. 257, 260 (2001) (“the main role of the contract is to articulate mechanisms to ensure that the [agent’s] choices are more consistent with the maximization of the entire network value”).

⁷¹ Bengt Holmström, *Moral Hazard in Teams*, 13 Bell J. Econ. 324 (1982). For early work on moral hazard, see Kenneth J. Arrow, *Uncertainty and the Welfare Economics of Medical Care*, 53 AM. ECON. REV. 941 (1963); Michael Spence & Richard Zeckhauser, *Insurance, Information and Individual Action*, 61 AM. ECON. REV. 380 (1971).

appropriate assets belonging to the principal.⁷² Stated another way, moral hazard “suggests that people cannot be counted on to do what they say they are going to do.”⁷³

Moral hazard is one of two fundamental problems facing principals who act through agents, the other being “adverse selection.” Adverse selection occurs when the principal chooses an agent who is not capable of performing up to the principal’s standards.⁷⁴ The notion is that principals make this sort of mistake because some attribute of an agent is unobservable to the principal.⁷⁵ As a result, adverse selection is sometimes characterized as an information problem, while moral hazard is cast as an incentive problem.⁷⁶ This is slightly misleading, of course, because moral hazard is also an information problem that arises because the agent’s actions are unobservable to the principal. The most important point for present purposes, however, is that adverse selection is best addressed through *ex ante* measures – screening by the prospective principal or signaling by the prospective agent⁷⁷ – whereas moral hazard is best addressed through *ex post* incentive alignment. Each of these functions may be performed by contracts.

Empirical work on agency theory is extensive and includes some studies of actual contracts. Marcel Kahan and David Yermack’s study of covenants and convertibility in debt securities nicely illustrates the use of agency theory in an empirical study of contracts.⁷⁸ Kahan and Yermack assemble a dataset of 64 convertible and 128 straight public bond issues from 1993 and 1994 and observe: “all types of covenants are almost invariably omitted from convertible debt contracts, although they are included in a large majority of straight debt issues of similar credit quality.”⁷⁹

In attempting to elucidate this contracting pattern, Kahan and Yermack turn to Jensen and Meckling, who explain why firms that use debt as part of the capital structure might pursue higher-risk investment strategies than firms that are financed completely with equity. According to Jensen and Meckling, an equity-holder may be able to increase his expected return at the expense of bondholders “by promising to take [a] low variance

⁷² See, e.g., James A. Brickley, *Incentive Conflicts and Contractual Restraints: Evidence From Franchising*, 42 J. L. ECON. 745 (1999) (analyzing the underinvestment incentive in franchising).

⁷³ Armen A. Alchian & Susan Woodward, *The Firm is Dead, Long Live the Firm: A Review of Oliver E. Williamson’s The Economic Institutions of Capitalism*, 26 J. ECON. LIT. 65, 68 (1988).

⁷⁴ Gordon Smith has characterized this as a problem of “incompetence.” See D. Gordon Smith, *Corporate Governance and Managerial Incompetence: Lessons From Kmart*, 74 N.C. L. REV. 1037, 1041-42 (1996); D. Gordon Smith, *Venture Capital Contracting in the Information Age*, 2 J. SMALL & EMERGING BUS. L. 133, 137-38 (1998).

⁷⁵ See George A. Akerlof, *The Market for “Lemons”: Quality Uncertainty and the Market Mechanism*, 84 Q.J. ECON. 488 (1970).

⁷⁶ Bolton and Dewatripoint refer to adverse selection as a problem of “hidden information” and moral hazard as a problem of “hidden action.” BOLTON & DEWATRIPOINT, *supra* note 4, at 15.

⁷⁷ See BOLTON & DEWATRIPOINT, *supra* note 4, at 47-127 (discussing the economics of adverse selection).

⁷⁸ Marcel Kahan & David Yermack, *Investment Opportunities and the Design of Debt Securities*, 14 J. L. ECON. ORG. 136 (1998).

⁷⁹ *Id.* at 136.

project, selling bonds and then taking [a] high variance project he can transfer wealth from the (naïve) bondholders to himself as equity holder.”⁸⁰

Of course, most bondholders are not naïve, and they take steps to prevent equity-holders from redistributing wealth in this way. For example, Jensen and Meckling suggest that bondholders might simply adjust the valuation of the firm downward at the time of investment, thus imposing on the equity-holders any costs associated with the possibility that they might later increase the riskiness of the firm’s investment strategy. The difference in value between a firm that is financed completely with equity and a firm that includes debt financing is the “agency cost” of issuing debt.⁸¹

Equity-holders bear the burden of agency costs and have a strong incentive to mitigate those costs. Equity-holders might reduce the agency cost of issuing debt by agreeing to cabin their discretion through covenants, such as a covenant limiting the incurrence of additional indebtedness or a covenant requiring the firm to maintain of a specified level of working capital. Writing and enforcing such covenants may be costly, but as long as the covenants produce benefits (in the form of increased firm valuation) exceeding the costs, equity-holders have an incentive to include such covenants in debt contracts.

Jensen and Meckling also discussed, but did not formally model, convertibility as a means of reducing agency costs.⁸² Other financial economists later explored this issue,⁸³ allowing Kahan and Yermack to assert with confidence, “Making bonds convertible into equity at the debt-holder’s option represents another method for reducing the agency costs of debt.”⁸⁴ Borrowing these insights from financial economics and combining them with the observation that “covenants are almost invariably omitted from convertible debt contracts,” Kahan and Yermack were able to suggest a new rationale for convertibility: “the avoidance of restrictive covenants in situations when they are expected to be costly.”⁸⁵

For present purposes, the most interesting feature of Kahan and Yermack’s study – as well as the other studies in the sample that rely on agency theory⁸⁶ – is the attempt to show that some aspect of contract design is motivated by the desire to reduce agency

⁸⁰ Jensen & Meckling, *supra* note 68, at 335.

⁸¹ *Id.* at 337.

⁸² *Id.* at 353

⁸³ See Richard C. Green, *Investment Incentives, Debt, and Warrants*, 13 J. FIN. ECON. 115 (1984); Robert A. Haugen & Lemma W. Senbet, *Resolving the Agency Problems of External Capital Through Options*, 36 J. FIN. 629 (1981); Teresa A. John & Kose John, *Top-Management Compensation and Capital Structure*, 48 J. FIN. 949 (1993).

⁸⁴ Kahan and Yermack, *supra* note 78, at 138.

⁸⁵ *Id.* at 137.

⁸⁶ See, e.g., Brickley, *supra* note 72; Darlene C. Chisholm, *Profit-Sharing Versus Fixed-Payment Contracts: Evidence from the Motion Pictures Industry*, 13 J. L. ECON. & ORG. 169 (1997); Kenneth Lehn & Annette Poulsen, *Contractual Resolution of Bondholder-Stockholder Conflict in Leveraged Buyouts*, 34 J. L. ECON. 645 (1991).

costs. Agency costs travel under myriad aliases, including “transaction costs,”⁸⁷ and economists distinguish between these costs and the “frictional costs that are associated only with production (*e.g.*, transportation costs).”⁸⁸ In simplest terms, agency costs are costs incurred in an attempt to exploit or prevent exploitation of incomplete information.⁸⁹ So understood, agency costs are not “simply ordinary costs that enter the cost function like all others.”⁹⁰ Instead, agency costs are the costs associated with moral hazard and opportunism. Agency theory and incomplete contract theory, discussed in the next section, are united by their placement of these costs at the center of their respective accounts of contractual relationships.

D. Incomplete Contract Theory

Though Macaulay and Macneil have been persistent critics of economic analysis of contracts,⁹¹ they may have played an important role in the development of economic theory. In the mid-1970s, economist Oliver Williamson noticed Ian Macneil’s work on relational contracts, which Williamson described as “much more expansive, nuanced, and interdisciplinary (mainly combining law and sociology) than any I had seen previously.”⁹² Williamson had been thinking about “markets and hierarchies”⁹³ – terms

⁸⁷ See Douglas Allen, *What are Transaction Costs?*, 14 RESEARCH L. & ECON. 1, 4 (1991). Allen defines “transaction costs” as follows:

Transaction costs are the resources used to establish and maintain property rights. They include the resources used to protect and capture (appropriate without permission) property rights, plus any deadweight costs that result from any potential or real protecting or capturing.

Id. at 3.

⁸⁸ *Id.*

⁸⁹ Allen claims that transaction costs, so defined, arise in three situations: (1) “coerced exchanges – better known as theft”; (2) expenditures designed to deter theft (“locks, guard dogs, and hand guns”) or commit theft (“picks, mace, and more hand guns”), as well as “efforts to prevent or take advantage of appropriable rents”; and (3) “effort to capture the wealth of others and to prevent one’s own wealth from being taken,” which effort is present in every voluntary exchange. *Id.* at 4.

⁹⁰ *Id.* at 12. For this reason, Allen asserts, “Associating transaction costs with taxes is just plain wrong.” *Id.* at 12.

⁹¹ See, *e.g.*, MACNEIL, THE NEW SOCIAL CONTRACT, *supra* note 12, at xii-xiii (observing that the “aged hoariness” of relational contract “is merely obscured by the temporary brilliance of its mutated cousins, the contract of classical and neoclassical economics and the classical contract law of Pothier, Langdell, Pollock, Holmes, and Williston”); Stewart Macaulay, *Contracts, New Legal Realism, and Improving the Navigation of the Yellow Submarine*, 80 TUL. L. REV. 1161, 1177 (2006) (referring disparagingly to the “cave of high-powered methods and statistics”); Ian R. Macneil, *Economic Analysis of Contractual Relations: Its Shortfalls and the Need for a “Rich Classificatory Apparatus”*, 75 NW. U. L. REV. 1018 (1981).

⁹² OLIVER WILLIAMSON, MECHANISMS OF GOVERNANCE 355 (1996) (referring to Macneil’s treatment of contracts in his article *The Many Futures of Contracts*, 47 S. CAL. L. REV. 691 (1974)).

⁹³ Oliver Williamson, *Hierarchical Control and Optimum Firm Size*, 75 J. POL. ECON. 123 (1967); Oliver Williamson, *The Vertical Integration of Production: Market Failure Considerations*, 61 AM. ECON. REV. 112 (1971); Oliver Williamson, *Markets and Hierarchies: Some Elementary Considerations*, 63 AM. ECON. REV. 316 (1973).

that roughly parallel Macneil's spectrum of discrete and relational contracts⁹⁴ – and over the course of a decade or so, along with Benjamin Klein⁹⁵ and others, Williamson embraced relational contract theory and laid the foundations of transaction cost economics (“TCE”) through informal theoretical arguments.⁹⁶

That relational contract theory would appeal to Williamson is not at all surprising. Just as Macneil was attempting to break away from classical and neoclassical contract law, Williamson was attempting to break away from neoclassical economics. For inspiration, Williamson turned to Ronald Coase's famous question: “Why is there any organization?”⁹⁷ Answers to that question are described as “theories of the firm,” though they might more accurately be cast as “theories of relational contracting.”⁹⁸ In this section, we couple TCE with the property rights theory of the firm, developed formally by Sanford Grossman, Oliver Hart, and John Moore,⁹⁹ and refer to these two theories together as “incomplete contract theory.”¹⁰⁰ While TCE and the property rights theory are meaningfully different,¹⁰¹ they both depend on the notion that contracts are inevitably incomplete, and they both depend on *control rights* to mitigate *ex post* opportunism.¹⁰²

⁹⁴ Ian R. Macneil, *Contracts: Adjustment of Long-Term Economic Relations Under Classical, Neoclassical, and Relational Contract Law*, 72 NW. U. L. REV. 854, 862-65 (1978).

⁹⁵ See, e.g., Benjamin Klein et al., *Vertical Integration, Appropriable Rents, and the Competitive Contracting Process*, 21 J.L. & ECON. 297, 308-10 (1978); Benjamin Klein, *Transaction Cost Determinants of ‘Unfair’ Contractual Arrangements*, 70 AM. ECON. REV. 356 (1980); Benjamin Klein & Keith B. Leffler, *The Role of Market Forces in Assuring Contractual Performance*, 89 J. POL. ECON. 615 (1981); and Benjamin Klein, *Contracting Costs and Residual Claims: The Separation of Ownership and Control*, 26 J.L. & ECON. 367, 367-68 (1983). Klein has applied TCE in several specific contractual relationships. See, e.g., Roy W. Kenney & Benjamin Klein, *The Economics of Block Booking*, 26 J.L. & ECON. 497 (1983); Benjamin Klein & Lester Saft, *The Law and Economics of Franchise Tying Contracts*, 28 J.L. & ECON. 345 (1985).

⁹⁶ Despite his sympathy for Macneil's work, Williamson has been criticized for producing an “undersocialized” view of transactions. See Granovetter, *supra* note 60, at 495-99.

⁹⁷ Ronald H. Coase, *The Nature of the Firm*, 4 ECONOMICA 386 (1937), reprinted in R.H. COASE, *THE FIRM, THE MARKET, AND THE LAW* 33, 36 (1988).

⁹⁸ See, e.g., Ronald H. Coase, “The Nature of the Firm: Meaning,” in OLIVER E. WILLIAMSON & SIDNEY G. WINTER EDS., *THE NATURE OF THE FIRM: ORIGINS, EVOLUTION, AND DEVELOPMENT* 48, 56 (1991) (“A number of economists have said in recent years that the problem of the firm is essentially a choice of contractual arrangements. I have never thought otherwise.”).

