

EMPIRICAL SCHOLARSHIP IN CONTRACT LAW: POSSIBILITIES AND PITFALLS

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Professor Korobkin examines and analyzes empirical contract law scholarship over the last fifteen years in an attempt to guide scholars concerning how empiricism can be used in and enhance the study of contract law. After defining the parameters of the study, Professor Korobkin categorizes empirical contract law scholarship by both the source of data and main purpose of the investigation. He then describes and analyzes three types of criticisms that can be made of empirical scholarship, explains how these criticisms pertain to contract law scholarship, and considers what steps researchers can take to minimize the force of such criticisms.

This article provides a critical analysis of empirical scholarship in contract law. Its primary goal is to help contracts scholars determine whether they wish to add an empirical component to their academic work and how they might do so, but the observations and conclusions will hopefully be of interest to empiricists or would-be empiricists interested in any area of the law.

The article analyzes empirical contract law scholarship from two very different perspectives. First, in order to provide scholars with a menu of the empirical approaches available to them, the article categorizes empirical contract law scholarship according to two criteria: the sources of the empirical data relied upon, and the use—or purpose—of the empirical inquiry. This portion of the analysis is based on a review of the body of empirical contract law scholarship published over the last fifteen years. Second, in order to help scholars determine whether their research efforts would be used most productively in the pursuit of empirical analysis, the article describes and analyzes a series of conceptual

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problems with using empiricism in contract law scholarship. None of these problems undermine the general message that empiricism can be extremely useful in studying contract law, but the discussion seeks to both warn scholars of the drawbacks of empirical research so that they can approach the enterprise realistically and aid them in taking steps to minimize the extent of these drawbacks.

Part I of this article describes the scope of the analysis to follow: what is considered “empirical,” and what is considered “contract law.” An initial conclusion presented in this part is that, within the definitional boundaries provided, the body of recent research published in law journals is surprisingly small.¹ This alone suggests that the opportunities for making a significant scholarly contribution in the field are readily available. It also might suggest that the difficulties of writing in the genre are significant, a problem considered later in the article.

Part II offers two nonexclusive schemes for categorizing empirical contract law scholarship in ways that hopefully will aid interested scholars in thinking coherently about their options as potential empiricists. Contract law scholarship is first described in terms of four possible sources of empirical data: judicial opinions, actual contracting practices, contracting experiments, and nonexpert opinions about contract law. Second, contract law scholarship is described in terms of three primary uses of empirical data: positive doctrinal analysis, effects of doctrine on behavior, and normative doctrinal analysis.

Part III creates three categories of criticisms that can be levied against empirical contract law scholarship: that findings might not be generalizable; that the data presented fails to adequately support the article’s thesis; and that the data itself is inconclusive. This part also describes how these criticisms can be applied to the body of existing contract law scholarship, and it offers suggestions as to how empirical scholars can design their studies to minimize the force of these criticisms.

Part IV concludes by pointing out one area of study in particular that would likely benefit tremendously from empirical research but has been almost entirely ignored by empirical contract law scholars: the effect of mandatory contract rules on private contracting behavior.

I. SCOPE AND INITIAL FINDINGS

Prior to categorizing the literature, it is necessary to define what is within the scope of the analysis and what is not or, more specifically, what qualifies as “empirical material,” what qualifies as scholarship about “law” generally, and what qualifies as scholarship about “contract law” in particular.

1. The bibliography of articles considered is attached to this article as the Appendix.

Because this symposium focuses on different approaches to empirical and experimental scholarship, for the purposes of this article, I take an expansive view of empiricism. Empiricism is often understood by legal scholars to refer exclusively to statistical or quantitative analysis.² It is defined here, however, to include any attempt to collect and analyze a set of data for more than anecdotal purposes,³ whether or not the analysis is quantitative and even if the data set is not a particularly systematic or a clearly representative subset of the population in which the author is ultimately interested. Thus, an article based on a survey of nearly one hundred business people who enter into commercial contracts is considered empirical and included in the study,⁴ but an article based on interviews with three firms about their contracting practices is excluded.⁵

The careful analysis of judicial opinions is, of course, the dominant form of legal scholarship. In a broad sense, such analysis is empirical because it relies on external source material. To include such scholarship in a survey of empirical research, however, would be to fail to narrow the class of articles surveyed much at all.⁶ Thus, the nonsystematic analysis of judicial opinions is excluded from this study. Articles that examine a large number of cases systematically, however, are considered empirical for present purposes.

Although the definition of “empirical scholarship” employed here is relatively broad, because this article is directed primarily to legal scholars engaged in the study of contract doctrine, “law” is defined narrowly. To qualify for examination in this survey, an article must explicitly discuss one or more elements of contract *doctrine*—that is, rules for determining when contracts are enforceable, or of default or mandatory terms of enforceable contracts—either from a descriptive or normative perspective.

There is extensive empirical literature from psychology and economics that studies negotiating behavior.⁷ Because the result of a successful negotiation is a contract, this literature can be described as devoted to the subject of “contracting,” but it is not considered “contract

2. See, e.g., Michael Heise, *The Importance of Being Empirical*, 26 PEPP. L. REV. 807, 810–11 (1999); Craig A. Nard, *Empirical Legal Scholarship: Reestablishing a Dialogue Between the Academy and the Profession*, 30 WAKE FOREST L. REV. 347, 348–61 (1995).

3. My definition is more consistent with how the term “empirical” is usually understood by social scientists, although it is somewhat more narrow than a common definition that requires only that a study makes some observation about how the world works. See Lee Epstein & Gary King, *Exchange: Empirical Research and the Goals of Legal Scholarship: The Rules of Inference*, 69 U. CHI. L. REV. 1 (2002). If legal scholarship were classified as “empirical” merely by relying on some observation of the world, nearly all scholarship would qualify.

4. See, e.g., David Baumer & Patricia Marschall, *Willful Breach of Contract for the Sale of Goods: Can the Bane of Business Be an Economic Bonanza?*, 65 TEMP. L. REV. 159, 160, 164–72 (1992); Russell J. Weintraub, *A Survey of Contract Practice and Policy*, 1992 WIS. L. REV. 1, 10–51.

5. Britt-Mari Blegvad, *Commercial Relations, Contract, and Litigation in Denmark: A Discussion of Macaulay's Theories*, 24 LAW & SOC'Y REV. 397, 404–07 (1990).

6. See *supra* note 3.

7. This literature is too extensive to cite, even selectively. For one overview, see ALVIN E. ROTH, INTRODUCTION TO EXPERIMENTAL ECONOMICS 3, 40–49 (John H. Hagel & Alvin E. Roth eds., 1995).

law” scholarship for the purposes of this article. Terms specified in negotiated agreements are usually enforceable by the coercive apparatus of the state. Consequently, when individuals or entities contract, they create a private law regime to order their relationship. But despite the relationship of this literature directly to the subject of contracting and, more tenuously, to the understanding of law, it is also not considered in this article unless it also explicitly considers the doctrinal implications of private ordering mechanisms. For the same reason that empirical studies of negotiation are excluded from this analysis, the relatively large economics literature examining the terms selected by contracting parties in particular industries or situations⁸ is also excluded from this analysis unless the study offers some link to one or more areas of contract doctrine.

To further define the scope of the survey, “contract law” is understood here as the group of subjects typically covered in first-year law school contracts classes, thus excluding studies of doctrinal issues that are contractual in nature but taught in more specialized substantive courses.⁹ Because this article considers only scholarship with a link to legal doctrine, and because social science literature in nonlegal journals rarely concerns itself with the analysis of legal doctrine, only law reviews and “law and” journals were consulted.

The first relevant finding of this analysis is that, although there is a very large body of empirical studies of contracting, there is extremely little empirical contract law scholarship being produced in the legal academy today. With a research assistant’s help, I conducted an extensive search for articles relevant to the topic over the last fifteen years. Despite the fact that more than 500 law journals are published regularly in the United States alone,¹⁰ and that contract law is a relatively rich area

8. See, e.g., Douglas Allen & Dean Lueck, *Contract Choice in Modern Agriculture: Cash Rent Versus Cropshare*, 35 J.L. & ECON. 397, 404–22 (1992) (analyzing whether midwestern farmers and landowners prefer “cropshare” or “cash-rent” terms in contracts for the leasing of farmland); 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, 386–96 (1987) (examining price-adjustment terms in petroleum coke contracts); Paul L. Joskow, *Price Adjustment in Long-Term Contracts: The Case of Coal*, 31 J.L. & ECON. 47, 49–81 (1988) (examining price-adjustment terms in long-term coal contracts); Thomas M. Palay, *Comparative Institutional Economics: The Governance of Rail Freight Contracting*, 13 J. LEGAL STUD. 265, 266–86 (1984) (comparing terms of rail shipping contracts when the rail line has to make a contract-specific investment and when the rail line does not).

9. For example, Ronald Mann’s excellent empirical work on secured transactions falls outside the scope of this analysis. See, e.g., Ronald J. Mann, *Explaining the Pattern of Secured Lending*, 110 HARV. L. REV. 625 (1997); Ronald J. Mann, *The First Shall Be Last: A Contextual Argument for Abandoning Temporal Rules of Lien Property*, 75 TEX. L. REV. 11 (1996); Ronald J. Mann, *The Role of Letters of Credit in Payment Transactions*, 98 MICH. L. REV. 2494 (2000); Ronald J. Mann, *The Role of Secured Credit in Small Business Lending*, 86 GEO. L.J. 1 (1997); Ronald J. Mann, *Secured Credit and Software Financing*, 85 CORNELL L. REV. 134 (1999); Ronald J. Mann, *Strategy and Force in the Liquidation of Secured Debt*, 96 MICH. L. REV. 159 (1997); Ronald J. Mann, *Verification Institutions in Financing Transactions*, 87 GEO. L.J. 2225 (1999).

10. According to Anderson publishing, there are 179 student-edited, general interest law reviews. See Anderson Publishing Co., *1999 On-Line Directory of Law Reviews and Scholarly Legal Periodicals*, at <http://www.andersonpublishing.com/lawschool/directory> (visited July 18, 2001). Tracey George and Chris Guthrie report that, as of January 1998, there were 330 specialized law journals pub-

for legal scholarship,¹¹ I was able to identify fewer than thirty articles relevant to this review,¹² and many of these either only arguably meet the definition of “empirical”¹³ or provide a tenuous link between the data gathered and any contract doctrine.¹⁴ Even assuming that my search failed to identify all of the relevant publications,¹⁵ it seems extremely conservative to conclude that the empirical study of contract law is a very underdeveloped genre of legal scholarship.