⁹⁹ See Sanford J. Grossman & Oliver D. Hart, *The Costs and Benefits of Ownership: A Theory of Vertical and Lateral Integration*, 94 J. POL. ECON. 691 (1986); Oliver Hart & John Moore, *Incomplete Contracts and Renegotiation*, 56 ECONOMETRICA 755 (1988); Oliver Hart & John Moore, *Property Rights and the Nature of the Firm*, 98 J. POL. ECON. 1119 (1990).

¹⁰⁰ In this regard, we follow the lead of Patrick Bolton and Mathias Dewatripoint. See BOLTON & DEWATRIPOINT, *supra* note 4, at 490-91.

¹⁰¹ Robert Gibbons describes the property rights theory as the “inverse” of TCE: “where [TCE] envisions socially destructive haggling *ex post*, the property-rights theory assumes efficient bargaining, and where [TCE] is consistent with contractible specific investments *ex ante*, the property-rights theory requires non-contractible specific investments.” Gibbons, *supra* note 6, at 7.

¹⁰² See BOLTON & DEWATRIPOINT, *supra* note 4, at 491 (under TCE, “[t]he need for a long-term contract ... arises as a way of protecting the buyer's *ex ante* investment against *ex post* ‘opportunism’ by

In their excellent synthesis of economic theories of contract, Bolton and Dewatripoint refer to incomplete contract theory as “both a substantive and methodological break” from agency theory.¹⁰³ Where agency theory focuses on fitting compensation to particular outcomes, incomplete contract theory focuses on decision making procedures and institutional design. This shift in focus is necessitated by the assumption that all contracts are incomplete in the sense that they do not specify the obligations of the contracting parties in every possible future state of the world.¹⁰⁴ The source of incompleteness is “bounded rationality,”¹⁰⁵ a somewhat malleable term that includes an inability to negotiate future plans because parties “have to find a common language to describe states of the world and actions with respect to which prior experience may not provide much of a guide.”¹⁰⁶ Thus, bounded rationality might include an inability to write contracts in such a way that they can be enforced by a third party.¹⁰⁷

Under incomplete contract theory the most important implication of incomplete contracting is the potential for “holdup.”¹⁰⁸ Holdup occurs when one contracting party

the seller”); *id.* at 499 (according to the property rights theory, “the owner of a firm has the right ... to exclude others from using the firm’s assets[, which] serves as a protection against *ex post* opportunism”).

¹⁰³ *Id.* at 489. Cf. OLIVER E. WILLIAMSON, *THE MECHANISMS OF GOVERNANCE* 171 (1996) (observing that incentive theory and transaction-cost economics are “mainly complementary”).

¹⁰⁴ See Herbert A. Simon, *A Formal Theory of the Employment Relationship*, 19 *ECONOMETRICA* 293 (1951).

¹⁰⁵ See generally Herbert A. Simon, *Rationality as Process and as Product of Thought*, 68 *AM. ECON. REV.* 1 (1978); Herbert A. Simon, *Theories of Decision-Making in Economics and Behavioral Science*, 49 *AM. ECON. REV.* 253 (1959); Herbert A. Simon, *A Behavioral Model of Rational Choice*, 69 *Q.J. ECON.* 99 (1955).

¹⁰⁶ OLIVER HART, *FIRMS, CONTRACTS & FINANCIAL STRUCTURE* 23 (1995). The degree to which contracts are incomplete is not completely foreordained, but depends in part on the tradeoff between the anticipated hazards of *ex post* opportunism and the costs of *ex ante* design. See Keith J. Crocker & Kenneth J. Reynolds, *The Efficiency of Incomplete Contracts: An Empirical Analysis of Air Force Engine Procurement*, 24 *RAND J. ECON.* 126, 127 (1993):

Were contracting costless, it would be possible in principle to design arrangements complete enough to circumscribe all surplus-eroding redistributive tactics and intricate enough to mitigate investment distortions. In practice, however, the costs of identifying contingencies and devising responses increase rapidly in complex or uncertain environments, placing economic limits on the ability of agents to draft and implement elaborate contractual agreements. When designing a contract, the parties may mitigate *ex post* opportunism and investment distortions by the use of more complete agreements, but at the cost of increased resources dedicated to crafting the document *a priori*. As a consequence, environmental characteristics that generate increased contracting costs should result in efficient contracts being less complete, whereas conditions that exacerbate the potential for *ex post* inefficiencies should lead to more exhaustive agreements.

¹⁰⁷ HART, *supra* note 106, at 23. More recent work in the field explores the possibility of strategic incompleteness. B. Douglas Bernheim & Michael D. Whinston, *Incomplete Contracts and Strategic Ambiguity*, 88 *AM. ECON. REV.* 902 (1998). This sort of behavior relies on the possibility of contract modification. For a proposal to make certain contracts nonmodifiable, see Christine Jolls, *Contracts as Bilateral Commitments: A New Perspective on Contract Modification*, 26 *J. LEGAL STUD.* 203 (1997).

¹⁰⁸ The literature on holdups is voluminous, and substantial activity revolves around the case of Fisher Body and General Motors, first discussed in Klein et al., *supra* note 95. The subsequent debate over

threatens another with economic harm unless concessions are granted by the threatened party.¹⁰⁹ The potential for holdup exists only within contractual relationships, not in initial contract negotiations, and it results from the investment of relationship-specific assets by one of the parties. Anticipation of holdup is said to motivate the structure of contractual relationships. In particular, the potential for holdup is said to encourage contracting parties to enter into long-term relationships or to vertically integrate.

Scholars often rely on incomplete contract theory to generate testable predictions about contractual relationships. These predications typically are based on the “discriminating alignment hypothesis,” which holds that “transactions, which differ in their attributes, are aligned with governance structures, which differ in their cost and competence, so as to effect a transaction cost economizing result.”¹¹⁰ When motivated by this hypothesis, empirical studies of contracts attempt to identify and measure differences in the underlying transactions and to match those differences with governance structures. These studies address a range of organizational forms, from vertically integrated firms (hierarchy) to contracts between firms (market), as well as hybrid relationships, such as alliances and joint ventures.

Empirical work on incomplete contract theory has blossomed,¹¹¹ and the theory has spawned an extensive literature in the law reviews on appropriate judicial responses to incomplete contracts. Prominent streams within this literature include work on default rules¹¹² and judicial interpretation.¹¹³ The primary concern addressed by this literature is

Fisher Body has been spirited. See Ronald H. Coase, *The Acquisition of Fisher Body by General Motors*, 43 J.L. & ECON. 15 (2000) (no evidence of holdup in relationship between GM and Fisher Body); Robert F. Freeland, *Creating Holdup Through Vertical Integration: Fisher Body Revisited*, 43 J.L. & ECON. 33 (2000) (no evidence of holdup in relationship between GM and Fisher Body until *after* the acquisition); Ramon Casadesus-Masanell & Daniel F. Spulber, *The Fable of Fisher Body*, 43 J.L. & ECON. 67 (2000) (merger of GM and Fisher Body was not motivated by a desire to avoid holdup); and Benjamin Klein, *Fisher-General Motors and the Nature of the Firm*, 43 J.L. & ECON. 105 (2000) (evidence of holdup in relationship between GM and Fisher Body exists and fear of holdup motivated the acquisition). The latest contribution by Ronald Coase to that debate has descended into allegations of professional misconduct. Ronald Coase, *The Conduct of Economics: The Example of Fisher Body General Motors*, 15 J. ECON. & MGMT. STRATEGY 255 (2006) (wondering “what it is about the conduct of economics that led so many able economists to choose error rather than truth”).

¹⁰⁹ The term “holdup” is sometimes used synonymously with “opportunism.” Conrad S. Ciccotello et al., *Research and Development Alliances: Evidence From a Federal Contracts Repository*, 47 J. L. ECON. 123, 127 (2004). Masten et al. suggest the possibility of holdup in the absence of asset specificity. They use the term “temporal specificity” to describe a situation in which “timely performance is critical, [and] delay becomes a potentially effective strategy for exacting price concessions.” Scott E. Masten et al., *The Costs of Organization*, 7 J.L. ECON. & ORG. 1, 9 (1991).

¹¹⁰ WILLIAMSON, *supra* note 92, at 355.

¹¹¹ For an excellent survey, see Jeffrey T. Macher & Barak D. Richman, *Transaction Cost Economics: An Assessment of Empirical Work in the Social Sciences* (working paper 2006). For earlier, but still useful, surveys, see Howard Shelanski & Peter G. Klein, *Empirical Research in Transaction Cost Economics: A Review and Assessment*, 11 J. L. ECON. & ORG. 335 (1995); Paul L. Joskow, *Asset Specificity and the Structure of Vertical Relationships: Empirical Evidence*, 4 J. L. ECON. & ORG. 95 (1988).

¹¹² See, e.g., Ian Ayres & Robert Gertner, *Filling Gaps in Incomplete Contracts: An Economic Theory of Default Rules*, 99 YALE L.J. 87 (1989); Ian Ayres & Robert Gertner, *Strategic Contractual Inefficiency and the Optimal Choice of Legal Rules*, 101 YALE L.J. 729 (1992); Alan Schwartz & Robert E. Scott, *Contract Theory and the Limits of Contract Law*, 113 YALE L.J. 541 (2003).

the risk of *ex post* opportunism.¹¹⁴ As noted above, the central problem that animates agency theory is the risk of moral hazard, which is a form of *ex post* opportunism.¹¹⁵ Though the implications of *ex post* opportunism vary between agency theory and incomplete contract theory, the take-home lesson for present purposes is that under both of these economic theories, the central purpose of contracting is to address the risk of *ex post* opportunism. As we will see in Part II, that fundamental assumption drives almost all empirical studies of contracts.

II. Survey of Empirical Studies of Contracts: 1990-2006

This section surveys empirical studies of contracts from 1990 through 2006. Of course, the empirical study of contracts did not begin in 1990,¹¹⁶ but the purpose of this survey is not to develop a comprehensive account of extant learning on contracts. Instead, we intend merely to reveal the sorts of questions that researchers ask about contracts. Not surprisingly, what we find is that economic theories play a dominant role in framing empirical work on contracts.

¹¹³ See, e.g., Eric A. Posner, *The Parol Evidence Rule, the Plain Meaning Rule, and the Principles of Contractual Interpretation*, 146 U. PA. L. REV. 533 (1998); Richard A. Posner, *The Law and Economics of Contract Interpretation*, 83 TEX. L. REV. 1581 (2005).

¹¹⁴ Juliet P., *Taxonomy for Justifying Legal Intervention in an Imperfect World: What To Do When Parties Have Not Achieved Bargains or Have Drafted Incomplete Contracts*, 2004 WIS. L. REV. 323 (2004) (developing “a model of legal intervention that focuses on structural barriers that make it difficult for parties to solve a key problem of contracting: opportunism”).

¹¹⁵ See MILGROM & ROBERTS, *supra* note 5, at 167 (defining moral hazard as a “form of post-contractual opportunism that arises because actions that have efficiency consequences are not freely observable and so the person taking them may choose to pursue his or her private interests at others’ expense”). Many economists use the terms as synonyms. See, e.g., Arruñada et al., *supra* note 70, at 258 (2001). Cf. WILLIAMSON, *supra* note 5, at 101 (“Not only are the failures to self-disclose true attributes *ex ante* (adverse selection) and true performance *ex post* (moral hazard) both subsumed under opportunism, but the failure to tell the truth, the whole truth and nothing but the truth is implicated by opportunism.”).

¹¹⁶ Empirical studies of contracts prior to 1990 include Paul L. Joskow, *Price Adjustments in Long-Term Contracts: The Case of Coal*, 31 J. L. ECON. 47 (1988); Victor P. Goldberg & John R. Erickson, *Quantity and Price Adjustment in Long-Term Contracts: A Case Study of Petroleum Coke*, 30 J. L. ECON. 369 (1987); Paul L. Joskow, *Contract Duration and Relationship-Specific Investment: Empirical Evidence From the Coal Market*, 77 AM. ECON. REV. 168 (1987); Paul L. Joskow, *Vertical Integration and Long-term Contracts: The Case of Coal*, 1 J. L. ECON. & ORG. 33 (1985); R. Glenn Hubbard & Robert J. Weiner, *Regulation and Long-Term Contracting in U.S. Natural Gas Markets*, 35 J. IND. ECON. 71 (1986); J. Harold Mulherin, *Complexity in Long-term Contracts: An Analysis of Natural Gas Contract Provisions*, 2 J. L. ECON. & ORG. 105 (1986); James M. Acheson, *The Maine Lobster Market: Between Market and Hierarchy*, 1 J. L. ECON. & ORG. 385 (1985); Scott E. Masten & Keith J. Crocker, *Efficient Adaptation in Long-Term Contracts: Take or Buy Provisions for Natural Gas*, 75 AM. ECON. REV. 1083 (1985); Thomas M. Palay, *Avoiding Regulatory Constraints: Contracting Safeguards and the Role of Informal Agreements*, 1 J. L. ECON. & ORG. 155 (1985); Lee J. Alston et al., *Tenancy Choice in a Competitive Framework with Transaction Costs*, 92 J. POL. ECON. 1121 (1984); Thomas M. Palay, *Comparative Institutional Economics: The Governance of Rail Freight Contracting*, 13 J. LEG. STUD. 265 (1984); James Wilson, *Adaptation to Uncertainty and Small Number Exchange: The New England Fresh Fish Market*, 11 BELL J. ECON. 491 (1980).

For purposes of this survey, our conception of “empirical studies” is artificially narrow. We include only studies that use actual contracts as a primary data source. We omit studies of contracts that are based exclusively on surveys,¹¹⁷ interviews, press releases or newspaper accounts,¹¹⁸ industry publications,¹¹⁹ government data, experimental methods, and the like.¹²⁰ We also exclude articles – found frequently in law journals – in which the authors used stylized contract terms,¹²¹ illustrative contracts,¹²² or contracts in judicial opinions.¹²³ Instead, we limit our survey to studies of actual contracts, including case studies.¹²⁴ Thus, studies that focus on the external effects of forming certain contractual relationships, rather than on the contracts themselves, are excluded.¹²⁵ Dispute resolution in various contractual settings is a popular topic of study,

¹¹⁷ See, e.g., Thomas N. Hubbard, *Contractual Form and Market Thickness in Trucking*, 32 RAND J. ECON. 369 (2001); Loren Brandt & Arthur J. Hosios, *Credit, Incentives, and Reputation: A Hedonic Analysis of Contractual Wage Profiles*, 104 J. POL. ECON. 1172 (1996); Stefano Della Vigna & Ulrike Malmendier, *Contract Design and Self-Control: Theory and Evidence*, 119 QUAR. J. ECON. 353 (1992); Xueguang Zhou et al. *Embeddedness and Contractual Relationships in China's Transitional Economy*, 68 AM. SOC. REV. 75 (2003); Yadong Luo, *Contract, cooperation, and performance in international joint ventures*, 23 STRAT. MGMT. J. 903 (2002); Shannon W. Anderson and Henri C. Dekker, *Management Control for Market Transactions: The Relation Between Transaction Characteristics, Incomplete Contract Design, and Subsequent Performance*, 51 MGMT. SCI. 12 (2005).

¹¹⁸ See, e.g., Dovev Lavie & Lori Rosenkopf, *Balancing Exploration and Exploitation in Alliance Formation*, 49 ACAD. MGMT. J. 797 (2006).

¹¹⁹ See, e.g., Ranjay Gulati, *Does Familiarity Breed Trust? The Implications for Repeated Ties for Contractual Choice in Alliances*, 38 ACAD. MGMT. J. 85 (1995).

¹²⁰ As a result of our decision to restrict our survey to studies of actual contracts, we excluded many worthy studies of contracts, including two of Francine Lafontaine excellent studies of franchising. See Francine Lafontaine, *Contractual Arrangements as Signaling Devices: Evidence from Franchising*, 9 J. L. ECON. & ORG. 256 (1993); Francine Lafontaine & Kathryn L. Shaw, *The Dynamics of Franchise Contracting: Evidence from Panel Data*, 107 J. POL. ECON. 1041 (1999). In both instances, the data were drawn primarily from *Entrepreneur* magazine's “Annual Franchise 500” survey. We wish to emphasize that our decision to exclude these studies, and many others, was not based on reservations about the quality of the data, but rather our attempt to limit the survey in a way that best accomplished our limited purpose.

¹²¹ See, e.g., Jesse M. Fried & Mira Ganor, *Agency Costs Of Venture Capitalist Control In Startups*, 81 N.Y.U. L. REV. 967 (2006); Avery Wiener Katz, *The Option Element in Contracting*, 90 VA. L. REV. 2187 (2004); Mark P. Gergen, *The Use of Open Terms in Contract*, 92 COLUM. L. REV. 997 (1992).

¹²² See, e.g., Alan Schwartz, *The Myth That Promisees Prefer Supercompensatory Remedies: An Analysis of Contracting for Damage Measures*, 100 YALE L. J. 369, 406 (1990).

¹²³ See, e.g., Smith, *Independent Legal Significance*, *supra* note 1; Robert E. Scott, *A Theory Of Self-Enforcing Indefinite Agreements*, 103 COLUM. L. REV. 1641, 1652-61 (2003); Judith L. Maute, *Peevyhouse V. Garland Coal & Mining Co. Revisited: The Ballad Of Willie And Lucille*, 89 NW. U. L. REV. 1341 (1995); Mark P. Gergen, *Liability for Mistake in Contract Formation*, 64 S. CAL. L. REV. 1 (1990); Joseph F. Brodley & Ching-to Albert Ma, *Contract Penalties, Monopolizing Strategies, And Antitrust Policy*, 45 STAN. L. REV. 1161 (1993).

¹²⁴ See, e.g., Joseph C. Mullin & Wallace P. Mullin, *United States Steel's Acquisition of the Great Northern Ore Properties: Vertical Foreclosure or Efficient Contractual Governance?*, 13 J.L. ECON. & ORG. 74 (1997); Fleischer, *supra* note 129.

¹²⁵ See, e.g., Gustavo E. Bamberger et al., *An Empirical Investigation of the Competitive Effects of Domestic Airline Alliances*, 47 J. L. ECON. 195 (2004); Allen N. Berger & Gregory F. Udell, *Some Evidence on the Empirical Significance of Credit Rationing*, 100 J. POL. ECON. 1047 (1992); David Card,

but articles in this genre generally are excluded from this survey on the ground that the researchers are focusing on legal process rather than on the content of contracts.¹²⁶

We do not deny that data sources other than actual contracts are important for the empirical study of contractual relationships,¹²⁷ especially given the difficulties that researchers often encounter in gaining access to private agreements. Nevertheless, we believe that our narrower conception of relevant empirical work is justified, given our modest goal for this survey.

In conducting this survey, we reviewed 40 top journals in six disciplines or sub-disciplines: economics, financial economics, law and economics, strategy and management, sociology, and law. A list of the journals appears as Appendix I. Our review covered all articles published in the selected journals from 1990 through 2006.¹²⁸ Many of the journals did not publish even one qualifying article. If more scholars studied contracts empirically, we would have focused on a narrower range of years. At it stands, we located 52 empirical studies of contracts, which are listed in Appendix II.

Most of the empirical studies in the survey were conducted by economists or scholars who have embraced economic analysis of contracts. Lawyers draft contracts, but our survey shows that law professors rarely attempt to study contracts.¹²⁹ Of the 52 articles identified for the survey, 48 asked questions motivated by one or more of the economic theories discussed in Part I.¹³⁰ Parsing the economically oriented articles, we

Unexpected Inflation, Real Wages, and Employment Determination in Union Contracts, 80 AM. ECON. REV. 669 (1990).

¹²⁶ See, e.g., Amy Farmer, *The Causes of Bargaining Failure: Evidence From Major League Baseball*, 47 J. L. ECON. 543 (2004).

¹²⁷ See Macher & Richman, *supra* note 111, at 9-10.

¹²⁸ We did not include student comments and notes in law reviews in our survey.

¹²⁹ The survey of empirical studies contained in Part II of this Article shows that among the 20 law reviews, only five empirical studies of contracts have been published since 1990. Three of these studies appeared in the *Stanford Law Review*. The law review articles identified in the survey are the following: Lucian Arye Bebchuk et al., *The Powerful Antitakeover Force of Staggered Boards: Theory, Evidence and Policy*, 54 STAN. L. REV. 887 (2002); Victor Fleischer, *Brand New Deal: The Google IPO And The Branding Effect Of Corporate Deal Structures*, 104 MICH. L. REV. 1581 (2006); Gillian K. Hadfield, *Problematic Relations: Franchising and the Law Of Incomplete Contracts*, 42 STAN. L. REV. 927 (1990); Hugh T. Scogin, Jr., *Between Heaven and Man: Contract and the State in Han Dynasty China*, 63 S. CAL. L. REV. 1325 (1990); D. Gordon Smith, *The Exit Structure of Venture Capital*, 53 UCLA L. REV. 315 (2005). Several law professors have published empirical studies of contracts in law and economics journals. See, e.g., Robert Daines & Michael Klausner, *Do IPO Charters Maximize Firm Value? Antitakeover Protection in IPOs*, 17 J. L. ECON. & ORG. 83 (2001); Marcel Kahan & David Yermack, *Investment Opportunities and the Design of Debt Securities*, 14 J. L. Econ. Org. 136 (1998).

¹³⁰ Some of these articles argue against the economic theories. For example, Casadesus-Masanell and Spulber contend that the purpose of GM's acquisition of Fisher Body was "to assure GM adequate supplies of auto bodies, to synchronize the two companies' operations, and to provide GM with access to the executive talents of the Fisher brothers," not to combat opportunism. Casadesus-Masanell & Spulber, *supra* note 108. Also, Andrew Hanssen challenged the transaction-cost explanation for block-booking of motion pictures, which appears in Roy W. Kenney & Benjamin Klein, *The Economics of Block Booking*, 26 J. L. ECON. 497 (1983). See F. Andrew Hanssen, *The Block Booking of Films Reexamined*, 43 J. L. ECON. 395 (2000). For a response by Kenney and Klein, see Roy W. Kenney & Benjamin Klein, *How Block Booking Facilitated Self-Enforcing Film Contracts*, 43 J. L. ECON. 427 (2000).

found that 31 relied primarily on incomplete contract theory,¹³¹ 12 relied primarily on agency theory,¹³² and five relied substantially on both economic theories.¹³³ Of the four articles that did not rely on either of the economic theories, three were published in law reviews,¹³⁴ and one was published in a sociology journal.¹³⁵

Some of the articles in the survey focus on one type of provision and attempt to show that the selected provision is consistent with the predictions of the economic models.¹³⁶ Other studies compare the efficacy of contracts with other mechanisms for mitigating opportunism¹³⁷ or assess the efficacy of different contract provisions.¹³⁸

¹³¹ We evaluated each article qualitatively to determine the motivating theory. In addition, we examined citations to prominent theorists. With respect to the 31 articles relying primarily on incomplete contract theory, 28 cited at least one of Oliver Williamson's works on transaction cost economics and 26 cited Benjamin Klein. Of the three articles that did not cite Williamson, two cited Klein, and one cited Oliver Hart, who garnered only 13 citations among the 31 articles.

¹³² With respect to the 12 articles relying primarily on incentive theory, seven cited the influential work of Bengt Holmström, and only four cited the well-known article by Jensen & Meckling.

¹³³ See Paul Gompers & Josh Lerner, *The Use of Covenants: An Empirical Analysis of Venture Partnership Agreements*, 39 J. L. ECON. 463 (1996); Arruñada et al., *supra* note 70; Pierre Azoulay & Scott Shane, *Entrepreneurs, Contracts, and the Failure of Young Firms*, 47 MGMT. SCI. 337 (2001); Chong-En Bai et al., *Revenue Sharing and Control Rights in Team Production: Theories and Evidence from Joint Ventures*, 35 RAND J. ECON. 277 (2004); J. Harold Mulherin et al., *Prices are Property: The Organization of Financial Exchanges From the Transaction Cost Perspective*, 34 J. L. ECON. 591 (1991).

¹³⁴ Bebchuk et al., *supra* note 129; Fleischer, *supra* note 129; Scogin, *supra* note 129.

¹³⁵ John F. Padgett & Paul D. MacLean. *Organizational Invention and Elite Transformation: The Birth of Partnership Systems in Renaissance Florence*, 111 AM. J. SOC. 1463 (2006). This article and Scogin, *supra* note 129, are historical pieces motivated largely by description.

¹³⁶ See, e.g., Keith B. Leffler & Randal R. Rucker, *Transaction Costs and the Efficient Organization of Production: A Study of Timber-Harvesting Contracts*, 99 J. POL. ECON. 1060 (1991) (explaining the choice between lump-sum and per-unit payment provisions in private timber-harvesting contracts); Thomas P. Lyon & Steven C. Hackett, *Bottlenecks and Governance Structures: Open Access and Long-Term Contracts in Natural Gas*, 9 J. L. ECON. & ORG. 380 (1993) (arguing that open access requirements in the natural gas industry have reduced the threat of pipeline opportunism); Azoulay & Shane, *supra* note 133 (showing that new franchise chains that grant exclusive territories to franchisees are more likely to survive than chains that do not grant exclusive territories); Chisholm, *supra* note 86 (demonstrating that share contracts are positively correlated with contract length, actor's experience, revenue-generating ability, and prior collaborations, thus "demonstrating that contract choice may be influenced, in part, by disincentive effects arising from moral hazard"); Srikant Datar et al., *Earnouts: The Effects of Adverse Selection and Agency Costs on Acquisition Techniques*, 17 J. L. ECON. & ORG. 201 (2001) (arguing that earnouts alleviate moral hazard in acquisitions, and provide incentives for the target owners after the acquisition).

¹³⁷ See, e.g., Lehn & Poulsen, *supra* note 86 (concluding that bondholders seek protection against the risks associated with leveraged buyouts through explicit contract provisions rather than through convertible bonds or cross ownership of bonds and stocks); Douglas W. Allen & Dean Lueck, *The "Back Forty" on a Handshake: Specific Assets, Reputation, and the Structure of Farmland Contracts*, 8 J. L. ECON. & ORG. 366 (1992) (surmising that relationships with uncomplicated contracts rely on reputation and common law as governance mechanisms); Raji Srinivasan & Thomas H. Brush, *Supplier Performance in Vertical Alliances: The Effects of Self-Enforcing Agreements and Enforceable Contracts*, 17 ORG. SCI. 436 (2006) (contending that "self-enforcing agreements prove more valuable for suppliers than enforceable contracts in pursuing close ties with buyers").