Notwithstanding the relative dearth of empirical contract law scholarship, there is a substantial enough body of literature to create a categorization scheme. It is hoped that contracts scholars can use this scheme to envision how they might incorporate empirical analysis into their future scholarship.

II. CATEGORIZING EMPIRICAL CONTRACT SCHOLARSHIP: SOURCES AND USES

Empirical contract law scholarship can be categorized in two basic ways: according to the source of the empirical data (i.e., what constitutes the “data” on which the study relies), and according to the descriptive or normative purpose of the article (i.e., the point of collecting the empirical data). Neither mechanism provides a perfectly tidy classification scheme,

lished by law schools on their own or in conjunction with other departments or professional organizations. Tracey E. George & Chris Guthrie, *An Empirical Evaluation of Specialized Law Reviews*, 26 FLA. ST. U. L. REV. 813, 822 (1999).

11. A representative survey of the number of articles listed in the Index to Legal Periodicals computer database under the subject heading “Contracts” from 1985 to 1999 reveals 230 articles published in 1985, 287 in 1990, 446 in 1995, and 462 in 1999. Marc Galanter, *Contract in Court; or Almost Everything You May or May Not Want to Know About Contract Litigation*, 2001 WIS. L. REV. 577, 613 tbl.10.

12. See *infra* Appendix.

13. This is to say that to describe the analysis as “systematic” is to be extremely generous.

14. For example, Ian Ayres’s excellent articles based on his empirical analysis of new car contract negotiations is included in the scope of this article, even though the contract law implications of the study are discussed by the author only briefly. See Ian Ayres, *Fair Driving: Gender and Race Discrimination in Retail Car Negotiations*, 104 HARV. L. REV. 817, 857–72 (1991) [hereinafter Ayres, *Fair Driving*] (presenting data but not discussing implications for contract doctrine); Ian Ayres, *Further Evidence of Discrimination in New Car Negotiations and Estimates of Its Cause*, 94 MICH. L. REV. 109, 143–44 (1995) [hereinafter Ayres, *Further Evidence*] (briefly mentioning various approaches regulators could use to require more full and honest disclosure of car dealers’ costs). Marcel Kahan and Michael Klausner’s two valuable articles studying event-risk terms in corporate bond covenants are also included, although the only discussion related to contract doctrine in the former article is a brief mention that the authors’ findings raise “complex questions” about whether mandatory terms should be required in bond covenants. See Marcel Kahan & Michael Klausner, *Antitakeover Provisions in Bonds: Bondholder Protection or Management Entrenchment*, 40 UCLA L. REV. 931, 980–82 (1993).

15. As it turns out, empirical scholarship—even within a single legal discipline such as contract law—is quite difficult to identify through literature searches. There is no finite list of terms that appear in empirical articles but not nonempirical articles. In addition, empirical articles do not necessarily cite to other empirical articles, unless the other articles happen to examine the same doctrinal issue. The author thanks UCLA law student Paul Foust for his research assistance, and a number of other contracts professors including Ian Ayres, Dan Bussel, Mark Gergen, Gillian Lester, Arthur Rossett, and Eric Talley for their assistance in identifying relevant articles. Any omissions, of which there are doubtlessly some, are, of course, the sole responsibility of the author.

but both are workable. Many articles have more than one use, for example, but they can still be classified by their dominant use, or placed in more than one category.

A. *Sources of Empirical Data*

Recent empirical contract law scholarship relies on four types of data sources: judicial opinions, studies of the actual contracting practices of contracting parties, experimental studies of contracting behavior using hypothetical contracting parties, and studies of the opinions of contracting parties about contract law and contracting practices. This section describes these four categories of data sources, using illustrative examples from the literature.

1. *Judicial Opinions*

All legal scholarship that attempts to describe or critique doctrine must, by definition, rely on judicial opinions. Because judicial opinions are used as data for this type of scholarship, all analysis of doctrine is empirical, at least broadly speaking. A fundamental methodological distinction exists, however, between two types of studies based on judicial opinions. On one hand are articles that analyze the internal coherence and logic of one, several, or even a large number of judicial opinions. Although this literature relies on data derived from the world outside the author's mind, it usually both lacks a quantitative dimension and makes no attempt to be particularly systematic in its analysis. For these reasons, this large body of common contract scholarship is omitted from this study.

On the other hand, studies that attempt to systematically analyze all judicial opinions related to a particular subject over a certain time period are included in this analysis of empirical scholarship. This body of literature, itself substantially more limited than common doctrinal analysis, ranges widely in its level of quantitative sophistication. One example of a study that falls on the low end of the scale of quantitative sophistication is Farber and Matheson's well known investigation of promissory estoppel doctrine,¹⁶ in which the authors reviewed all of the published opinions citing section 90 of the first or second restatements of contracts over a ten-year period—222 cases in all¹⁷—and drew conclusions about what objective factors drive court determinations of whether or not the promisor is liable to the promisee.¹⁸

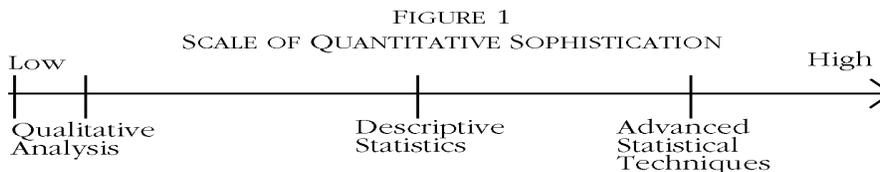
16. Daniel A. Farber & John H. Matheson, *Beyond Promissory Estoppel: Contract Law and the "Invisible Handshake"*, 52 U. CHI. L. REV. 903 (1985).

17. *Id.* at 907 n.14.

18. *Id.* at 925–29.

Toward the center of the scale of quantitative sophistication are studies that use descriptive statistics to identify the factors that drive court decisions. For example, Robert Hillman followed the Farber and Matheson study by drawing conclusions from all of the judicial opinions dealing with promissory estoppel over a two-year period.¹⁹ Hillman, however, coded the opinions for a range of objective facts including the subject matter of the disputes, the type of litigants, the procedural posture of the cases, and the reasons identified by courts for their decision,²⁰ thus enabling him to offer a quantitative picture of which factors are correlated with different litigation outcomes in promissory estoppel opinions.²¹ Using a similar approach, Peter Whitmore analyzed 105 judicial opinions ruling on the enforceability of noncompetition clauses in employment contracts.²²

On the high end of the quantitative sophistication scale are studies that provide a more complex statistical analysis of a body of judicial opinions. Surprisingly, there are very few examples of this approach. The best example in the contract law context is Fred McChesney,²³ who used 134 cases as a data set from which to try to understand when the law recognizes a cause of action for tortious interference with contract.²⁴ For his analysis, McChesney coded the cases in his sample based on the presence or absence of various facts relevant to a series of different hypotheses about what interests the tortious interference doctrine exists to protect.²⁵ He then conducted a multiple regression analysis to determine which facts do a better job of predicting that a court will find liability for tortious interference.²⁶



19. Robert A. Hillman, *Questioning the "New Consensus" on Promissory Estoppel: An Empirical and Theoretical Study*, 98 COLUM. L. REV. 580, 582–85 (1998) [hereinafter Hillman, *New Consensus*]; see also Robert A. Hillman, *The Unfulfilled Promise of Promissory Estoppel in the Employment Setting*, 31 RUTGERS L.J. 1, 5–6 (1999) (using the same data set to compare promissory estoppel claims in the employment setting to promissory estoppel claims brought in other contexts).

20. Hillman, *New Consensus*, *supra* note 19, at 582–83.

21. *Id.* at 588–602.

22. Peter J. Whitmore, *A Statistical Analysis of Noncompetition Clauses in Employment Contracts*, 15 J. CORP. L. 483, 494 n.67 (1990).

23. Fred S. McChesney, *Tortious Interference with Contract Versus "Efficient" Breach: Theory and Empirical Evidence*, 28 J. LEGAL STUD. 131 (1999).

24. *Id.* at 170–85. The McChesney article directly examines a tort doctrine, but it is included in this analysis because the existence of the tort of interfering with a contract directly affects our understanding of contract doctrine—in particular, whether contract law remedies encourage efficient breaches.

25. *Id.* at 173–76.

26. *Id.* at 180–85.

What all of these types of studies have in common is that they attempt to use objective facts found in judicial opinions as data points in their analysis, rather than examining the internal logic or reasoning of opinions, as is much more commonplace in legal scholarship generally and contract law scholarship specifically.

2. *Actual Contracting Practices*

A second source of data for the empirical study of contract law—and a source more unique to the study of contract law—is the actual contracting practices of individuals or groups that routinely enter into contracts and thus are subject to the legal restrictions imposed by doctrine. This data source can be subdivided into three distinct subcategories.

The first type of studies of actual contracting practices attempt to describe in-depth the contracting patterns and norms generally followed by a particular type or group of contracting party. This type of study is usually descriptive and does not necessarily provide any quantitative analysis. The best example of this approach in the field of contract law can be found in Lisa Bernstein's research on the practices of a variety of trade associations, including those whose members engage in the trade of diamonds,²⁷ grain and feed,²⁸ hay, textiles, and silk.²⁹

A somewhat more quantitative method for understanding actual contracting behavior, used by a handful of scholars, is to interview a relatively large number of contract decision makers and base conclusions on the typical responses received. This was Stewart Macaulay's approach³⁰ in his 1963 study of contracting behavior famous for concluding that contract law seemed to have little effect on how business people ordered their private relationships, and that most business people involved in the contracting process had little contract law knowledge at all.³¹ Given the renown of the Macaulay study, it is surprising that only a handful of contract law articles published in the last fifteen years attempt to build on his methodology. Following in Macaulay's footsteps, Daniel Keating interviewed thirteen repeat players in commercial transactions about various contracting practices,³² and later interviewed officials who deal with contracting at twenty-five companies for a study specifically on the "battle of

27. Lisa Bernstein, *Opting Out of the Legal System: Extralegal Contractual Relations in the Diamond Industry*, 21 J. LEGAL STUD. 114, 130–48 (1992) [hereinafter Bernstein, *Opting Out*].