A small number of studies attempt to describe and analyze an entire system of rights allocation.¹³⁹ Generally speaking, however, the studies in the survey appeared less concerned with explaining a particular set of contracts than with extending or refining the underlying economic theories.¹⁴⁰

As evidenced by the foregoing discussion, the economic theories discussed in Part I play a dominant role in framing empirical work on contracts. Nonetheless, we were pleased to find three articles motivated at least in part by the organizational theories discussed in Part III below. Kyle Mayer and Robert Salomon examined 405 service contracts from a single information technology firm in an attempt to show “how the resource-based view can complement the standard TCE approach to governance.”¹⁴¹ Victor Fleischer’s study of “branding effects” in the Google initial public offering (IPO) and other transactions is included in our discussion of identity theory.¹⁴² Finally, Kyle Mayer and Nicholas S Argyres draw on learning theory to inform their case study of a time series of 11 contracts concluded between the same two firms in the personal computer industry.¹⁴³ These examples illustrate the utility of drawing on organizational theories to enhance our understanding of the various functions and purposes of contracts in organizations and markets. Although few in number, the studies point to the potential influence that organizational theory may soon have on the empirical study of contracts. The empirical study of contracts is still a fledgling enterprise, and we hope that these new avenues of research will find an audience among contracts scholars to the same extent that agency theory and incomplete contract theory have done.

¹³⁸ See, e.g., Kyle J. Mayer et al., *Are Supply and Plant Inspections Complements or Substitutes? A Strategic and Operational Assessment of Inspection Practices in Biotechnology*, 50 MGMT. SCI. 1064 (2004) (concluding that supply inspections and plant inspections are sometimes substitutes and sometimes complements); Brickley, *supra* note 72 (finding that certain provisions of franchise agreements are complements).

¹³⁹ See, e.g., Arruñada et al., *supra* note 70; Smith, *Exit Structure*, *supra* note 129; Hadfield, *supra* note 129.

¹⁴⁰ For example, Joanne Oxley’s work on strategic alliances identified an important form of contractual hazard that was new to the transaction-cost literature. See Joanne E. Oxley, *Appropriability Hazards and Governance in Strategic Alliances: A Transaction Cost Approach*, 13 J. L. ECON. & ORG. 387 (1997).

¹⁴¹ Kyle J. Mayer & Robert M. Salomon, *Capabilities, Contractual Hazards, And Governance: Integrating Resource-Based And Transaction Cost Perspectives*, 49 ACAD. MGMT. J. 942, 942 (2006).

¹⁴² Fleischer, *supra* note 129.

¹⁴³ Kyle J. Mayer & Nicholas S Argyres, *Learning to Contract: Evidence from the Personal Computer Industry*, 15 ORG. SCI. 394 (2004). For a more recent paper in which the same authors draw again on learning theory, see Argyres et al., *supra* note 8, at 3.

III. Organizational Perspectives on Contracts

The economic theories discussed in Part I do not purport to provide a comprehensive account of contracts.¹⁴⁴ Most of the empirical studies of contracts surveyed in Part II focus on the incentive structure or governance of contracts, leaving other provisions unexamined. In this Part, we draw on various organizational theories to enrich our understanding of contracts, sometimes supplementing and sometimes challenging the accounts provided by the economic theories.

Why organizational theories? Richard Scott has observed that “organizations are a prominent, if not the dominant, characteristic of modern societies.”¹⁴⁵ Contracts often are created by organizations, and, in turn, each contract creates a new organization. The four theories highlighted here – resource theory, learning theory, identity theory, and institutional theory – represent different views of why organizations do what they do. We believe that contracts often carry the fingerprints of one or more of the processes discussed in these theories.

A. Resources

The resource-based view (RBV) may be the dominant theoretical approach of organizational strategy scholarship, which examines factors that enable firms to secure abnormally high rates of return. RBV scholars assess how organizations use tangible and intangible resources to gain sustained competitive advantages vis-à-vis their rivals.¹⁴⁶ Resources are assumed to be distributed heterogeneously within industries, creating opportunities for firms to differentiate themselves and capture value.¹⁴⁷ As resources

¹⁴⁴ Cf. Mayer & Salomon, *supra* note 141 (“Although contracting hazards have been shown to play a key role in governance . . . , they are not the only factors that stand to influence such decisions. Firm capabilities can also play a role.”).

Many of the studies in our survey suggested that contract choice was a function of both opportunism and other considerations. *See, e.g.*, Chisholm, *supra* note 86 (concluding that share contracts for actors are positively correlated with contract length, actor’s experience, revenue-generating ability, and prior collaborations, thus “demonstrating that contract choice may be influenced, in part, by disincentive effects arising from moral hazard,” but also showing that contract choice also may be affected by liquidity concerns); Paul L. Joskow, *The Performance of Long-Term Contracts: Further Evidence From Coal Contracts*, 21 RAND J. ECON. 251 (1990) (“A major challenge in structuring long-term coal supply contracts involves the specification of price and quantity adjustment provisions that both guard against opportunistic behavior and provide for flexibility to adapt to changing market conditions as the contractual relationship plays itself out over time”); Rachele C. Sampson, *The Cost of Misaligned Governance in R&D Alliances*, 20 J. L. ECON. & ORG. 484 (2004) (“Collaborative benefits are diminished most by selection of governance that imposes excessive bureaucracy rather than governance that allows excessive opportunism hazards”).

¹⁴⁵ W. RICHARD SCOTT, ORGANIZATIONS: RATIONAL, NATURAL, AND OPEN SYSTEMS 3 (5th ed. 2003).

¹⁴⁶ *See, e.g.*, Margaret Peteraf, *The Cornerstones of Competitive Advantage*, 14 STRAT. MGMT. J. 179 (1993); Janice A. Black and Kimberly B. Boal, *Strategic Resources: Traits, Configurations, and Paths to Sustainable Competitive Advantage*, 15 STRAT. MGMT. J. 131 (1994).

¹⁴⁷ Jay Barney, *Firm Resources and Sustained Competitive Advantage*, 17 J. MGMT. 99 (1991).

become more idiosyncratic and inimitable, they become more valuable to a firm and more crucial to the firm's competitive advantage.¹⁴⁸ An important ambition of RBV, therefore, is to identify the mechanisms that inhibit competitors from imitating a firm's resource base and that allow firms to develop competitive advantages.

RBV is different from the economic theories discussed in Part I. While those economic theories treat incentive alignment or governance as the primary motivation for contracts, RBV emphasizes resource use and deployment.¹⁴⁹ In short, under RBV the main function of contracts is to secure resources, thereby allowing the firm to capture future rents.¹⁵⁰ Thus, while incomplete contract theory focuses on the governance attributes of joint ventures and strategic alliances,¹⁵¹ RBV emphasizes their strategic

¹⁴⁸ Barney lists four resource attributes that contribute to competitive advantage: (1) value, "in the sense that it exploits opportunities and/or threats in a firm's environment"; (2) rareness; (3) imperfectly imitable; and (4) nonsubstitutability. *Id.* at 105. Barney suggested three types of resources: physical capital (e.g. plant and equipment), human capital, and organizational capital. The latter kind of capital constitutes resources embedded in firms' routines, leadership structure, or other design-oriented features. With respect to the topic of contracts, organizational capital includes the formal and informal relations formed by firms.

¹⁴⁹ Kathleen R. Conner, *A Historical Comparison of Resource-Based Theory and Five Schools of Thought within Industrial Organization Economics: Do We Have a New Theory of the Firm?* 17 J. MGMT. 121 (1991). Scholars have begun to explore ways in which technological capabilities affect governance, leading Mayer and Salomon to suggest that RBV may "complement the standard transaction cost approach to governance." Mayer & Salomon, *supra* note 141, at 944. They explain:

Although strong technological capabilities certainly lower the cost of internal production, a firm with these capabilities may also, because it understands the technologies relevant to a project, be better able to identify appropriate project suppliers and avoid low-quality subcontractors in a potential "market for lemons" (Akerlof, 1970). The firm can do so because it can better evaluate a partner's skills, judge its readiness to perform the task, assess its ability to accept and receive guidance, and provide such guidance through technology transfer when necessary. Furthermore, strong technological capabilities lower the cost of external governance by enabling more effective monitoring. The firm has a better understanding of what problems to look for when contracting and how much progress to expect from a supplier. In short, firms with technological capabilities can overcome potential information asymmetries when governing suppliers. Strong technological capabilities may even help a firm craft better ex ante contracts to clearly define the roles and responsibilities of each party, specify the knowledge to be exchanged, identify appropriate milestones, stipulate monitoring mechanisms, and introduce appropriate pecuniary incentives. For these reasons, we expect a firm with superior technological capabilities to be able to govern external market exchanges better than a firm without such capabilities.

Id. at 945.

¹⁵⁰ GM's acquisition of Fisher Body is typically portrayed as motivated by the potential for opportunism. *See infra* note 108. Casadesus-Masanell and Spulber take a different tack, however, arguing that the merger was designed "to assure GM adequate supplies of auto bodies, to synchronize the two companies' operations, and to provide GM with access to the executive talents of the Fisher brothers." Casadesus-Masanell & Spulber, *supra* note 108, at 68. This is a nice illustration of RBV.

¹⁵¹ Ranjay Gulati, *Does Familiarity Breed Trust? The Implications of Repeated Ties for Contractual Choice in Alliances*, 38 ACAD. MGMT. J. 85, 85 (1995) ("firms use equity alliances when the transaction costs associated with an exchange are too high to justify a quasi-market, nonequity alliance"); Oxley, *supra* note 140, at 388 ("In choosing among different interfirm alliance types, the logic of transaction cost economics suggests that more 'hierarchical' alliances will be chosen for transactions where contracting hazards are more severe.").

importance. These perspectives are not mutually exclusive, but contracts scholars who relied exclusively on incomplete contract theory would miss important insights about the strategic purpose of contracts. Scholars have identified three isolating mechanisms that make resources inimitable and, therefore, advantageous to the firm: path dependence, causal ambiguity, and property rights.¹⁵² We discuss each of these mechanisms in turn.

The path dependence of competitive advantage implies that a firm has a long experience with a particular set of resources.¹⁵³ Developing new strategic capabilities can be risky. As a result, firms tend to build on existing competencies rather than trying to acquire new competencies.¹⁵⁴ Further, because resources are learned, developed, or acquired over time, rivals find it very difficult to duplicate specific advantages.¹⁵⁵

Firms that seek to build new competencies often acquire them from other firms. Given the risks associated with strategic change, however, firms typically seek to obtain substantial information before committing to new strategic ventures or developing new competencies. Firms may use contracts as a mechanism for acquiring information and experimenting with new capabilities. For example, Kim and Mahoney argue that organizations use joint ventures to search for and assess information about potential long-term relationships with other firms.¹⁵⁶ Joint ventures and strategic alliances are (relatively) low-cost contractual arrangements that facilitate testing for compatibility of resources and exploring of potential synergies. RBV's insight is that firms often design contracts like joint ventures and strategic alliances to experiment creatively with new resource arrangements.

Resources may also be inimitable because of causal ambiguity. In other words, rivals may find it difficult to identify the precise source of a firm's competitive advantage.¹⁵⁷ Rivals may attempt to copy the wrong resources or try to acquire less effective capabilities with the belief that those resources or capabilities lead to the leading

¹⁵² Richard P. Rumelt, "Towards a Strategic Theory of the Firm," in ROBERT B. LAMB ED., *COMPETITIVE STRATEGIC MANAGEMENT* 556 (1984).

¹⁵³ Paul A. David, *Clio and the Economics of QWERTY*, 75 *AMER. ECON. REV.* 332 (1985); Paul A. David, "Path Dependence, Its Critics, and the Quest for 'Historical Economics'," in PIERRE GARROUSTE & STAVROS IOANNIDES, *EVOLUTION AND PATH DEPENDENCE IN ECONOMIC IDEAS: PAST AND PRESENT* (2001). Path dependence implies that a firm's competencies are situated historically in events (sometimes chance events).

¹⁵⁴ The notion that firms should enhance their current competencies is sometimes referred to as exploitation, while searching for new potential competencies is exploration. See, James G. March, *Exploration and Exploitation in Organizational Learning*, 2 *ORG. SCI.* 71 (1991). March argues that firms should seek a balance of exploitation and exploration.

¹⁵⁵ The flip side of this, however, is that firms with competitive advantages may suddenly lose that advantage in a changing environment.

¹⁵⁶ Jongwook Kim & Joseph T. Mahoney, *How Property Rights Economics Furthers the Resource-based View: Resources, Transaction Costs, and Entrepreneurial Discovery*, 1 *INT'L. J. STRAT. CHANGE MGMT.* 40 (2006). See also Massimo G. Colombo, *Alliance Form: A Test of the Contractual and Competence Perspectives*, 24 *Strat. Mgmt. J.* 1209 (2003).

¹⁵⁷ For an economic treatment of firm heterogeneity due to causal ambiguity, see, Steven A. Lippman & Richard P. Rumelt, *Uncertain Imitability: An Analysis of Interfirm Differences in Efficiency under Competition*, 13 *BELL J ECON.* 418 (1982).

firm's performance. Sometimes the exact source of a firm's advantage may be invisible to outsiders, as is the case with trade secrets.¹⁵⁸ At other times, the complexity of resource and capability combinations may make it difficult, if not impossible, for competitors to replicate an advantage.¹⁵⁹

Firms may try to devise contracts that make resource contributions to the firm more ambiguous and therefore more difficult to replicate. Contracts may omit certain details in the interest of preventing firm-specific resources from escaping and spreading. For instance, some scholars have argued that knowledge is a crucial organizational resource that leads to the earning of Ricardian rents.¹⁶⁰ Liebeskind notes that knowledge is difficult to protect with patents or copyrights, and it is not always easy to detect illegal imitation.¹⁶¹ Knowledge transfers from one organization to another occur in a fairly invisible, and sometimes unintentional, fashion. Firms may try to limit knowledge sharing through employee conduct rules, but given the common ability to transfer knowledge without detection, firms may need to put in additional organizational restrictions that are not apparent in the contract. More pertinent to our argument, contracts may be designed to obscure the resource contribution of the transaction (*e.g.*, making it difficult to identify what firms are contributing to a joint venture).

Ultimately, the value of protecting knowledge and other intangible resources may depend, as noted above, on uncertainty in the environment. Firms in rapidly-shifting environments may find it in their best interest to loosen the constraints of employee contracts and allow them to share knowledge freely with competitors and potential collaborators.¹⁶² By making the employment contract more flexible, firms in turn make their resource base more adaptive to sudden shifts in the market that require on-the-fly innovation. Thus, in highly uncertain and rapidly-changing industries, opportunism may be firms' last priority when designing employee contracts.

The final isolating mechanism associated with RBV is property rights. By creating legal barriers to imitation (*e.g.*, patents), firms attempt to protect prized resources.¹⁶³ Property rights tend to be most important when a resource is easily observed and replicable. Property rights allow firms to extract rents more easily from tangible resources, such as technological innovations. This final mechanism is most commonly associated with contracts. Firms, after all, secure long-term commitments to resources

¹⁵⁸ See, *e.g.*, Julia P. Liebeskind, *Knowledge, Strategy and the Theory of the Firm*, 17 STRAT. MGMT. J. 93 (1996).

¹⁵⁹ For a longer list of various forms of causal ambiguity see, Joseph T. Mahoney & J. Rajendran Pandian, *The Resource-Based View within the Conversation of Strategic Management*, 13 STRAT. MGMT. J. 363 (1992).

¹⁶⁰ Sidney Winter, "Knowledge and Competence as Strategic Assets," in David J. Teece, ed., *THE COMPETITIVE CHALLENGE: STRATEGIES FOR INDUSTRIAL INNOVATION AND RENEWAL* (1988).

¹⁶¹ Liebeskind, *supra* note 158.

¹⁶² Walter W. Powell, *Neither Market nor Hierarchy: Network Forms of Organization*, 12 RESEARCH ORG BEHAV. 295 (1990).

¹⁶³ For organizational economists, property rights are one of the most fundamental ways that firms secure competitive advantages, see Joseph T. Mahoney & J. Rajendran Pandian, *The Resource-Based View Within the Conversation of Strategic Management*, 15 STRAT. MGMT. J. 363 (1992).

through legal contracts. But RBV also encourages us to consider the other resource considerations of making contracts.

For example, Miller and Shamsie argue that the importance of property rights in securing critical resources depends on the amount of uncertainty in the organization's environment.¹⁶⁴ As uncertainty increases (associated with technological and competitive instability), a firm should rely less on legal means of protecting resources in an attempt to become more flexible and adaptive. According to their thesis, contracts – as a means of capturing the value of resources – should be less vital to a firm's competitive advantage in markets characterized by high uncertainty.¹⁶⁵ Thus, RBV might offer insights regarding the completeness of contracts. Incomplete contracts do not specify all relevant contingencies, given the possibility for a variety of different outcomes and the difficulty of predicting outcomes.¹⁶⁶ When resource uncertainty is high, the incompleteness of contracts may contribute to the competitive advantage of the firm for a reason that has nothing to do with opportunism. On the other hand, when uncertainty is low firms should find more value in specifying more contingencies and securing the long-term commitment of particular sets of resources.

In sum, RBV focuses scholarly research of contracts on the kinds of resources used to create and capture value and the various ways that firms might use contracts in these endeavours. In contrast to incomplete contract theory, which emphasizes opportunism, RBV provides insights into the various ways that firms may design contracts to use and deploy resources critical to the creation or maintenance of competitive advantages.

B. Learning

Organizational theorists have created an impressive literature on organizational learning,¹⁶⁷ which is related to, but distinct from, individual learning.¹⁶⁸ While learning

¹⁶⁴ Danny Miller & Jamal Shamsie, *The Resource-Based View of the Firm in Two Environments: The Hollywood Film Studios from 1936 to 1965*, 39 *ACAD. MGMT. J.* 519 (1996).

¹⁶⁵ Evidence supports their proposition. In an analysis of film studios over a thirty-year time period, they find that long-term contracts with film actors led to improved performance during a period of relative industry stability, but long term contracts became a detriment to studio performance during a period of greater uncertainty.

¹⁶⁶ For more discussion of incomplete contracts, see, Oliver Hart & John Moore, *Incomplete Contracts and Renegotiation*, 56 *ECONOMETRICA* 755 (1988).

¹⁶⁷ For a useful description of the origins and development of research in organizational learning, see Anne S. Miner & Stephen Mezias, *Ugly Duckling No More: Pasts And Futures Of Organizational Learning Research*, 7 *ORGANIZATION SCIENCE* 88, 88 (1996).

¹⁶⁸ See Daniel H. Kim, *The Link Between Individual and Organizational Learning*, 35 *SLOAN MGMT. REV.* 37 (1993) (observing that “organizations ultimately learn via their individual members. Hence, theories of individual learning are crucial for understanding organizational learning.”).

by individuals does not necessarily lead to changes in individual behavior, many organizational theorists conceive of organizational learning as organizational change.¹⁶⁹

In their seminal work in the field, Richard Cyert and James March describe firms as adaptive learning systems.¹⁷⁰ Under this view, firms address uncertainty by developing standard operating procedures. The efficacy of these procedures is tested through experiences that lead to incremental change: effective procedures are retained, and ineffective procedures are modified. Scholars writing after Cyert and March distinguished incremental and radical change.¹⁷¹ Whereas incremental change focuses on local outcomes, radical change affects an organization's fundamental commitments.

Contracts may contain the evidence of learning. Kyle Mayer and Nicholas Argyres' study of inter-firm contracts in the personal computer industry provides evidence that firms use contracts as "repositories of knowledge" about the working relationship between partnering firms.¹⁷² Past problems experienced in the interfirm relationship led to an altering of the contract. Over time the contract becomes a record of things learned and obstacles overcome.¹⁷³

A paradigmatic example in which incremental learning is memorialized via contractual changes is the development of the modern franchise agreement by Ray Kroc and McDonald's Corporation.¹⁷⁴ Some features of McDonald's innovative franchise structure were forced upon Kroc by the McDonald brothers, Dick and Mac. For example, when the McDonald brothers insisted that Kroc limit the initial franchise fee to \$950 and the ongoing royalty to 1.9% of franchisee sales, Kroc realized that he could not make money as other franchises had through the mere sale of franchise rights. While Kroc

¹⁶⁹ See, e.g., CHRIS ARGYRIS & DONALD SCHÖN, ORGANIZATIONAL LEARNING: A THEORY OF ACTION PERSPECTIVE (1978).

¹⁷⁰ See RICHARD M. CYERT AND JAMES G. MARCH, A BEHAVIORAL THEORY OF THE FIRM (1963).

¹⁷¹ This distinction travels under various labels. See, e.g., ARGYRIS & SCHÖN, *supra* note 169, at 2-3 (1978) (distinguishing between single-loop learning, which "permits the organization to carry on its present policies or achieve its present objectives," and double-loop learning, which "involve[s] the modification of an organization's underlying norms, policies and objectives"); C. Marlene Fiol & Marjorie A. Lyles, *Organizational Learning*, ACAD. MGMT. REV. 803, 807-08 (1985) (distinguishing lower-level learning, which "leads to the development of some rudimentary associations of behavior and outcomes," and higher-level learning, which "aims at adjusting overall rules and norms rather than specific activities or behaviors"); Mark Dodgson, *Technology, Learning, Technology Strategy and Competitive Pressures*, 2 BRITISH J. MGMT. 132, 139-40 (1991) (distinguishing tactical learning, "which has an immediate problem-solving nature," from strategic learning, which "extends beyond immediate issues and involves firms developing skills and competences which provide the basis for future, perhaps unforeseen, projects").

¹⁷² Mayer & Argyres, *supra* note 143, at 405.

¹⁷³ One implication of this analysis is that contracts often deviate from the results predicted by economic theory. See Oliver E. Williamson, *Strategizing, Economizing, and Economic Organization*, 13 STRAT. MGMT. J. 75, 78 (1991) ("if economic organization is formidably complex, which it is, and if economic agents are subject to very real cognitive limits, which they are, then failures of alignment will occur routinely").

¹⁷⁴ For a captivating history of McDonald's, see JOHN F. LOVE, MCDONALD'S: BEHIND THE ARCHES (1989). See also, William L. Killion, *Franchisor Vicarious Liability – The Proverbial Assault On The Citadel*, 24 FRANCHISE L. J. 162, 163 (2005) ("Ray Kroc did not invent fast food franchising; he revolutionized it.").

initially dreamed of making money through the sale of shake mixers to his franchisees,¹⁷⁵ “the beginning of real income for McDonald’s” lay in the leasing and subleasing of stores to franchisees.¹⁷⁶ Kroc eventually introduced many innovations to franchising, including the paradigm-shifting QSC (Quality, Service, Cleanliness) program; contractual rights of first refusal instead of exclusive territories¹⁷⁷; and prohibitions on transfer of the franchise without the franchisor’s consent.¹⁷⁸ Many of these innovations were embedded in the McDonald’s franchise agreements or in the operations manual, which is incorporated by reference into the franchise agreements.¹⁷⁹

Of course, the fact that organizations learn from their experiences and incorporate that learning into their contracts hardly seems revolutionary for the empirical study of contracts.¹⁸⁰ For present purposes, the more important lesson from learning theory is that contracts become routine solutions to common problems faced by organizations. Rather than pursuing a negotiated settlement to a particular circumstance, contracts often are formalized routines created without much thought to concerns about opportunism.

The routinization of contracts may seem like an effective solution to the costliness of creating situational contracts. Writing each contract *sui generis* expends resources that the firm might better use elsewhere. But routinization also creates hidden costs that are incurred when actors choose to depart from established routines. Routines build interdependence with other components of the organization. The learning literature points to interdependence and complexity as outcomes of organizational learning.¹⁸¹ As an organization creates more and more routines, those routines become increasingly layered

¹⁷⁵ Killion, *supra* note 174, at 164.

¹⁷⁶ LOVE, *supra* note 174, at 88.

¹⁷⁷ See *Schupack v. McDonald’s System, Inc.*, 264 NW2d 827, 830-31 (1978):

At first McDonald's would occasionally grant exclusive territories to a franchisee, which would give the franchisee an absolute right to any new stores opened in the territory. This practice, however, proved to be detrimental to McDonald's growth because if the holder of the exclusive territory was satisfied with a certain number of units, McDonald's growth in that area would come to standstill. A change was made from exclusive territories to a Right of First Refusal. The Right was better suited to McDonald's desire to expand since they could still build a unit and offer it to another party, if the holder of the Right refused the new store.

Azoulay and Shane claim that McDonald’s policy of nonexclusivity was appropriate to the mature franchise, but not to the young franchise. Azoulay & Shane, *supra* note 133, at 354.

¹⁷⁸ See *Schupack*, *supra* note 177, at 831-32 (noting that the first appearance of restrictions on transfer in McDonald’s franchise agreements appeared in 1962).

¹⁷⁹ See Roger D. Blair & Francine Lafontaine, *Understanding the Economics of Franchising and the Laws that Regulate It*, 26 FRANCHISE L.J. 55, 60 (2006) (quoting the McDonald’s Franchise Agreement, as included in the company’s Uniform Franchise Offering Circular (2003)).

¹⁸⁰ Many contracts scholars have argued that contracts are subject to evolutionary forces. For an example in the franchising context, see Azoulay & Shane, *supra* note 133, at 340 (“those contracts that are more consistent with economic theory will survive, while those that are less consistent will be selected out”).

¹⁸¹ JAMES G. MARCH & HERBERT A. SIMON, ORGANIZATIONS (1958); Herbert A. Simon, *The Architecture of Complexity*, 106 PROC. AM. PHIL. ASSOC. 467 (1962).

and interconnected, such that a change in one routine necessitates changes in other routines in the organization. Considering contracts as a particular type of routine helps us understand why changing contracts or adapting them to specific circumstances can be a very difficult and costly action.¹⁸² If the contract's form is intertwined with dozens of other organizational processes, then it is conceivable that over time a particular contract form will become increasingly rigid and subject to inertia.¹⁸³

These insights may help to explain why some franchisors have difficulty adapting to changes in their external environments. The canonical case here is Chicken Delight, whose business model called for the sale of paper products and cooking equipment to the franchisees. Shortly after those sales were held to be an illegal tie for purposes of antitrust law,¹⁸⁴ the Chicken Delight franchise system in the U.S. folded. We suspect that Chicken Delight failed to adapt after the court ruling because its entire system of production was based on interdependent routines tied in with the specific franchising contract. When that contract was ruled illegal, the costs of adapting the system to a new franchising arrangement were too high for the organization, forcing it to close its doors.