28. Lisa Bernstein, *Merchant Law in a Merchant Court: Rethinking the Code's Search for Imminent Business Norms*, 144 U. PA. L. REV. 1765, 1798–1803 (1996) [hereinafter Bernstein, *Merchant Law*]; see also Lisa Bernstein, *The Questionable Empirical Basis of Article 2's Incorporation Strategy: A Preliminary Study*, 66 U. CHI. L. REV. 710, 725–30 (1999) [hereinafter Bernstein, *The Questionable Empirical Basis*].

29. Bernstein, *The Questionable Empirical Basis*, *supra* note 28, at 719–25, 730–40.

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

31. *Id.* at 58–61.

32. Daniel Keating, *Measuring Sales Law Against Sales Practice: A Reality Check*, 17 J.L. & COM. 99, 100 n.7 (1997) [hereinafter Keating, *A Reality Check*].

the forms” problem.³³ Russell Weintraub surveyed eighty-four corporate general counsels about a range of contracting practices, including their use of contingent price terms, their willingness to modify terms in long-term contracts in light of changed circumstances, and their propensity to act in reliance on offers that had not yet been accepted.³⁴ Using an even larger sample but focusing on a more narrow problem, J. Holt Verkerke surveyed 221 employers as to whether their contracts with employees specify that the employment is “at will” or can be terminated only for “just cause.”³⁵

A few scholars have also attempted to study actual contracting practices directly by examining large numbers of contracts, rather than relying on self-reports of lawyers or business people concerning their contracting behavior. For example, in one article, Kahan and Klausner studied a specific type of term, “event-risk covenants,” that determine what future events trigger bondholder rights to sell their bonds or convert them to stock, embedded in 101 different corporate bonds issued over a five-year period.³⁶ In another article, the same authors studied terms in a similar sample of 122 bonds.³⁷ John Burke considered the implications for contract doctrine of a 1996 study by the New Jersey Law Revision Commission that examined the terms provided in fifty typical consumer standard form contracts.³⁸

3. *Negotiating Experiments*

As noted above, there are a wealth of experimental studies on how negotiators enter into contracts and what terms they agree on, most conducted by psychologists or experimental economists.³⁹ There are a small number of such studies conducted by law professors that provide explicit links to contract law doctrine.

In one experiment Stewart Schwab asked experimental subjects to represent either a labor union or management, and then to negotiate with a subject assigned the opposite role a series of terms in a hypotheti-

33. Daniel Keating, *Exploring the Battle of the Forms in Action*, 98 MICH. L. REV. 2678, 2681 (2000) [hereinafter Keating, *Battle of the Forms*].

34. Russell J. Weintraub, *A Survey of Contract Practice and Policy*, 1992 WIS. L. REV. 1, 2 (discussing the results of a questionnaire eliciting information on contract practices in U.S. companies). Weintraub sent his survey to general counsels at 182 geographically diverse corporations of various sizes, of which approximately forty-six percent were returned completed. *Id.* at 1 n.1.

35. J. Hoult Verkerke, *An Empirical Perspective on Indefinite Term Employment Contracts: Resolving the Just Cause Debate*, 1995 WIS. L. REV. 838, 863–69.

36. Marcel Kahan & Michael Klausner, *Standardization and Innovation in Corporate Contracting (or “The Economics of Boilerplate”)*, 83 VA. L. REV. 713, 742 (1997) [hereinafter Kahan & Klausner, *Standardization*].

37. Marcel Kahan & Michael Klausner, *Antitakeover Provisions in Bonds: Bondholder Protection or Management Entrenchment?*, 40 UCLA L. REV. 931, 950–51 (1993).

38. John J.A. Burke, *Contract as Commodity: A Nonfiction Approach*, 24 SETON HALL LEGIS. J. 285, 291–94 (2000).

39. See *supra* text accompanying note 7.

cal collective bargaining agreement.⁴⁰ By manipulating the default contract terms between negotiating dyads,⁴¹ Schwab was able to test the impact on contract outcomes of law-supplied default terms. In a somewhat different style of experiment, I employed subjects to play the role of a lawyer representing a shipping company in contract negotiations with a large customer, and to determine the maximum discount they would recommend their client offer or the minimum additional payment amount they would recommend their client demand in order to contract around law-supplied default rules.⁴² As in Schwab's experiment, conclusions about the effect of default terms on contracting behavior were drawn by comparing the responses provided by subjects who were given different information about the content of the law-supplied default.⁴³

In an interesting study using actual contracting parties rather than subjects playing the role of a hypothetical contracting party, Ian Ayres trained shills to negotiate over the price of new cars with actual car salesmen.⁴⁴ Each shill negotiated with the salesmen according to the same script; the experimental manipulation came by manipulating the race and gender of the shills.⁴⁵ By doing this, Ayres was able to draw conclusions about the effects of the race and gender of the potential car buyer on the negotiating behavior of the subject salesmen.⁴⁶

4. *Nonexpert Opinions About the Law*

Finally, a small number of empirical contract law articles rely on surveys of nonexperts about their perceptions of what contract law does and/or should require of contracting parties. Possible sources of such opinions are parties that routinely engage in contracting behavior or individuals who are representative of a class of people likely to enter into specific types of contracts. Pauline Kim used the latter source, surveying 330 unemployed workers about their perceptions of what grounds for an employer's discharge of an employee were legally permissible.⁴⁷ David Baumer and Patricia Marschall used the former source, surveying execu-

40. Stewart Schwab, *A Coasean Experiment on Contract Presumptions*, 17 J. LEGAL STUD. 237, 237-38 (1988).

41. For example, in Schwab's experiment, one-half of the dyads were told that the law-supplied default rule allowed management to relocate work to other plants at will unless the collective bargaining agreement between labor and management specified otherwise, while the other half of the dyads were told that the law-supplied default prevented management from relocating work. *Id.* at 249.

42. Russell B. Korobkin, *The Status Quo Bias and Contract Default Rules*, 83 CORNELL L. REV. 608, 633-37 (1998) [hereinafter Korobkin, *Status Quo Bias*]; see also Russell B. Korobkin, *Inertia and Preference in Contract Negotiation: The Psychological Power of Default Rules and Form Terms*, 51 VAND. L. REV. 1583 (1998).

43. Korobkin, *Status Quo Bias*, *supra* note 42, at 633-37.

44. Ayres, *Further Evidence*, *supra* note 14, at 113-15; see also Ayres, *Fair Driving*, *supra* note 14, at 825-26.

45. Ayres, *Further Evidence*, *supra* note 14, at 113.

46. *Id.* at 119.

47. 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).

tives of 119 companies about their views on the ethical implications of willfully breaching a contractual obligation in order to take advantage of a better business opportunity,⁴⁸ as did Keating, who asked one of his samples of contracting parties their views on proposals to reform section 2-207 of the U.C.C., in addition to investigating their contracting practices.⁴⁹

B. *Uses of Empirical Data*

Just as the sources of empirical data in contract law scholarship can be categorized, so too can the uses to which that data is put. Here, I divide the uses of empirical data into three groupings: to understand the contours of contract law doctrine (“positive analysis of doctrine”), to understand how doctrine effects the contracting behavior private parties (“effect of doctrine”), and to support proposed doctrinal shifts (“doctrinal change”).

Two initial comments about this categorization scheme are in order. First, there is obviously some degree of correlation between the source of empirical data and its use. To take the most stark example, only one source—judicial opinions—is used for positive analysis of doctrine. Categorizing empirical scholarship first by source and second by use of data is not redundant, however, because scholars have used all four types of sources for more than one use. For example, authors sometimes rely on court opinions for primary uses other than positive doctrinal analysis.

Second, empirical scholarship often has more than one purpose. Some articles, for example, are used for either the purpose of positive doctrinal analysis or the effect of doctrine, and also to support a call for doctrinal change. Consequently, dividing the uses of empirical contract law scholarship into three categories suggests a neat division when reality is not so tidy. Nonetheless, by viewing the body of empirical scholarship through the lens of this categorization scheme, it is hoped that future empirical contract law scholars will more clearly perceive the range of purposes for which the collection of empirical data might enhance their work.

1. *Positive Doctrinal Analysis*

As noted above, the positive analysis of doctrine is the one use of empirical contract law scholarship derived from a single source of data: judicial opinions. Although it can be said that all scholarly discussions of judicial opinions have as at least one goal the description of the state of the relevant law, most discussions of case law attempt primarily to explicate or critique the reasoning of one, or at most a few, courts, and per-

48. Baumer & Marschall, *supra* note 4, at 164–72.

49. Keating, *Battle of the Forms*, *supra* note 33, at 2704–12.

haps predict how other cases with different facts would be resolved if the logic of the opinions in question were followed in future cases.

Empirically driven positive doctrinal analysis, whether based on qualitative assessments of large numbers of cases or quantitative assessments, has the following different goal: to look beyond judges' professed reasoning to identify what objectively identifiable factors actually drive case outcomes. These articles often begin with two or more inconsistent descriptions of what factors actually drive doctrine, two or more inconsistent normative theories of what factors should drive doctrine, or some combination of the two, and then use the analysis of large numbers of cases to determine which competing description of the world is more accurate. For example, Farber and Matheson concluded that, contrary to the statements of black letter law that promissory estoppel depends on detrimental reliance, the rule that courts actually enforce in practice is that "any promise made in furtherance of an economic activity is enforceable."⁵⁰ Hillman disagrees, citing the fact that in the two years of cases he analyzed, ninety-three percent of all promissory estoppel claims that succeeded on the merits included a judicial finding and description of reliance on the part of the nonpromising party.⁵¹

McChesney attempted to determine which of six hypothesized factors were most likely to cause a court to find a defendant liable for tortious interference with contract.⁵² He found that the two observable factors most predictive of liability rulings suggest that courts are concerned with protecting the property rights of the nonbreaching party rather than encouraging efficient breaches while discouraging inefficient breaches.⁵³ Whitmore considered which factual circumstances were correlated with courts enforcing noncompetition agreements in employment contracts, and found that, among many relevant facts, the exposure of an employee to the employer's customer lists was most highly correlated with enforcement of the provision.⁵⁴

Empirically driven, positive doctrinal analysis is most enlightening in two types of situations. First, this type of analysis has a dramatic impact when it calls into question the descriptive accuracy of clear, well-established "black letter law." Farber and Matheson's promissory estoppel analysis garnered attention, in part, because the authors claimed to have determined that a clear doctrinal requirement—detrimental reli-

50. Farber & Matheson, *supra* note 16, at 904–05.

51. Hillman, *New Consensus*, *supra* note 19, at 597 tbl.4.1.

52. (1) The court found the defendant liable for an independent tort; (2) Standard contract remedies would have undercompensated the nonbreaching party; (3) The nonbreaching party made a large contract-specific investment; (4) The breaching party was insolvent or the small stakes made collection of contract damages infeasible; (5) The contract was not "at will"; (6) The defendant knew that it was interfering with an existing contract. McChesney, *supra* note 23, at 173–76.