Azoulay and Shane provide a more systematic examination of this problem in their study of exclusive territory provisions in franchise agreements:

Despite the benefits of exclusive territories, some entrepreneurs fail to adopt this policy. The reason is not that they face higher costs of adoption. Rather, their limited knowledge of contracting leads them to overlook the importance of the franchisor encroachment problem when designing their contracts. Because franchise agreements are sticky, and bounded rationality prevents these entrepreneurs from identifying the payoffs associated with adoption, we often observe nonexclusive arrangements persisting until failure.¹⁸⁵

¹⁸² Olav Sorenson, *Interdependence and Adaptability: Organizational Learning and the Long-Term Effect of Integration*, 49 MGMT. SCI. 446 (2003). Sorenson argues that interdependence prohibits firms from optimizing routines independently of one another: “[C]hanges in one activity of the organization might require concomitant changes in other activities. Interdependence, therefore, fosters bureaucratic inertia within the organization.” *Id.* at 448.

¹⁸³ For a more thorough discussion of inertia, see Michael T. Hannan & John Freeman, *Structural Inertia and Organizational Change*, 49 AM. SOC. REV. 149 (1984).

¹⁸⁴ *Siegel v. Chicken Delight, Inc.*, 448 F.2d 43 (9th Cir. 1971), *cert. denied*, 405 U.S. 955 (1972).

¹⁸⁵ Azoulay & Shane, *supra* note 133, at 353 (2001). Azoulay and Shane attribute the “stickiness” of franchise agreements to bounded rationality and transaction costs:

Entrepreneurs will persist with initially selected routines until they fail... First, entrepreneurs cannot change their routines unless they first recognize that those routines are flawed. This recognition requires an understanding of the cause-effect relationship between organizational design and firm performance, which many entrepreneurs lack. Second, even if an entrepreneur recognizes that a routine is flawed, he or she may be unable to change it. The changing of contract provisions involves incurring significant transaction costs that make the provisions sticky to adjustment.

Id. at 340.

Firms may also develop specific contractual provisions as an outcome of collective learning processes. “Population-level learning” results from the interaction of organization-level learning, imitation, and selection mechanisms.¹⁸⁶ As a certain routine emerges within an organization, peer organizations may imitate that routine, especially if it appears to solve a commonly-faced problem, which spreads the routine throughout the population. If the diffused routine contributes to the survival and success of adopting organizations, we can say that the population collectively learned an effective attribute.

Just as routines may ossify within a single organization, “boilerplate” contract provisions may have an inertial effect on population-level activities. Kahan and Klausner have described the “network effects” of boilerplate.¹⁸⁷ Such network effects may result in suboptimal “boilerplate” provisions that are used widely by firms in the same industry.¹⁸⁸

The lesson from organizational learning theory seems to be that contracts are not always optimally designed. In fact, as a contract becomes accepted as routine, over time it may become less and less optimal. Yet the reason for their persistence is that contracts, at least originally, help organizations find solutions to common problems faced by the organization. Organizations fight a continual battle to find routines that enhance their predictability and reproducibility while not threatening their long-term adaptiveness.

In sum, learning theory suggests that we consider contracts to be both inputs to learning processes and outcomes of learning. As inputs, contracts may assist organizations in developing incremental changes in their structure. As outcomes, contracts are routines that are learned through experience with relational contracting and that contribute to organizational inertia.

C. Identity

Social identity theory was developed to explore issues of intergroup discrimination among individuals.¹⁸⁹ Organizational theorists have extended social

¹⁸⁶ Anne S. Miner & Pamela R. Haunschild, *Population Level Learning*, 17 RES. ORG. BEHAVIOR 115 (1995); Anne S. Miner & Philip Anderson, *Industry and Population Level Learning: Organizational, Interorganizational, and Collective Learning Processes*, 16 ADVANCES STRAT. MGMT. 1 (1999).

¹⁸⁷ See, e.g., Marcel Kahan & Michael Klausner, *Antitakeover Provisions in Bonds: Bondholder Protection or Management Entrenchment?*, 40 UCLA L. REV. 931 (1993); Marcel Kahan & Michael Klausner, *Standardization and Innovation in Corporate Contracting (or “the Economics of Boilerplate”)*, 83 VA. L. REV. 713 (1997); Michael Klausner, *Corporations, Corporate Law, and Networks of Contracts*, 81 VA. L. REV. 757 (1995).

¹⁸⁸ See, e.g., Michelle E. Boardman, *Contra Proferentum: The Allure of Ambiguous Boilerplate*, 104 Mich. L. Rev. 1105 (2006); Stephen J. Choi & G. Mitu Gulati, *Innovation in Boilerplate Contracts: An Empirical Examination of Sovereign Bonds*, 53 EMORY L.J. 929 (2004) (“Change not only takes time, but also comes in stages – as we describe it, there is first an interpretive shock, then a lengthy period of adjustment, and only then a big shift in terms.”); Smith, *Independent Legal Significance*, *supra* note 1.

¹⁸⁹ See Henri Tajfel & John Turner, “The Social Identity Theory of Inter-group Behavior,” in WILLIAM G. AUSTIN & STEPHEN WORCHEL, EDS., *THE SOCIAL PSYCHOLOGY OF INTERGROUP RELATIONS* (1986).

identity theory to the organizational context.¹⁹⁰ In that context, identity is generally understood to be the central, enduring, and distinctive character of an organization.¹⁹¹ Organizational identity has profound implications for organizational behavior, not the least of which is the facilitation of coordination, communication, and learning within the organization.¹⁹² Formulating a coherent identity also is essential to any organization's survival. While individuals may be able to survive with a confused or mistaken identity, organizations with incoherent identities may be unrecognizable to consumers and others in the marketplace. Formulating "who we are" as an organization, then, is a necessity for any successful organization.¹⁹³

The most significant challenge in studying identity, whether individual or organizational, is that identity is unobservable.¹⁹⁴ As a result, identity scholars have embraced the assumption that "identity is as identity does."¹⁹⁵ Evidence of identity is found in the "categorical self-descriptors used by social actors to satisfy their identity requirements."¹⁹⁶ The categorical self-descriptors that organizations use may be found in their choice of organizational form¹⁹⁷ or in their preference for certain organizational practices, including contracting practices.

Contracts offer organizations a unique opportunity to express their primary identity requirements: continuity and distinctiveness.¹⁹⁸ Given the importance of a

¹⁹⁰ See, e.g., Blake E. Ashforth & Fred Mael, *Social Identity Theory and the Organization*, 14 ACAD. MGMT. REV. 20 (1989). Organizations are social artifacts. HOWARD E. ALDRICH & MARTIN RUEF, *ORGANIZATIONS EVOLVING* (2006). One implication of this insight is that organizations do not possess "assigned characteristics" of identity, such as race, gender, birth order, etc. ROY F. BAUMEISTER, *IDENTITY: CULTURAL CHANGE AND THE STRUGGLE FOR SELF* (1986). Nevertheless, organizations may become functionally equivalent to individuals through the selection of organizational forms. See David A. Whetten & Alison Mackey, *A Social Actor Conception of Organizational Identity and Its Implications for the Study of Organizational Reputation*, 41 BUS. & SOC. 393, 398 (2002).

¹⁹¹ Stuart Albert & David A. Whetten, "Organizational Identity," in L. L. CUMMINGS AND B. M. STAW (EDS.), 7 RESEARCH IN ORGANIZATIONAL BEHAVIOR 263 (1985). But see Dennis A. Gioia et al., *Organizational Identity, Image and Adaptive Instability*, 25 ACAD. MGMT. REV. 63, 63-64 (2000) (arguing that organizational identity is "actually relatively dynamic and that the apparent durability of identity is somewhat illusory").

¹⁹² Bruce Kogut & Udo Zanger, *What Firms Do? Coordination, Identity, and Learning*, 7 ORG. SCI. 502, 507-511 (1996). Kogut and Zander rely on identity as the centerpiece of their provocative theory of the firm: "What makes a firm's boundaries distinctive is that the rules of coordination and the process of learning are situated not only physically in locality, but also mentally in identity." *Id.* at 515.

¹⁹³ Barbara Czarniawska advances the imperative of identity coherence. She argues that identity is not just a metaphor; rather, it represents the most essential organizing feature of the organization. BARBARA CZARNIAWSKA, *NARRATING THE ORGANIZATION: DRAMAS OF INSTITUTIONAL IDENTITY* 233 (1997).

¹⁹⁴ *Id.*

¹⁹⁵ Whetten & Mackey, *supra* note 190, at 396.

¹⁹⁶ *Id.*

¹⁹⁷ *Id.* at 398 ("In identity terms, the selection of organizational forms makes up a self-categorization process whereby the organization's memberships in identity categories or groups are declared").

¹⁹⁸ Jane E. Dutton et al., *Organizational Images and Member Identification*, 39 ADMIN. SCI. Q. 239 (1994). According to Whetten & Mackey, identity is best conceived as "those things that enable social

clearly-defined identity for survival, organizations may use contracts (and other institutionalized moments of self-representation) to express identity – stating not only what they are but also what they are not. In other words, contracts afford organizations the opportunity to stake out their identity and defend their claims to distinctiveness.

Many high-profile mergers, for example, contain apparent identity provisions. In connection with their merger, Disney and Pixar created a set of “Policies for Management of the Feature Animation Businesses.”¹⁹⁹ The primary purpose of the two-page document seems to be the maintenance of Pixar’s identity. Indeed, one of the provisions establishes a committee whose purpose is “to help maintain the Pixar ‘culture.’”²⁰⁰ In addition, Pixar is to retain its name and headquarters, and “[t]he Pixar sign at the gate shall not be altered.”²⁰¹

A striking manifestation of identity in contractual form is the recent advent of “Cooperative LLCs.” In the summer of 2006, for example, three dairy families in Monticello, Wisconsin purchased the Edelweiss Creamery and, along with two of the prior owners of the creamery, formed the Edelweiss Graziers Cooperative (“Edelweiss”).²⁰² The dairy families produce milk using an innovative grazing method,²⁰³ and the cheesemakers use that milk to create Emmentaler cheese using a traditional Swiss copper vat.²⁰⁴ But what is most unusual about Edelweiss is the ownership structure of the cooperative. Unlike traditional business cooperatives, which are owned exclusively by patron members,²⁰⁵ Edelweiss is owned by both patron (the dairy farmers) and non-patron (the cheesemakers) members.²⁰⁶

Edelweiss was the first business organized as an “unincorporated cooperative association” under a Wisconsin statute adopted in 2006.²⁰⁷ Following the lead of four

actors to satisfy their inherent needs to be the same yesterday, today, and tomorrow and to be unique actors or entities.” Whetten & Mackey, *supra* note 190, at 396.

¹⁹⁹ <<http://www.sec.gov/Archives/edgar/data/1001039/000119312506012082/dex991.htm>>.

²⁰⁰ *Id.*

²⁰¹ *Id.*

²⁰² “Three Dairy Grazier Families Form Edelweiss Co-op to Manufacture Grass-Based Cheese,” CHEESE REPORTER (July 14, 2006).

²⁰³ The method is known as Management-Intensive Grazing. See Edelweiss Graziers Co-op: About Us <<http://www.edelweissgraziers.com/aboutus.html>>.

²⁰⁴ See Edelweiss Creamery <<http://www.edelweisscreamery.com/>>.

²⁰⁵ For a discussion of membership requirements in business cooperatives, see Lewis D. Solomon & Melissa B. Kirgis, *Business Cooperatives: A Primer*, 6 DEPAUL BUS. L.J. 233 (1994).

²⁰⁶ A “patron member” must conduct business for or with the cooperative in order to receive financial rights or distributions. WIS. STAT. § 193.005(22)-(23). A “non-patron member” is not required to patronize the cooperative to receive financial rights or distributions. WIS. STAT. § 193.005(18)-(19).

²⁰⁷ WIS. STAT. CH. 193. For an analysis of the new statute, see Ryan P. Haas, *Uncooperative Cooperatives: A Review of Wisconsin’s Unincorporated Cooperative Association Statute* (working paper, on file with authors).

other states,²⁰⁸ Wisconsin created the unincorporated cooperative association statute to allow outside equity investors in cooperative enterprises.²⁰⁹ This new business form, sometimes referred to as a “Cooperative LLC,” has attracted the interest of the National Conference of Commissioners on Uniform State Laws, which has formed a drafting committee for the purpose of creating a uniform statute.

Why would an artisanal cheesemaker like Edelweiss form an unincorporated cooperative association rather than a limited liability company or some other organizational form? The antitrust exemptions normally associated with cooperatives have no potential utility for a small business like Edelweiss.²¹⁰ And any tax advantages available under Subchapter T of the Internal Revenue Code would be equally available to a limited liability company.²¹¹ Moreover, the traditional transaction-cost explanations for agricultural cooperatives suggest that their attractiveness lies in the homogeneity of the owners,²¹² a feature that is conspicuously absent in unincorporated cooperative associations. While the cooperative form may have some positive branding effects,²¹³ the broader development and use of cooperatives in Wisconsin suggests that use of the cooperative form is, in large part, a statement of identity.²¹⁴

²⁰⁸ In the order in which the statutes were adopted, Wyoming, WYO. STAT. ANN. TITLE 17, CH. 10 (2006); Minnesota, MINN. STAT. CH. 308B (2005); Tennessee, TENN. CODE ANN. TITLE 43, CH. 38 (2006); and Iowa, IOWA CODE CH. 501A (2005).

²⁰⁹ Traditional cooperatives may issue preferred stock at a rate not to exceed 8% of par value per year. WIS. STAT. § 185.21(2)(c) (2003-04).

²¹⁰ See Capper-Volstead Act of 1922, 42 STAT. 388 (1922), 7 U.S.C. §§291-92. See also, Donald A. Frederick, *Anti-trust Status of Farmer Cooperatives: The Story of the Capper-Volstead Act*, Cooperative Information Report 59, 154 (USDA Rural Business Cooperative Service, 2002) (available at <http://www.rurdev.usda.gov/rbs/pub/cir59.pdf>).

²¹¹ Under Subchapter T, a qualifying firm may elect for taxation at either the entity level or the member level. I.R.C. §§1381-88. Limited liability companies have a similar election under the “check the box” regulation. Treas. Reg. § 301.7701-3(b)(1).

²¹² HENRY HANSMANN, *THE OWNERSHIP OF ENTERPRISE* 120-45 (1996).

²¹³ See Haas, *supra* note 207, at 27 (use of the cooperative form may “signal adherence to the foundational principles of cooperatives, which may increase consumer perception of the brand”).

²¹⁴ See Marc Schneiberg, *What’s on the Path? Path Dependence, Organizational Diversity, and the Problem of Institutional Change in the US Economy, 1900-1950*, 5 SOCIO-ECON. REV. 47, 70-71 (2006):

We all ‘know’ that populism failed in the US, that agrarian protest was decisively defeated, and that struggles against ‘trusts’ and corporate combination only hastened their coming. We all ‘know’ that movements for alternatives – public ownership, producer- or regional-republicanism, a cooperative commonwealth – met their demise over a century ago, falling decisively before the modernizing visions of system building, corporate liberalism and progressive era regulation. We all ‘know’ that all of these matters were settled long ago, whether with the collapse of Populism and the Farmers Alliance in the mid-1890s, the great merger wave of 1898–1904, or the FTC and Clayton Acts of 1914. But even in their failures and defeats, these struggles, experiments with other possibilities and movements for alternatives left elements of those abandoned orders strewn about that path, here in the form of 3,500 insurance mutuals, there in the form of agricultural cooperatives or municipal utility companies. And in the end, those elements of organizational and social life – those cooperatives, networks, cooled-out

Contracts may be used by organizations to transmit their identity to important stakeholders. By relaying certain messages about the identity of the firm via contract, agents may intend contracts to create loyalty and identification with the organization. In particular, employment contracts often contain identity messages that employers hope to inculcate in employees.²¹⁵ Contracts are an initial stage of identity formation for the employee. They not only tell the employee a great deal about the organization's identity, but they also indicate what kind of identity the employee should try to cultivate when working under the auspices of the organization and generate reciprocal obligations between employer and employee.²¹⁶ Similarly, contracts may be designed to communicate images to a wider audience. In his case studies of the Google initial public offering and other deals,²¹⁷ for example, Victor Fleischer describes the "branding effect" of legal infrastructure.²¹⁸

In sum, identity theory encourages us to think about how contracts are used to designate certain identity characteristics of the organization and to communicate images that the organization wishes to establish among particular audiences. Thus, contracts are as much symbols as they are instruments to obtain certain ends.

D. Legitimacy & Isomorphism

Institutional theory posits that organizational behavior is often generated by the need to be seen as legitimate and engaged in socially appropriate behavior.²¹⁹ Some of

holdovers of hotter times, and legacies of previous struggles lost or partly won – constituted platforms and building blocks for subsequent struggles against the corporation, for renewed efforts to organize alternatives, and for the construction of an increasingly well-developed, cooperative and publicly based pathway within American 'liberal market' capitalism.

²¹⁵ Jeffery A. Thompson and J. Stuart Bunderson, *Violations of Principle: Ideological Currency in the Psychological Contract*, 28 ACAD. MGMT. REV. 571 (2003). Thompson and Bunderson similarly argue that some organizations may try to transform the employment relationship by invoking ideological commitments (*i.e.*, identity): "In an ideology-infused contract, therefore, there is the assumption that the employee is willing to contribute extrarole behaviors such as voluntary helping or advocacy, perhaps outside the organization, in order to support the pursuit of the espoused cause." *Id.* at 576. Similarly, we argue that in many instances organizations use contracts to infuse employees with particular individual identities. *See also* Denise M. Rousseau & Judi McLean Parks, *The Contracts of Individuals and Organizations*, 15 RES. ORG. BEH. 1 (1994).

²¹⁶ Denise M. Rousseau, *Psychological and Implied Contracts in Organizations*, 2 EMP. RESP. RIGHTS J. 121 (1989); The "psychological contracts" literature also emphasizes the changing nature of these mutual obligations. Importantly, the initial employment contract defines the baseline on which future perceptions of obligation and identity build. Sandra L. Robinson, Matthew S. Kraatz, and Denise M. Rousseau, *Changing Obligations and the Psychological Contract: A Longitudinal Study*, 37 ACAD. MGMT. REV. 137 (1994).

²¹⁷ Fleischer, *supra* note 129; Victor Fleischer, *The MasterCard IPO: Protecting the Priceless Brand*, 12 HARV. NEGOT. L. REV. __ (forthcoming 2006).

²¹⁸ For an evaluation of Fleischer's idea, see D. Gordon Smith, *The "Branding Effect" of Contracts*, 12 HARV. NEGOT. L. REV. __ (forthcoming 2006).

²¹⁹ For a broad review of institutional theory, see, W. RICHARD SCOTT, *INSTITUTIONS AND ORGANIZATIONS* (2nd ed. 2001).

the predictions of institutional theory overlap with those of identity theory – for example, organizations may symbolically adopt certain behaviors to appear legitimate to key stakeholders – but institutional theory’s unique contribution is to specify mechanisms that allow organizations to enhance their legitimacy. Typically, organizations gain legitimacy by conforming to accepted standards and norms, which in turns leads to increasing similarity or isomorphism.

DiMaggio and Powell’s classic article on isomorphism sought to explain “why there is such startling homogeneity of organizational forms and practices.”²²⁰ To explain this tendency, they identified three main main types of institutional isomorphism: coercive, mimetic, and normative isomorphism.²²¹ Coercive isomorphism involved the adoption of similar practices due to forced constraint by some external organization upon which other organizations depend for resources. Mimetic isomorphism occurs when organizations are uncertain about how to accomplish certain goals, which leads them to look to peer organizations as models for behavior. Normative isomorphism occurs as organizations adopt practices defined as appropriate by a governing or norm-setting body, such as a professional association.

The development of modern venture capital contracts illustrates each of the three forms of isomorphism. These contracts – typified by the use of convertible preferred stock – were developed by Silicon Valley lawyers in the late 1970s and early 1980s.²²² The product of much experimentation, venture capital investments coalesced around convertible preferred stock for a combination of advantageous governance and regulatory features.²²³ While this development has generally been viewed as a form of “competitive isomorphism,”²²⁴ the effect of the taxation system on these contracts is a form of coercive isomorphism.

The Silicon Valley lawyers who developed the form of modern venture capital contracts “acted first to transmit norms and typifications among otherwise isolated clients, then to formulate and sponsor a variety of competing prescriptions for practice, and ultimately to export the emerging ‘Silicon Valley model’ beyond the community’s

²²⁰ Paul DiMaggio & Walter W. Powell, *The Iron Cage Revisited: Institutional Isomorphism and Collective Rationality in Organizational Fields*, 48 AM. SOC. REV. 147 (1983).

²²¹ DiMaggio and Powell distinguish “competitive isomorphism” and “institutional isomorphism.” The former “emphasizes market competition, niche change, and fitness measures,” while the latter acknowledges that “[o]rganizations compete not just for resources and customers, but for political power and institutional legitimacy.” *Id.* at 150.

²²² MARK C. SUCHMAN, ON ADVICE OF COUNSEL: LAW FIRMS AND VENTURE CAPITAL FUNDS AS INFORMATION INTERMEDIARIES IN THE STRUCTURATION OF SILICON VALLEY (1994) (unpublished Ph.D. dissertation, Stanford University).

²²³ See Ronald J. Gilson & David M. Schizer, *Understanding Venture Capital Structure: A Tax Explanation for Convertible Preferred Securities*, 116 HARV. L. REV. 874 (2003) (“[v]enture capital structure thus performs double duty, addressing standard contracting concerns (which are the grist of the existing academic literature) while also reducing taxes”).

²²⁴ On competitive isomorphism, see Michael T. Hannan & John H. Freeman, *The Population Ecology of Organizations*, 82 AM. J. SOC. 929 (1977).

borders.”²²⁵ The legal profession, therefore, became a *de facto* standard-setting body for the venture capital industry. This suggests normative isomorphism.

The influence of the Silicon Valley model of venture capital contracting has not been limited to the United States. The fact that convertible preferred stock is used in many other countries, which do not share important regulatory features of the U.S. system, may suggest the overriding importance of the governance features of convertible preferred stock. Or it may suggest the presence of mimetic isomorphism.

A major contribution of this literature is to point out that organizations may adapt to their environment not to achieve technical-rational ends, but to be seen as legitimate. Routines, structures, and other organizational features develop as formal responses to elaborate responses to societal myths about rationality.²²⁶ Externally, organizations adopt these routines to appear legitimate, even though these same routines may be decoupled from actual practice.²²⁷

One implication of institutional theory is that contracts may have become another ritualized aspect of the organization that represents an organization’s need for legitimacy. While contracts clearly have instrumental purposes, as so neatly described by neoclassical economics, TCE and RBV, contracts also have a ceremonial function. When organizations offer contracts to second-parties, they often do so as a symbolic gesture of legitimacy, demonstrating that they play by the same rules of rationality that the rest of the modern world abides. Thus, contracts come to represent a symbolic rite of passage into the modern world of corporate business.

Institutional theory also suggests that contracts may evolve over time as organizational actors collectively seek solutions to common problems. As organizations face similarly uncertain situations, they may try to find rational solutions to these

²²⁵ Mark C. Suchman & Lauren B. Edelman, *Legal Rational Myths: The New Institutionalism and the Law and Society Tradition*, 21 LAW & SOC. INQUIRY 903, 935 (1996). In the hands of East-coast venture capital lawyers, however, the forms changed. Where the West-coast versions seemed to emphasize the possibility of upside gains, the East-coast versions were focused on downside protections. See National Venture Capital Association’s Model Venture Capital Financing Documents, Amended & Restated Certificate of Incorporation, Redemption 37 n. 77 (observing that “[r]edemption provisions are more common in East Coast venture transactions than in West Coast venture transactions”) <http://www.nvca.org/model_documents/model_docs.html>; Anne Marie Borrego, *East vs. West: A Difference?* (quoting an entrepreneur to the effect that “[t]he questions and the terms with East Coast VCs were more focused on the downside”) <http://www.vfinance.com/invest/invest.asp?ToolPage=article_detail.asp&id=6>.

²²⁶ John W. Meyer and Brian Rowan, *Institutionalized Organizations: Formal Structure as Myth and Ceremony*, 83 AM. J. SOC. 340 (1977).

²²⁷ Adopting particular attributes to achieve legitimacy is not the same thing as “signaling.” According to Spence’s formulation, the costs of attaining an effective signal must be negatively correlated with the quality of the adopter. Thus, higher quality organizations find it less costly to adopt the signal. In contrast, attributes that organizations adopt to enhance legitimacy are highly imitable, and thus can quickly diffuse to organizations of various types. If the attribute diffuses widely, adoption of the attribute may become mandatory to be seen as a recognizable or legitimate organization. For information on signaling see, MICHAEL A. SPENCE, MARKET SIGNALING: INFORMATIONAL TRANSFER IN HIRING AND RELATED PROCESSES (1974).

problems by looking to those organizations that have the most prestige.²²⁸ Mimicry of high status organizations' contractual elements soon leads to a diffusion of a new contractual form among organizations in an entire industry (or field, as institutional theorists describe it). Thus, one implication of institutional theory is that adaptation of contracts over time may proceed in a fad-like fashion, with lower status firms continually conforming to new standards set by high status firms.

In sum, institutional theory suggests that contracts represent attempts by organizations to achieve legitimacy in a highly rationalized, corporate world. In seeking legitimacy, organizations adopt certain contractual elements that conform to developing standards of rational organizational behavior. Thus, contractual elements tend to change in a fad-like fashion.

Conclusion

In his well-known article introducing the concept of the business lawyer as "transaction cost engineer,"²²⁹ Ron Gilson suggests that "the tie between legal skills and transaction value is the business lawyer's ability to create a transactional structure which reduces transaction costs and therefore results in more accurate asset pricing."²³⁰ In the foregoing sections, we suggest that business lawyers may be doing much more than transaction cost economization.

The organizational theories discussed above reveal the diverse purposes of contracts and the various roles that lawyers play when drafting contracts. Lawyers are more than "transaction cost engineers." RBV suggests that lawyers serve as strategic advisors, helping organizations to explore and acquire resources that (potentially) create value. Learning theory emphasizes the role of lawyers as participants in a long-term learning process, assisting firms to routinize certain transactions. In this role, lawyers are an important conduit of experience and knowledge. Identity theory frames contracting as an activity that reinforces or establishes organizational identity. Effective lawyers draft contracts that accurately reflect their clients' identities, develop and maintain their clients' brands, and nurture their clients' reputations. Finally, institutional theory highlights the extent to which contracts communicate legitimacy to a broader set of stakeholders. Lawyers are an important professional audience that establishes the boundaries of appropriateness that govern organizational contracting. Lawyers are not only helping firms to make legitimate contracts, they also define appropriate contracts.