53. *Id.* at 176–84.

54. Whitmore, *supra* note 22, at 526.

ance⁵⁵—actually did not play a significant role in decided cases.⁵⁶ Jason Johnston’s study of all decisions concerning the Statute of Frauds published in the U.C.C. Reporter 2d over a five-year period⁵⁷ is notable for the same reason. Although there is no indication in the “black letter” law that the relationship between contracting parties is relevant to whether a signed writing is required for contract enforcement,⁵⁸ Johnston found that when “strangers” (one-time contracting partners) raised a Statute of Frauds defense to a contract enforcement action, courts found that a signed writing was needed in all but one case, whereas when repeat contracting partners raised a Statute of Frauds defense, courts always found that an exception to the writing requirement applied.⁵⁹ Thus, Johnston concluded that the nature of contracting parties’ relationship is of central importance to the Statute of Frauds, as applied by courts.⁶⁰

Second, positive doctrinal analysis can also be enlightening when black letter doctrine is a vague “standard” rather than a clear “rule.”⁶¹ Whitmore’s study of the factors that affect noncompetition clause enforcement is useful largely because the only doctrinal guidance for courts and contracting parties is that such clauses are permissible when “reasonable.”⁶² Against this backdrop, a statistical analysis of what factual variations are most highly correlated with enforcement provides a deeper understanding of the law than any statement of doctrine can provide.

2. *Effect of Doctrine*

Macaulay’s landmark article on the contracting behavior of businessmen is perhaps most notable in the world of legal scholarship for its finding that the rules of contract law had very little effect on actual contracting behavior.⁶³ Macaulay found, for example, that businessmen were

55. According to the *Restatement (Second) of Contracts*, promissory estoppel requires “[a] promise which the promisor should reasonably expect to induce action or forbearance on the part of the promisee or a third person and which does induce such action or forbearance.” RESTATEMENT (SECOND) OF CONTRACTS § 90 (1981) (emphasis added); see also 3 ERIC MILLS HOLMES, CORBIN ON CONTRACTS § 8.9, at 30 (Joseph M. Perrillo ed., rev. ed. 1996); 4 RICHARD A. LORD, WILLISTON ON CONTRACTS § 8.4, at 41 (4th ed. 1992).

56. Farber & Matheson, *supra* note 16, at 910.

57. Jason Scott Johnston, *The Statute of Frauds and Business Norms: A Testable Game-Theoretic Model*, 144 U. PA. L. REV. 1859 (1996).

58. See, e.g., RESTATEMENT (SECOND) OF CONTRACTS § 110 (1981) (listing the classes of contracts subject to the statute of frauds).

59. Johnston, *supra* note 57, at 1868.

60. *Id.* Johnston also makes the normative claim that the parties’ relationship should, in fact, affect whether a signed writing is needed for contract enforcement because parties in repeat relationships have extrajudicial means of punishing contracting partners and thus have less need for formalities such as signed writings. *Id.* at 1863–64.

61. The literature on the distinction between “rules” and “standards” is, of course, vast. For perhaps the seminal discussion, see Duncan Kennedy, *Form and Substance in Private Law Adjudication*, 89 HARV. L. REV. 1685 (1976). For a recent discussion, see Russell B. Korobkin, *Behavioral Analysis and Legal Form: Rules vs. Standards Revisited*, 79 OR. L. REV. 23 (2000).

62. See, e.g., Whitmore, *supra* note 22, at 488.

63. Macaulay, *supra* note 30, at 58–60.

generally unconcerned with following the necessary formalities to ensure their bargains were legally enforceable and rarely relied on their legal rights to settle disputes with trading partners.⁶⁴ Several recent empirical studies follow Macaulay's lead in investigating whether private contracting practices are shaped by legal rights.

In his two studies, Keating, like Macaulay, found that the contracting practices of the businesspeople interviewed ignored many of the doctrinal rules of Article 2 of the Uniform Commercial Code (U.C.C.). For example, most respondents often failed to put agreements into writing, even when the Statute of Frauds would make enforceability dependent on a signed writing.⁶⁵ Most buyer respondents would excuse sellers' failure to deliver goods due to unforeseen events, even when the commercial impracticability standard of U.C.C. section 2-615 would not give sellers a legal right to an excuse.⁶⁶ Most sellers would provide warranties beyond their obligation according to law or the terms of a contract.⁶⁷ Few parties ever litigate disagreements between their form contracts.⁶⁸ Macaulay, Keating, and others generally explain the chasm between legal obligations created by contract doctrine and the practice of contracting by pointing to the reputational consequences of a bad business reputation (which prevents breach),⁶⁹ the costs of ruining a profitable relationship with the other party over a single transaction,⁷⁰ the prohibitively high cost of litigation for all but the largest disputes (which prevents the enforcement of legal rights), or all of these.

Of course, when considering alternatives to the enforcement of legal rights through the judicial system, contracting parties are not limited to the choices of waiving their rights or relying on the threat of reputational sanctions. By constructing private arbitration regimes, parties can create a legal enforcement mechanism that operates outside of the public judicial system, and they can even substitute different substantive rights *ex ante* for those that would otherwise be provided by contract doctrine. Bernstein has used her study of industry trade association arbitration regimes for the purpose of describing some of the circumstances in which private parties will choose to opt out of contract doctrine and replace it with a competing set of rules. For example, Bernstein observes that the diamond industry has a mandatory arbitration system for its members that, among other deviations from substantive contract doctrine, permits arbitrators to award punitive damages for breach of contract.⁷¹ She con-

64. *Id.* at 58–61 (reporting that businessmen relied on “handshakes” that were not enforceable, entered into “requirements contracts” of doubtful legality at the time, etc.).

65. Keating, *A Reality Check*, *supra* note 32, at 108–10.

66. *Id.* at 120–21.

67. *Id.* at 122–23.

68. Keating, *Battle of the Forms*, *supra* note 33, at 2698–99.

69. *See, e.g.*, Keating, *A Reality Check*, *supra* note 32, at 102 (“law is much less significant than reputation”); Weintraub, *supra* note 34, at 7.

70. *See, e.g.*, Keating, *Battle of the Forms*, *supra* note 33, at 2698–99.

71. Bernstein, *Opting Out*, *supra* note 27, at 124–30.

tends that punitive damages are efficient in the particular context of the diamond industry, where opportunities for efficient breach are rare (and thus the potential of punitive damages to deter efficient breach irrelevant) and expectation damages nearly always too low to adequately compensate the nonbreaching party.⁷² She generalizes from this data that private entities will opt out of contract doctrine when the doctrine is inefficient for a particular group and that group has the means (here, through mandatory membership in the guild) to impose an alternative system on its members.⁷³

Two articles relying on experimental data have explicitly studied the effect of default contract rules on private contracting behavior, testing theoretical predictions of economic theory. The Coase theorem provides that, if there are no transaction costs, the law's choice of a default contract term will have no effect on the terms ultimately selected for use in private contracts, because parties will simply choose to contract around inefficient defaults.⁷⁴ In different studies, Schwab and I created low transaction cost environments to test this prediction. Schwab found that his negotiating subjects were not significantly more likely to agree to a term governing management's right to transfer work to other locations if that term were the default term than if it were not.⁷⁵ My subjects, in contrast, placed a significantly higher value on contract terms if they were identified as law-provided defaults than if they were not.⁷⁶

Although studies of judicial opinions are usually used for positive doctrinal analysis, on rare occasions they have also been relied upon for analysis of the effect of doctrine on contracting behavior. James J. White searched the U.C.C. Reporter over a six-year period for published opinions dealing with a number of topics, including the terms governing the allocation of the risk of loss under sections 2-319, 2-320, and 2-509.⁷⁷ Rather than analyzing the reasoning of the opinions, White merely identified the relevant decisions, and found only ten during the time period reviewed.⁷⁸ From the existence of only this relatively small number, White concluded that the codification of reasonable commercial expectations in these provisions of the U.C.C.—as opposed to alternative default rules—had the effect of reducing conflict between contracting partners.⁷⁹

72. *Id.* at 134.

73. *Id.* at 135.

74. R.H. Coase, *The Problem of Social Cost*, 3 J.L. & ECON. 1, 6 (1960).

75. Schwab, *supra* note 40, at 252. Schwab's results did show a slight bias in favor of default terms, although the bias was not statistically significant.

76. Korobkin, *Status Quo Bias*, *supra* note 42, at 639.

77. James J. White, *Promise Fulfilled and Principle Betrayed*, 1988 ANN. SURV. AM. L. 7, 18.

78. *Id.* at 24.

79. *Id.* at 27.

3. *Normative Doctrinal Analysis*

In the majority of empirical contract law articles, the primary use of data is to provide support for the author's normative argument for doctrinal change or reinforcement. Even when the primary use of empirical data is to describe doctrine or the effect of doctrine on behavior, most authors have a secondary goal of using their descriptive conclusions as support for one or more normative claims about the way contract doctrine ought to be. Given this, it is unsurprising that all four of the types of empirical sources found in contract law scholarship are used to provide support for doctrinal change arguments.

Studies of actual contracting practices are most frequently used for the purpose of urging doctrinal change, and the linkage in scholarship between the empirical data and the normative claim is as varied as the policy and value preferences of the authors. Consequently, it is difficult to subcategorize the ways in which authors use empirical data to support normative arguments. Some examples of very different uses, however, can at least provide a sense of the range of possibilities available to contract law scholars.