²²⁸ An important strand of institutional theory examines diffusion processes of change. See, David Strang & Sarah A. Soule, *Diffusion in Organizations and Social Movements: From Hybrid Corn to Poison Pills*, 24 ANN. REV. SOC. 265 (1998). Some scholars have argued that diffusion is often initiated as low status actors mimic the actions of high status actors. See, e.g., David Strang & Michael W. Macy, *In Search of Excellence: Fads, Success Stories, and Adaptive Emulation*, 107 AM. J. SOC. 147 (2001).

²²⁹ Ronald J. Gilson, *Value Creation By Business Lawyers: Legal Skills And Asset Pricing*, 94 YALE L.J. 239 (1984).

²³⁰ *Id.* at 255. For an interesting test of the value added by lawyers, see C.N.V. Krishnan & Paul A. Laux, *Legal Advisors: Popularity Versus Economic Performance in Acquisitions*, (working paper 2003) ("The market for M&A advisory services does not exhibit evidence of Gilson's conjecture, at least as reflected in stock returns.").

Appendix I **Journals Reviewed**

Economics

Journal of Political Economy, vols. 98-114 (1990-2006)
Econometrica, vols. 58-74 (1990-2006)
American Economic Review, vols. 80-96 (1990-2006)
Quarterly Journal of Economics, vols. 105-121 (1990-2006)
Review of Economic Studies, vols. 57-73 (1990-2006)
Review of Economics & Statistics, vols. 72-88 (1990-2006)

Financial Economics

Journal of Finance, vols. 45-60 (1990-2006)
Journal of Financial Economics, vols. 26-81 (1990-2006)
Review of Financial Studies, vols. 3-19 (1990-2006)

Law & Economics

The Journal of Law & Economics, vols. 33-47 (1990-2004)
The Journal of Law, Economics & Organizations, vols. 6-20 (1990-2004)
Rand Journal of Economics, vols. 21-37 (1990-2006)

Sociology

Journal of Law and Society, vols. 22-31 (1995-2004)
American Journal of Sociology, vols. 95-111 (1995-2004)
American Sociological Review, vols. 55-71 (1995-2004)

Strategy & Management

Academy of Management Journal, vols. 33-49 issue 5 (1990-2006)
Strategic Management Journal, vols. 11-27 (1990-2006)
Organization Science, vols. 1-17 (1990-2006)
Management Science, vols. 36-52 (1990-2006)
Administrative Sciences Quarterly, vols. 35-51 (1990-2006)

Law

Harvard Law Review, vols. 103-119 (1990-2006) (June 2006)
Yale Law Journal, vols. 99-115 (1990-2006) (May 2006)
Columbia Law Review, vols. 90-106 (1990-2006) (June 2006)
Stanford Law Review, vols. 42-58 (1990-2006) (February 2006)
New York University Law Review, vols. 65-81 (1990-2006) (April 2006)
Cornell Law Review, vols. 75-91 (1990-2006) (May 2006)
Virginia Law Review, vols. 76-92 (1990-2006) (May 2006)
California Law Review, vols. 78-94 (1990-2006) (March 2006)
University of Pennsylvania Law Review, vols. 138-154 (1990-2006) (May 2006)
University of Chicago Law Review, vols. 57-73 (1990-2006) (Spring 2006)
Vanderbilt Law Review, vols. 43-59 (1990-2006) (January 2006)
Minnesota Law Review, vols. 75-90 (1990/1991-2006) (May 2006)
UCLA Law Review, vols. 37-53 (1990-2006) (April 2006)
Texas Law Review, vols. 68-84 (1990-2006) (May 2006)
Duke Law Journal, vols. 39-55 (1990-2005) (December 2005)
Northwestern University Law Review, vols. 84-100 (1990-2006) (vol. 100 #1)
Michigan Law Review, vols. 88-104 (1990-2006) (May 2006)
Southern California Law Review, vols. 63-79 (1990-2006) (March 2006)
William and Mary Law Review, vols. 31-47 (1990-2006) (April 2006)
Georgetown Law Journal, vols. 78-94 (1990-2006) (March 2006)

These 20 law reviews are taken from a recent ranking by Ronen Perry, *The Relative Value of American Law Reviews: Refinement and Implementation* (working paper 2006).

Appendix II
Empirical Studies of Contracts in Top Journals: 1990-2006

- Daniel A. Akerberg & Maristella Botticini, *Endogenous Matching and the Empirical Determinants of Contract Form*, 110 J. POL. ECON. 564 (2002).
- Douglas W. Allen & Dean Lueck, *The “Back Forty” on a Handshake: Specific Assets, Reputation, and the Structure of Farmland Contracts*, 8 J. L. ECON. & ORG. 366 (1992).
- Douglas W. Allen & Dean Lueck, *The Role of Risk in Contract Choice*, 15 J. L. ECON. & ORG. 704 (1999).
- Benito Arruñada et al., *Contractual Allocation of Decision Rights and Incentives: The Case of Automobile Distribution*, 17 J. L. ECON. & ORG. 257 (2001).
- Pierre Azoulay & Scott Shane, *Entrepreneurs, Contracts, and the Failure of Young Firms*, 47 MGMT. SCI. 337 (2001).
- Chong-En Bai et al., *Revenue Sharing and Control Rights in Team Production: Theories and Evidence from Joint Ventures*, 35 RAND J. ECON. 277 (2004)
- Lucian Arye Bebchuk et al., *The Powerful Antitakeover Force of Staggered Boards: Theory, Evidence and Policy*, 54 STAN. L. REV. 887 (2002).
- James A. Brickley, *Incentive Conflicts and Contractual Restraints: Evidence From Franchising*, 42 J. L. ECON. 745 (1999).
- Stephen J. Carson et al., *Uncertainty, Opportunism, and Governance: The Effects Of Volatility and Ambiguity on Formal and Relational Contracting*, 49 ACAD. MGMT. J. 1058 (2006).
- Ramon Casadesus-Masanell & Daniel F. Spulber, *The Fable of Fisher Body*, 43 J. L. ECON. 67 (2000).
- Darlene C. Chisholm, *Profit-Sharing Versus Fixed-Payment Contracts: Evidence from the Motion Pictures Industry*, 13 J. L. ECON. & ORG. 169 (1997).
- Conrad S. Ciccotello et al., *Research and Development Alliances: Evidence from a Federal Contracts Repository*, 47 J. L. ECON. 123 (2004).
- Ronald H. Coase, *The Acquisition of Fisher Body by General Motors*, 43 J. L. ECON. 15 (2000).
- Kenneth S. Corts & Jasjit Singh, *The Effect of Repeated Interaction on Contract Choice: Evidence from Offshore Drilling*, 20 J. L. ECON. & ORG. 230 (2004).
- Keith J. Crocker & Kenneth J. Reynolds, *The Efficiency of Incomplete Contracts: An Empirical Analysis of Air Force Engine Procurement*, 24 RAND J. ECON. 126 (1993).
- Keith J. Crocker & Thomas P. Lyon, *What Do “Facilitating Practices” Facilitate? An Empirical Investigation of Most-Favored-Nation Clauses in Natural Gas Contracts*, 37 J. L. ECON. 297 (1994).

- Robert Daines and Michael Klausner, *Do IPO Charters Maximize Firm Value? Antitakeover Protection in IPOs*, 17 J. L. ECON. & ORG. 83 (2001).
- Srikant Datar et al., *Earnouts: The Effects of Adverse Selection and Agency Costs on Acquisition Techniques*, 17 J. L. ECON. & ORG. 201 (2001).
- Daniel W Elfenbein & Josh Lerner, *Ownership and Control Rights in Internet Portal Alliances, 1995-1999*, 34 RAND J. ECON. 356 (2003).
- Victor Fleischer, *Brand New Deal: The Google IPO And The Branding Effect Of Corporate Deal Structures*, 104 MICH. L. REV. 1581 (2006).
- Robert F. Freeland, *Creating Holdup Through Vertical Integration: Fisher Body Revisited*, 43 J. L. ECON. 33 (2000).
- Paul Gompers & Josh Lerner, *The Use of Covenants: An Empirical Analysis of Venture Partnership Agreements*, 39 J. L. ECON. 463 (1996).
- Anandasivam Gopal et al., *Contracts in Offshore Software Development: An Empirical Analysis*, 49 MGMT. SCI. 1671 (2003).
- Gillian K. Hadfield, *Problematic Relations: Franchising and the Law Of Incomplete Contracts*, 42 STAN. L. REV. 927 (1990).
- F. Andrew Hanssen, *The Block Booking of Films Reexamined*, 43 J. L. ECON. 395 (2000).
- R. Glenn Hubbard & Robert Weiner, *Efficient Contracting and Market Power: Evidence From the U.S. Natural Gas Industry*, 34 J. L. ECON. 25 (1991).
- Paul L. Joskow, *The Performance of Long-Term Contracts: Further Evidence From Coal Contracts*, 21 RAND J. ECON. 251 (1990).
- Marcel Kahan & David Yermack, *Investment Opportunities and the Design of Debt Securities*, 14 J. L. Econ. Org. 136 (1998).
- Arturs Kalnins & Kyle J. Mayer, *Relationships and Hybrid Contracts: An Analysis of Contract Choice in Information Technology*, 20 J. L. ECON. & ORG. 207 (2004).
- Roy W. Kenney & Benjamin Klein, *How Block Booking Facilitated Self-Enforcing Film Contracts*, 43 J. L. ECON. 427 (2000).
- Benjamin Klein, *Fisher-General Motors and the Nature of the Firm*, 43 J. L. ECON. 105 (2000).
- Patricia Koss, *Self-Enforcing Transactions: Reciprocal Exposure in Fisheries*, 15 J. L. ECON. & ORG. 737 (1999).
- Keith B. Leffler & Randal R. Rucker, *Transaction Costs and the Efficient Organization of Production: A Study of Timber-Harvesting Contracts*, 99 J. POL. ECON. 1060 (1991).
- Kenneth Lehn & Annette Poulsen, *Contractual Resolution of Bondholder-Stockholder Conflict in Leveraged Buyouts*, 34 J. L. ECON. 645 (1991).
- Michael L. Lemmon & James S. Schallheim, *Do Incentives Matter? Managerial Contracts for Dual-Purpose Funds*, 108 J. POL. ECON. 273 (2000).

- Gary D. Libecap & James L. Smith, *The Self-Enforcing Provisions of Oil and Gas Unit Operating Agreements: Theory and Evidence*, 15 J. L. ECON. & ORG. 526 (1999).
- Thomas P. Lyon & Steven C. Hackett, *Bottlenecks and Governance Structures: Open Access and Long-Term Contracts in Natural Gas*, 9 J. L. ECON. & ORG. 380 (1993).
- Kyle J. Mayer & Nicholas S Argyres, *Learning to Contract: Evidence from the Personal Computer Industry*, 15 ORG. SCI. 394 (2004).
- Kyle J. Mayer et al., *Are Supply and Plant Inspections Complements or Substitutes? A Strategic and Operational Assessment of Inspection Practices in Biotechnology*, 50 MGMT. SCI. 1064 (2004).
- Kyle J. Mayer & Robert M. Salomon, *Capabilities, Contractual Hazards, And Governance: Integrating Resource-Based And Transaction Cost Perspectives*, 49 ACAD. MGMT. J. 942 (2006).
- J. Harold Mulherin et al., *Prices are Property: The Organization of Financial Exchanges From the Transaction Cost Perspective*, 34 J. L. ECON. 591 (1991).
- Joseph C. Mullin & Wallace P. Mullin, *United States Steel's Acquisition of the Great Northern Ore Properties: Vertical Foreclosure or Efficient Contractual Governance?*, 13 J.L. ECON. & ORG. 74 (1997).
- Joanne E. Oxley, *Appropriability Hazards and Governance in Strategic Alliances: A Transaction Cost Approach*, 13 J. L. ECON. & ORG. 387 (1997).
- John F. Padgett & Paul D. MacLean. *Organizational Invention and Elite Transformation: The Birth of Partnership Systems in Renaissance Florence*, 111 AM. J. SOC. 1463 (2006).
- Stephen Craig Pirrong, *Contracting Practices in Bulk Shipping Markets: A Transaction Cost Explanation*, 36 J. L. ECON. 937 (1993).
- Russell Pittman, *Specific Investments, Contracts, and Opportunism: The Evolution of Railroad Sidetrack Agreements*, 34 J. L. ECON. 565 (1991).
- Rachelle C. Sampson, *The Cost of Misaligned Governance in R&D Alliances*, 20 J. L. ECON. & ORG. 484 (2004).
- Hugh T. Scogin, Jr., *Between Heaven and Man: Contract and the State in Han Dynasty China*, 63 S. Cal. L. Rev. 1325 (1990).
- Andrea Shepard, *Contractual Form, Retail Price, and Asset Characteristics in Gasoline Retailing*, 24 RAND J. ECON. 58 (1993).
- Mary M. Shirley and Lixin Colin Xu, *Information, Incentives, and Commitment: An Empirical Analysis of Contracts Between Government and State Enterprises*, 14 J. L. ECON. & ORG. 358 (1998).
- Gordon Smith, *The Exit Structure of Venture Capital*, 53 UCLA L. REV. 315 (2005).
- Raji Srinivasan & Thomas H. Brush, *Supplier Performance in Vertical Alliances: The Effects of Self-Enforcing Agreements and Enforceable Contracts*, 17 ORG. SCI. 436 (2006).