Kahan and Klausner studied event-risk covenants in corporate bonds, introduced for the first time in the late 1980s as a response to a wave of hostile takeovers.⁸⁰ The covenants provide contractual rights to bondholders to sell, or convert to stock, their bonds in the event of company changes in ownership or management.⁸¹ The authors found that after the issuance of the first four bonds that included event-risk covenants, 90% of future bonds mimicked the key provisions of the initial issues.⁸² From this empirical observation, the authors concluded that (1) contractual terms in bonds enjoy "learning benefits" and "network benefits," meaning that they become more valuable when additional contracting parties use identical terms,⁸³ and (2) judicial interpretation of such terms in one contract should serve as binding precedent in future cases, in order that the benefits of standardization can be more fully realized.⁸⁴

Verkerke surveyed employers about the content of the termination clauses they use in employment contracts.⁸⁵ He found that 52% of those surveyed specified that employment was "at will," while just 15% specified that termination would only be permissible for "just cause."⁸⁶ Presuming (a) that contract law should provide efficient default terms, and (b) that "majoritarian" default terms—that is, the term preferred by the

80. Kahan & Klausner, *Standardization*, *supra* note 36, at 740.

81. *Id.* at 741.

82. *Id.* at 747.

83. *Id.* at 749.

84. *Id.* at 764–65.

85. Verkerke, *supra* note 35, at 863–69.

86. *Id.* at 867. The remaining thirty-three percent did not provide a termination clause, meaning that the contracts would be governed by the dominant "at will" default rule. *Id.*

most parties—are most efficient because they minimize the costs incurred by parties who do not prefer the default term and wish to contract around it,⁸⁷ Verkerke concluded that the “at will” term is a normatively desirable default.⁸⁸

Verkerke’s empirically based normative argument is challenged on different empirical grounds by Kim, who surveyed unemployed workers about their knowledge of default employment contract termination rules.⁸⁹ She found that the vast majority of those surveyed believed that the law prevents employers from discharging an employee because, among other reasons, the employer does not like them (89%) or the employer wishes to hire someone else at a lower wage (82%).⁹⁰ In other words, most of the surveyed workers apparently believed that legal restrictions on termination provided them with something close to the protection that they actually need a “just cause” clause to enjoy. Implicitly assuming that access to legal information is more necessary for efficient private ordering than is minimizing the transaction costs of contracting around law-provided default rules, Kim argues that a “just cause” default, which would force employers to explain to employees the implications of placing an “at will” term in the contract, is the normatively appropriate rule.⁹¹

Articles relying on experimental data have also been used to make normative doctrinal arguments. Ayres’ experimental study of new car negotiations found that, on average, car dealers make higher initial and final demands for their vehicles when negotiating with African-American males, African-American females, or white females, than when negotiating with white males.⁹² Although the study is geared more to understanding discrimination than to reforming contract law,⁹³ Ayres does suggest that his data provides an argument for changes in contract law relating to statutory disclosure requirements and the misrepresentation doctrine.⁹⁴ My study of the different valuations subjects place on contract terms that are law-supplied defaults and those that are not is concerned primarily with investigating the effect of default terms on contracting behavior.⁹⁵ It also argues, however, that the empirical finding that contracting parties’ preferences are biased in favor of law-provided default terms makes it normatively more important for the law to select majoritarian defaults than traditional law-and-economics analysis suggests.⁹⁶

87. *Id.* at 871.

88. *Id.* at 913.

89. Kim, *supra* note 47, at 126–46.

90. *Id.* at 133–34.

91. *Id.* at 147–55.

92. Ayres, *Further Evidence*, *supra* note 14, at 116.

93. Ayres, *Fair Driving*, *supra* note 14, at 841–57.

94. Ayres, *Further Evidence*, *supra* note 14, at 143–44.

95. *See supra* text accompanying notes 39–46.

96. *See Korobkin, Status Quo Bias*, *supra* note 42, at 667–68.

III. CRITIQUING EMPIRICAL CONTRACT LAW SCHOLARSHIP: THE PITFALLS OF EMPIRICISM

There is a widespread belief that empirical research can improve both our positive understanding of law and behavior and inform our normative views of legal doctrine—one that is reflected in the devotion of this entire symposium to the endeavor, as well as calls from numerous other scholars.⁹⁷ If this is true of law generally, then it is probably doubly true of contract law specifically in light of the very small numbers of empirically driven contract law articles published in the last fifteen years.⁹⁸ Thus, it seems unnecessary to launch a defense of empirical legal scholarship generally, or empirical contract law scholarship specifically.

It is worthwhile, however, to raise the issue of opportunity costs. That is, given time and resource limitations—empirical research typically is more expensive and time consuming than purely theoretical work or traditional doctrinal analysis—should contract law scholars devote more energy to empirical study? And if the answer is affirmative, what types of empirical scholarship have the best potential for adding valuable insights to our shared body of knowledge related to contract law? To help address these questions, this part presents three broad critiques that can be made of empirical contract law scholarship, assesses the strength of the critiques, and suggests steps that empirical contract law scholars can take to minimize the force of these critiques and thus maximize the usefulness of their empirical research.

Because the topic of this article is *applying* empirical methods to the study of contract law rather than empirical *methodology* per se, methodological critiques of the existing empirical contract law scholarship are beyond its scope. Careful empiricists follow a number of practices, including but certainly not limited to the following: defining their hypotheses clearly at the outset, collecting data that can disprove the hypotheses, controlling for competing hypotheses, avoiding reaching conclusions

97. See generally, e.g., Derek C. Bok, *A Flawed System of Law Practice and Training*, 33 J. LEGAL EDUC. 570, 581–82 (1983) (warning that law professors must pay attention to empirical studies by professors of other disciplines that might affect the law, and should join with social scientists to perform empirical research on the usefulness of legal procedures); Heise, *supra* note 2, at 813–15 (making a normative argument in favor of increasing empirical legal research); Nard, *supra* note 2, at 247–51 (arguing that more empirical research would narrow the gap between “the abstractions of the law school classroom and the exigencies of realistic legal practice”); Richard A. Posner, *Against Constitutional Theory*, 73 N.Y.U. L. REV. 1, 11–12 (1998) (arguing that law professors should focus more effort on empirical research to support their legal theories and have more impact on the development of constitutional law); Peter H. Schuck, *Why Don't Law Professors Do More Empirical Research?*, 39 J. LEGAL EDUC. 323, 333–35 (1989) (arguing for an increase by law professors of statistical empirical studies). Calls for more empirical research in law are not only a modern phenomenon. Professor Schuck notes that criticism over the lack of empirical studies “has a long and distinguished pedigree, going back at least to the end of the last century,” and he cites both Oliver Wendell Holmes and Roscoe Pound in their calls for empirical studies in legal scholarship. Schuck, *supra*, at 324; see also Heise, *supra* note 2, at 811 (citing Holmes and Pound).

98. As Daniel Keating notes while introducing his modest empirical study of contract behavior, “in the land of the blind, the one-eyed man is king.” Keating, *A Reality Check*, *supra* note 32, at 99.

about causation when the data proves only a correlation, and avoiding reaching conclusions about the world writ large when the data support only a conclusion about a subset of the world. When collecting data, they measure the data in a way that is reliable (i.e., others measuring the same data in the same way will obtain the same measurements) and valid (i.e., the measure is relevant to the characteristic the author wishes to measure), and they describe their methods of collecting data in sufficient detail that the process could be replicated by other scholars.⁹⁹

Even this partial list of good practices suggests that empirical analysis can be done well or it can be done badly. Certainly, much empirical legal scholarship is not done well,¹⁰⁰ and it would be possible to find fault with many of the articles included in this study on a number of fronts. But, importantly, with a little reading on methods and a handful of consultations with empiricist colleagues, there is no reason that a careful contract law scholar with no formal training in empirical techniques should have serious difficulty designing a methodologically satisfactory study. Therefore, my comments in the next three subsections are confined to the question of how empirical scholarship *done well* might still fail to meet the high aspirations that so many of us share for it, and how empirical scholars can attempt to minimize these criticisms.

A. *Generalizability of the Empirical Findings*

Although contract law is technically state law, all but one state has adopted the U.C.C.,¹⁰¹ and with few exceptions even the common law of contracts is relatively consistent across jurisdictions. Add to this the fact that law journals favor articles that have as broad a target audience as possible,¹⁰² and the unavoidable consequence is that most of contract law scholarship attempts to provide positive descriptions or normative suggestions applicable to a range of different types of contracts across all American jurisdictions.¹⁰³ None of the empirical contracts articles reviewed in this study present data that makes up a truly representative sample of the population, (i.e., contracting parties or contract disputes generally) about which the author would like to suggest implications. Consequently, critics will usually be able to raise legitimate questions about the extent to which descriptive conclusions or policy prescriptions

99. For an excellent primer on empirical research conventions that uses law review articles as examples of how not to do proper empirical research, see Epstein & King, *supra* note 3.

100. For a particularly harsh critique of actual practice, see *id.* (manuscript at 12) (concluding that every single empirical law review article surveyed by the authors suffered from at least one methodological flaw).

101. Except for Louisiana, which has adopted some of the Code's articles, all states have adopted the U.C.C., although there are some variations among the states in their adoption of the latest versions. See U.C.C. §§ 1-101-2-210, 1 U.L.A. 1-2 (1989 & Supp. 2001).

102. See James Lindgren, *An Author's Manifesto*, 61 U. CHI. L. REV. 527, 532 (1994).

103. Exceptions in this study include the articles by Kahan and Klausner focusing specifically on bond covenants, and the articles by Bernstein focusing specifically on close-knit trade associations.

can be inferred from empirical results. The question can alternatively be termed one of “external validity,”¹⁰⁴ possible “selection bias,”¹⁰⁵ or the problem of “generalizability.”¹⁰⁶

Experimental studies, like those conducted by Schwab and by myself, are vulnerable to external validity criticisms arising from the identity of the subjects and the experimental conditions. When student subjects are asked to play the role of contracting parties¹⁰⁷ or their attorneys,¹⁰⁸ it is always possible that, because of differences in age, education level, life experience, or some other factor, members of the subject pool—students—will not make contracting decisions in the same way that the lawyers and businesspeople who actually do enter into contracts would make the same decisions.¹⁰⁹ Additionally, because the subjects are only playing the role of a contracting party, they may or may not make the same decisions as would individuals actually making contracting decisions that have real-life consequences. Thus, although we can hypothesize that experimental results are generalizable to the real world of contract formation, the experimental results cannot serve as proof of this assertion.

By using actual contracting parties in actual contracting situations as his experimental subjects, Ayres’ study of new car negotiations¹¹⁰ blunts these external validity concerns, but leaves itself open to other related external validity concerns. His subjects are all a particular type of contracting party, new car dealers, located in a particular geographic area, Chicago. It is possible that either car dealers or Chicagoans might differ from other retail salespeople in ways that cause them to behave differently in contract negotiations. Thus, Ayres’ very interesting conclusions may not be generalizable to other retail negotiations or potentially even to car sales negotiations in other parts of the country.

Nonexperimental studies of actual contracting behavior and of non-expert legal opinion are subject to the same type of criticisms. It is often overlooked that Macaulay’s pathbreaking study of private contracting behavior was limited to a nonrandom sample of lawyers and businesspeople doing business in Wisconsin.¹¹¹ Further, although his survey included forty-three different companies and six law firms, Macaulay made

104. See, e.g., Russell B. Korobkin & Chris Guthrie, *Psychological Barriers to Litigation Settlement: An Experimental Approach*, 93 MICH. L. REV. 107, 126–28 (1994).

105. See, e.g., Epstein & King, *supra* note 3 (manuscript at 69).

106. Michael L. Siegel, *A Pragmatic Critique of Modern Evidence Scholarship*, 88 NW. U. L. REV. 995, 1036 (1994).

107. Schwab’s subjects were 222 undergraduate students asked to play the role of union and management negotiators attempting to reach a collective bargaining agreement. See Schwab, *supra* note 40, at 246.

108. Korobkin’s subjects were 151 law students asked to play the role of the attorney for a contracting party. See Korobkin, *Status Quo Bias*, *supra* note 42, at 634.

109. For a more detailed description of the external validity problem, see *id.* at 661–64; Korobkin & Guthrie, *supra* note 104, at 126–28.

110. See Ayres, *Further Evidence*, *supra* note 14.

111. Macaulay, *supra* note 30, at 55.

no attempt to ensure that this sample was representative of the world of commercial contracting parties in terms of industry, size of business, etc.¹¹² Precisely the same criticisms can be made of Weintraub's study of eighty-four corporate general counsels,¹¹³ Verkerke's study of 221 employers in five states,¹¹⁴ and Keating's studies of corporate contracting parties.¹¹⁵ Bauman and Marschall's study of the opinions about contract law of decision makers at 119 North Carolina firms¹¹⁶ is no different. Kim's survey of the legal knowledge of 330 unemployed workers in St. Louis¹¹⁷ is vulnerable to the criticism not only that her study is limited to a single geographic location, but also that unemployed workers might not be representative of all workers. Employed workers may be, on average, more knowledgeable about employment termination law than are those who are unemployed.¹¹⁸ In all of these studies, not everyone asked to participate agreed, raising the concern that the responses of people who agree to take the time to participate in a research study might be systematically different from those who would not take the time.

Empirical studies of judicial opinions are also not immune from external validity concerns. First, the vulnerability suffered by studies of behavior—that the sample studied may not be representative of the entire entity that the author wishes to analyze—can be present in judicial opinion studies as well. McChesney's study of the doctrine of tortious interference with contract, for example, employs very careful statistical analysis, but the cases used are not a random sample. The author identified cases with “liability” outcomes by using the nonrandom sample of cases cited in a 1928 law review article,¹¹⁹ and he added “nonliability” cases to the data by “Shepardizing” the original nonrandom sample until he found enough nonliability cases to provide a critical mass of data.¹²⁰

112. *Id.* at 55–56.

113. Weintraub, *supra* note 34. Weintraub identifies some differences in responses to his survey based on the size of the corporation or the type of business it conducts, but there is no indication that his sample was designed to be representative of the range of corporation sizes and lines of business, and when differences on these bases are reported there is no indication that any of the differences are statistically significant.

114. Verkerke, *supra* note 35.

115. See, e.g., Keating, *Battle of the Forms*, *supra* note 33, at 2693–95 (recognizing the bias in his sample).

116. Baumer & Marschall, *supra* note 4.

117. Kim, *supra* note 47.

118. Kim recognizes, but downplays, this possibility. *Id.* at 141–43. In fact, however, it seems extremely plausible that the unemployed might tend to be less bright and knowledgeable than workers who have managed to keep their jobs, and thus less well informed about legal protections of workers.

119. The article is Charles E. Carpenter, *Interference with Contract Relations*, 41 HARV. L. REV. 728 (1928).

120. McChesney, *supra* note 23, at 171–73. McChesney does weight his statistical analysis to correct for the fact that nonliability cases are oversampled. *Id.* at 172–73. While this guards against the nonliability cases having too large an impact on the statistical results relative to the liability cases, it does not solve the problem that neither the liability cases nor the nonliability cases were randomly sampled from their respective pools.

Second, it is well known that cases that result in published opinions are not necessarily a random sample of all cases filed concerning a particular doctrinal topic, much less of all the disputes within that doctrinal area.¹²¹ Thus, conclusions appropriately drawn about published decisions may not be generalizable to all decisions, much less all litigation in a particular substantive area, or all disputes. If only a small percentage of judicial opinions finding liability (or nonliability) under a particular doctrine have a certain type of fact that the author is hypothesizing might be determinative, this might suggest that the hypothesis is incorrect, but it might suggest alternatively that the law is so clear among litigants concerning the liability consequences of that particular type of fact that nearly all of those cases settle or are decided without published opinions.

From one perspective, these comments might appear to raise a methodological criticism of specific studies for which there is a relatively obvious technical solution. In theory, the generalizability problem can be avoided if researchers choose their data points by drawing a random sample from the population about which the researcher would like to draw conclusions or suggest implications.¹²² In reality, the criticism cannot be solved merely by researchers paying closer attention to methodological considerations, for two reasons.

The more obvious of the reasons is that scholars face resource constraints. When researchers wish to use empirical data to understand contracting behavior, they usually will lack the wherewithal to study contracting parties in all fifty states, of all ages, of all professions, of all backgrounds, and regardless of whether or not the potential subjects wish to participate in the study (remember that the fact that some people will refuse to participate in a study creates a potential sampling bias). Experimenters usually use student subjects because students are relatively cheap and relatively easy to locate. Researchers who study actual contracting practices usually choose subjects in their geographical region for the same reason.

The problem that is more significant—because it could not be solved by an infusion of resources from some generous university, foundation, or government agency—is that when researchers would like to draw inferences for a broad population, it is usually impossible to design a data set that is perfectly representative of the larger target population in every relevant way. In studies of actual contracting behavior of commercial parties, for example, it would be impossible to identify all the features of contracting parties that might affect their behavior. The size

121. See, e.g., Orley Ashenfelter et al., *Politics and the Judiciary: The Influence of Judicial Background on Case Outcomes*, 24 J. LEGAL STUD. 257, 259 (1995) (recognizing the problem of selection bias in studies of published opinions); Donald Wittman, *Dispute Resolution, Bargaining, and the Selection of Cases for Trial: A Study of the Generation of Biased and Unbiased Data*, 17 J. LEGAL STUD. 313, 314 (1988) (same).

122. Cf. Epstein & Kind, *supra* note 3 (manuscript at 75–76) (describing the process of random sampling).

and industry type of the business might be relevant, of course, as might the region of the country in which the business is located. But what about whether the business is new or established? Whether it has multiple locations or a single location? Whether contracting decisions are made by a lawyer or a businessperson? The age, experience, or personal characteristics of the key decision maker? No study could conceivably be representative along all of these dimensions, much less the untold number of other potentially relevant factors. Thus, there is no study that could ever be fully immune to the criticism that what is true of the data set is not necessarily true of the population in general. And even if a sample could be studied that were perfectly representative of all contracting parties in every relevant way, the results would be open to the conjecture that, while applicable on an aggregate level, they might not be applicable to any particular industry, size of business, geographic region, etc., thus limiting the practical usefulness of the results to lawyers or policy makers. It is hard to imagine an empirical study not subject to some degree of criticism that the results *might not* be generalizable.

A problem with conducting empirical contract law scholarship, then, is that the author cannot hope to completely describe the world or definitively resolve a policy issue. In this sense, a single empirical study might be less fulfilling to the author than an article laying out a theory that seamlessly and completely resolves a legal problem on its own, with no questions left open. This observation, however, does not create an argument against studying contract law from an empirical perspective. Rather, it is a warning that empirical studies can rarely stand on their own, but instead must be viewed as a contribution to a body of literature that collectively aspires to understand a phenomenon or resolve an issue of great public importance.

Empirical research will usually fail to reach a definitive conclusion, but it can make a valuable contribution to scholarly knowledge by pointing in the direction of a certain conclusion, even if it must rely on future studies to further develop the thesis and push it toward a conclusive set of results. Thus, empirical contract law scholarship should be valued for the hypotheses it creates and shapes, as well as for the conclusions it reaches. A study of the sales practices of furniture manufacturers in North Carolina does not *prove* a point about all types of sellers in all regions of the country. But if it is able to reach strong conclusions about its limited data set, such a study presents a plausible hypothesis about all sellers nationwide—relying on the assumption that other sellers will behave as do North Carolina furniture manufacturers—that is subject to further testing and development by other scholars. In so doing, such a study undoubtedly makes a valuable contribution to scholarship.

The generalizability problem, then, should not discourage would-be empirical researchers, but it perhaps should cause them to judge their work by a somewhat different standard than they would judge purely

theoretical scholarship. It should also underscore the importance of using empirical research to develop, hone, and recalibrate hypotheses about the world—as opposed to reaching definitive conclusions—and of being careful not to present conclusions that reach beyond the inferences that the data can logically support. Most careful empirical work will draw conclusions about a data set, suggest hypotheses about a broader or different population logically derived from those conclusions, and describe how these hypotheses can be tested and further developed in future research.

B. Quality of “Fit” Between the Data and the Thesis

Another important criticism of conducting empirical research in law generally and contract law specifically is that a logical gap often exists between the data presented in empirical legal scholarship and the positive or normative thesis that the author uses the data to support. More often than not, empirical data do not point directly and unalterably to a particular conclusion about the law. Instead, intermediate assumptions are necessary to support the chain of logical reasoning from data to conclusion. These intermediate assumptions, which can be either additional empirical assumptions not related to the data presented in the article or assumptions about the values or value hierarchy that should underlie contract law, are often contestable.¹²³ The more intermediate assumptions that are required, and the more contestable that they are, the more debatable the value provided by the empirical data that forms the basis for the article.

A ready example is the body of literature in which data demonstrating that businesspeople generally ignore contract doctrine when negotiating or attempting to enforce obligations is used to support the conclusion that doctrine should be revised to better reflect commercial norms. For example, consider two of the arguments advanced by Weintraub, based on his study of corporate general counsels.¹²⁴ Weintraub found that a majority of the general counsels in his study provide specific terms in their contracts that would adjust the contract price in long-term contracts in the event of changed circumstances.¹²⁵ An even larger majority said they routinely grant their trading partners price modifications as a result of shifts in market conditions.¹²⁶ From this data, Weintraub suggests that there is no need for contract doctrine to provide a frustration excuse, and

123. As Dennis Patterson puts the point, empirical data does not necessarily lead to knowledge because “it is one thing to marshal the facts, and another to know what to make of the facts.” Dennis Patterson, *The Limits of Empiricism: What Facts Tell Us*, 98 MICH. L. REV. 2738, 2738 (2000).

124. Weintraub, *supra* note 34.

125. *Id.* at 17.

126. *Id.* at 19.

that “any vestiges” of the preexisting duty doctrine should be eliminated.¹²⁷

There is nothing objectionable about Weintraub’s data. But the link between the data and the conclusion requires an assumption that contracting parties are best served by a contract doctrine that mirrors their day-to-day contracting practices. Although common,¹²⁸ this assumption is contestable, and certainly not *necessarily* correct. It is possible that contracting parties choose to ignore their legal rights in their normal dealings with trading partners with whom they have an ongoing relationship or the possibility of future dealings, but still wish to have an entirely different set of rules provided by law on which they can rely in the rare instances when relationships break down, or when the benefits of opportunistic behavior might exceed the resulting reputational costs.¹²⁹ In other words, Weintraub’s conclusions assume that contracting parties are better off if the law reflects their customary practices,¹³⁰ but this is an empirical and/or theoretical question that his survey in no way addresses.¹³¹ The reliance of Weintraub’s main conclusions on this intermediate assumption weakens the power of the empirical data that he collected.

As a very different example of the “fit” problem that empirical contract law scholarship can face, consider again Verkerke’s study of employment termination terms. Verkerke demonstrates empirically that more of the companies he studied contract for “at will” employment with their employees than contract for “just cause” termination.¹³² From this data, he concludes that the “at will” term is the more efficient law-supplied default because it minimizes the number of parties that have to suffer transaction costs by contracting around the rule because they prefer the opposite term.¹³³

Again, neither the data nor the policy prescription are necessarily objectionable. But the link between the two relies on a number of assumptions. One value assumption, clearly identified by Verkerke, is that

127. *Id.* at 51–52.

128. *See, e.g.*, Bernstein, *Merchant Law*, *supra* note 28, at 1767–68 (describing the widely accepted position that law should reflect business norms).

129. *See id.* at 1796–1802 (arguing that parties prefer to have different rules to govern “end game” situations than those that govern “relational” disputes, and that the U.C.C. should therefore not attempt to mirror standard trade practice).

130. Weintraub claims that “rules should reinforce desirable usage and change as usage and mores change.” Weintraub, *supra* note 34, at 3; *see also* Keating, *A Reality Check*, *supra* note 32, at 103 (“[T]he law should not be contrary to practices that the community perceives as normal and desirable.”).

131. To the extent that his empirical data speaks to this assumption at all, the evidence points in the opposite direction of Weintraub’s conclusion. At the end of the survey focused mostly on contracting practices, Weintraub asked his subjects’ opinions on a few legal questions. Despite the fact that most parties reported they create their own terms to deal with changed circumstances, a plurality reported that they favor court adjustment of contract prices when performance is frustrated by unforeseen circumstances. Weintraub, *supra* note 34, at 53.

132. Verkerke, *supra* note 35, at 867.

133. *See id.* at 874–75.

the most efficient rule is the normatively desirable one. But there are two unidentified empirical assumptions as well, both of which may in fact be incorrect. First, the analysis assumes, as economic analysis usually does, that individuals' preferences are exogenous to the content of default rules: in this case, that the preference of the majority of parties for the "at will" rule is independent of the fact that this rule is currently the law-supplied default. But if the legal status of the "at will" rule increases its desirability among contracting parties—and there is evidence to suggest this is plausible¹³⁴—then it is possible that were the "just cause" rule the law-supplied default, an even larger majority of firms might contract for that rule, making a "just cause" default the "majoritarian" rule and thus desirable according to Verkerke's own standard.

Even if the exogenous preference assumption is empirically accurate, there is another potential difficulty with the link between Verkerke's data and conclusions. In order to conclude that the rule preferred by the majority of contracting parties will generate the lowest transaction costs, Verkerke implicitly assumes that the cost of contracting around a default term does not depend on the content of the default. But if contracting around a "just cause" default is less costly on average than contracting around an "at will" default, it is possible that the total transaction costs would be minimized by selecting the "just cause" term as the law-supplied default, even if only a minority of contracting parties favor that term.¹³⁵

Neither of these examples are offered to suggest that empirical studies in which the suggested conclusions do not flow directly and clearly from the data have no value. On the contrary, such studies are useful for two distinct reasons. First, by providing contingently valid conclusions about law, they improve our collective stock of knowledge. Second, by providing a new set of data and drawing conclusions from it, they provide an impetus for other scholars to draw competing conclusions from the same data set, thus advancing scholarly debate.¹³⁶ But since writing one article always has scholarly opportunity costs (the author cannot spend the time writing a different article instead), it is worthwhile to observe (1) that empirical data, even if it could avoid the charge that it might not be generalizable,¹³⁷ rarely could point directly to a single conclusion about contract doctrine, and (2) that empirical scholarship will be relatively more valuable if the number of assumptions—and especially the

134. See Korobkin, *Status Quo Bias*, *supra* note 42, at 637–47.

135. Cf. Ian Ayres, *Making a Difference: The Contractual Contributions of Easterbrook and Fischel*, 59 U. CHI. L. REV. 1391, 1405 (1992) (reviewing FRANK H. EASTERBROOK & DANIEL R. FISCHEL, *THE ECONOMIC STRUCTURE OF CORPORATE LAW* (1991)).

136. For a nice example of this, see generally Richard Craswell, *The Sound of One Form Battling: Comments on Daniel Keating's 'Exploring the Battle of the Forms in Action'*, 98 MICH. L. REV. 2727 (2000) (drawing conclusions from Keating's empirical observation that commercial parties often contract around the "battle of the forms problem" by negotiating single "master agreements" to govern all future transactions with other parties).

137. See *supra* Part III.A.

empirical assumptions—necessary to support the link between the data and the argument is small rather than large.

Consequently, contract law scholars considering empirical projects are well advised to attempt to carefully craft their data collection and analysis so that the results lead to positive or normative conclusions about contract doctrine with as few intermediate analytical steps as possible. And, of course, when the author's conclusion relies on one or more intermediate assumptions, good scholarly practice requires that the author clearly identify these assumptions and suggest how they might be tested or challenged in future work.

C. *Inconclusive Empirical Data*

A third potential drawback to conducting empirical research of legal topics, contract law included, is that data often fails to either support or refute a particular positive or normative hypothesis about law. That is, not only is it difficult to draw conclusions from facts without contestable intermediate assumptions, it is also difficult because the facts often remain unclear even after empirical investigation. There are two distinct types of problems here, which I will refer to as “indeterminacy” and “contradiction.” The former label refers to the fact that a given piece or set of empirical data will often fail to point clearly to a particular conclusion. The latter label refers to the fact that when an author collects a range of data, one part of the data set might point to one conclusion while another part undermines the first or points in a different direction. In either case, authors may make plausible arguments as to why, on balance, the data provides more support for one conclusion than another, but such empirical projects will usually have less of an impact on scholarly thinking about the law than a more ideal data set that points unequivocally to a single conclusion.

The problem of contradictory data is demonstrated by Kim's study of unemployed workers' perceptions of employment termination law.¹³⁸ As described above, the vast majority of those surveyed believed employers could not legally discharge employees for reasons that are clearly permissible, such as to hire a cheaper replacement or because the employer does not like the employee.¹³⁹ From this data and the assumption that full information about the law is a requirement for efficient contracting, Kim argues that “just cause” should be the default term, so as to force employers that want the power to terminate employees “at will” to contract for such a term, in so doing informing their employees of the consequences of accepting an “at will” employment term.¹⁴⁰

138. See generally Kim, *supra* note 47.

139. *Id.* at 133–34.

140. *Id.* at 151–52.

The problem is that while the finding that workers believe that the law provides them more protection than it actually does supports Kim's normative argument, another piece of her data undermines that argument: seventy-four percent of the workers surveyed who erroneously believed that the law provided something like "just cause" protection against termination believed that discharge would still be unlawful even if the employment contract stated that the employer "reserves the right to discharge employees at any time, for any reason, with or without cause."¹⁴¹ In other words, subjects who believed "just cause" was the law also thought that the rule was a mandatory one rather than merely a default. The natural implication of this seems to be that even if "just cause" were made the default term, forcing employers to include explicit "at will" terms in their employment agreements in order to contract around the default, this additional "information" would not make most workers any more cognizant of the limited protection the law would then provide to them. Kim's own data strongly suggests that changing the default would not serve her normative goal, at least to any significant degree.

A simpler problem of contradictory data is found in Keating's study of commercial contracting parties. Keating finds that many of his subjects fail to put contracts in writing in spite of their knowledge of the Statute of Frauds,¹⁴² thus supporting the thesis that contracting behavior is not very responsive to contract doctrine. On the other hand, he also finds many contracting parties that "follow a firm policy of memorializing every sales contract with a writing."¹⁴³ Is behavior responsive to contract doctrine, or is it not? The most accurate answer to this question may be "yes and no" or "sometimes," but these responses pack a less powerful punch than would a more definitive answer and are likely to have a correspondingly lesser impact on the development of academic thought on the subject.

McChesney's study of tortious interference with contract doctrine demonstrates the indeterminacy problem that often plagues empirical studies, reducing the power of the conclusions offered by the author. McChesney creates a regression model to test which of six factors best predict when courts will find defendants liable. McChesney concludes that two of the hypotheses explain the set of court outcomes better than the others, but in fact none of the explanations are extremely powerful.¹⁴⁴ The author himself properly concedes that a finding of liability "depends on various factors," and that his preferred explanation of tortious interference doctrine fails to predict outcomes in a large number of cases.¹⁴⁵

141. *Id.* at 139.

142. Keating, *A Reality Check*, *supra* note 32, at 109.

143. *Id.*

144. See McChesney, *supra* note 23, at 182-84 & tbl.3.

145. *Id.* at 184-85.

This necessary qualification does not, of course, render McChesney's study useless or even unimportant. The indeterminacy of the results, however, does limit the article's ability to revolutionize how the scholarly community thinks about the doctrine of tortious interference with contract, which was presumably the author's goal when he began conducting his research.

For an even simpler example, consider Keating's attempt to test the empirical prediction underlying most scholarship on the "battle of the forms" problem that "nobody reads the boilerplate" terms on preprinted forms.¹⁴⁶ From his survey of contracting parties, Keating observes that some of his respondents believe that their contracting partners rarely or never read the forms, some believe that their partners sometimes read the forms, most rarely or never read their partners' forms, but some sometimes read their partners' forms, depending on the situation.¹⁴⁷ From Keating's data, should scholars or policymakers conclude that readership of preprinted forms is higher or lower than the academy's *ex ante* belief? The data on this question seems completely indeterminate, eluding attempts to draw any conclusions.

As is the case with the problems of generalizability of data and fit between data and conclusions, the risk that any empirical project could, and often will to some extent, generate inconclusive results should not discourage contracts scholars from becoming empirical researchers, but it should illuminate the fact that there are drawbacks to empiricism to be weighed against its benefits. In most instances, a study that results in contradictory or indeterminate findings will not be useless—it will have some scholarly value in shaping hypotheses to be tested in the future. But there is no doubt an inverse relationship between the level of indeterminacy or contradiction in an empirical analysis and its scholarly contribution. Unlike the generalizability and fit problems, which are to at least some degree unavoidable in the empirical analysis of law, the problem of inconclusive data is a probabilistic risk that will undermine the value of some, but not all, empirical projects.

IV. CONCLUSION: A SPECIFIC OPPORTUNITY

This article has attempted to describe both the possibilities and the potential pitfalls of incorporating empirical research into the study of contract law. Parts I and II emphasize possibilities. Part I describes the surprising dearth of empirical research in contract law scholarship, which presents a sizeable opportunity for scholars to help to define an emerging field. Reviewing the existing literature, Part II demonstrates the range of different data sources available to empirical contract law scholars and the variety of ways data can be used in scholarship concerning contract doc-

146. Keating, *Battle of the Forms*, *supra* note 33, at 2703.

147. *Id.* at 2703–04.

trine. Part III focuses on the pitfalls inherent in empirical contract law scholarship, suggesting that even methodologically sound empiricism is not the “holy grail” that will resolve the difficult policy issues that divide scholars, while arguing that there are ways scholars can minimize these pitfalls to maximize the usefulness of their work.

For contract law scholars who choose to take up the cause of empiricism, it is sensible to focus efforts on areas of study that offer the highest likelihood of making important contributions to the contract law literature. Although the limited amount of empirical work in the field of contract law generally indicates that the range of areas of potential contribution is large, I conclude by describing one potentially fruitful area of inquiry that has been almost completely overlooked in the existing literature, and thus a particularly worthy subject of a research agenda.

The contract law scholarship that uses empirical data to study the effect of doctrine on behavior is geared mostly toward investigating whether contract doctrine does or does not affect behavior—that is, the question of whether contracting parties pay attention to contract doctrine when arranging their agreements. The logical question that, surprisingly, is rarely investigated empirically is whether particular contract rules have a differential effect on private behavior than alternative rules.

Much legal scholarship has always explained and justified legal rules based upon the incentive effect such rules are presumed to have on private behavior. As economic thinking has become a consciously integral part of legal analysis, nearly all legal scholars—even those not closely associated with the discipline of law and economics—assume without blinking an eye that mandatory legal rules will affect the behavior of those governed by the rules.¹⁴⁸ Too often, however, these assumptions about empirical facts are asserted and reasserted, and sometimes even challenged, without any empirical support. As already discussed, in contract law scholarship, two studies have attempted to test the law-and-economics claim that default rules will have no impact on behavior. No studies of which I am aware, however, test whether and to what extent *mandatory* contract law rules—including formation requirements and limitations on enforcement—affect private behavior. Does the use of the unconscionability doctrine to strike down onerous credit terms cause merchants to avoid selling goods on credit to the poor? Does the prohibition on punitive damages in contract law encourage efficient breach? Does the possibility of winning rescission of a contract in the case of mistake encourage parties to avoid thoroughly investigating items for sale?

148. Cf. Russell B. Korobkin & Thomas S. Ulen, *Law and Behavioral Science: Removing the Rationality Assumption from Law and Economics*, 88 CAL. L. REV. 1051, 1055 (2000) (“Indeed, it is so widely acknowledged and accepted that it hardly bears mentioning in the modern legal academy that law does not exist in a vacuum; rather, it has real effects on private behavior, and those effects should be considered and accounted for when examining alternative legal regimes.”).

Because contract law varies relatively little across American jurisdictions, studying the effect of such mandatory rules on behavior is challenging. In order to assess the behavioral effect attributable to a particular rule, a control population—one with a different rule—is required for comparison purposes. This challenge need not always be insurmountable, however. In some areas of contract law, there are measurable differences in doctrine between jurisdictions. The behavioral effects of the Statute of Frauds could be studied, for example, by comparing contracting behavior in states like California, known for undermining the writing requirement of the Statute with a broad exception when reliance on a verbal promise is alleged,¹⁴⁹ with states that have permitted fewer or more narrow exceptions to the traditional rule.¹⁵⁰ In other areas of contract law, changes in doctrine over time can make it possible to study the effects of doctrine by comparing behavior in the same jurisdiction before and after a landmark case, series of cases, or statutory change. For example, the effects of the unconscionability doctrine on the willingness of merchants to provide credit to poor customers could be studied by comparing the number of retail establishments in disadvantaged neighborhoods before and after the application of the doctrine to cross-collateralization credit clauses became well known in the case of *Williams v. Walker-Thomas Furniture*.¹⁵¹

Studying the effects on contracting behavior of specific contract rules by comparing across jurisdictions or time periods raises a number of methodological problems, most prominent among them how to account for the many other known and unknown variables, besides the difference in contract law, that could also account for differences in observed behavior. But if such difficulties can be overcome, empirical scholarship can significantly increase our understanding of contract law by testing the innumerable assumptions about the effect on behavior that a range of contract rules have.

149. See, e.g., *Monarco v. Lo Greco*, 35 Cal. 2d 621 (1950) (finding a broad “reliance” exception to the Statute of Frauds).

150. See, e.g., *Josephs v. Pizza Hut of Am.*, 733 F. Supp. 222, 226 (W.D. Pa. 1989) (“Pennsylvania case law demonstrates a willingness to circumvent the Statute of Frauds to allow the recovery of one’s full loss only when an agreement or promise was obtained by fraud”); *Thomas v. Prewitt*, 355 So. 2d 657, 661 (Miss. 1978) (“Non-statutory exceptions to the writing requirement of statutes of fraud are not looked upon with favor in this state.”).

151. *Williams v. Walker-Thomas Furniture*, 350 F.2d 445, 449 (D.C. Cir. 1965) (holding that a cross-collateralization credit clause would be unenforceable if found by the court to be “unconscionable”).

APPENDIX

EMPIRICAL CONTRACT LAW ARTICLES: 1985–2000

The following list includes articles published in law reviews that explicitly apply empirical analysis to the study of contract law doctrine:

Ian Ayres, *Further Evidence of Discrimination in New Car Negotiations and Estimates of Its Cause*, 94 MICH. L. REV. 109 (1995).

David Baumer & Patricia Marschall, *Willful Breach of Contract for the Sale of Goods: Can the Bane of Business be an Economic Bonanza*, 65 TEMP. L. REV. 159 (1992).

Lisa Bernstein, *Merchant Law in a Merchant Court: Rethinking the Code's Search for Immanent Business Norms*, 144 U. PA. L. REV. 1765 (1996).

Lisa Bernstein, *Opting Out of the Legal System: Extralegal Contractual Relations in the Diamond Industry*, 21 J. LEGAL STUD. 114 (1992).

John J. A. Burke, *Contract as Commodity: A Nonfiction Approach*, 24 SETON HALL LEGIS. J. 285 (2000).

Nathan M. Crystal, *An Empirical View of Relational Contracts Under Article Two of the Uniform Commercial Code*, 1988 ANN. REV. AM. L. 293.

Frank P. Darr, *Unconscionability and Price Fairness*, 30 HOUS. L. REV. 1819 (1994).

Daniel A. Farber & John H. Matheson, *Beyond Promissory Estoppel*, 52 U. CHI. L. REV. 903 (1985).

Robert A. Hillman, *Questioning the "New Consensus" on Promissory Estoppel: An Empirical and Theoretical Study*, 98 COLUM. L. REV. 580 (1998).

Robert A. Hillman, *The Unfulfilled Promise of Promissory Estoppel in the Employment Setting*, 31 RUTGERS L.J. 1 (1999).

Jason Scott Johnston, *The Statute of Frauds and Business Norms: A Testable Game-Theoretic Model*, 144 U. PA. L. REV. 1859 (1996).

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Marcel Kahan & Michael Klausner, *Antitakeover Provisions in Bonds: Bondholder Protection of Management Entrenchment*, 40 UCLA L. REV. 931 (1992).

Marcel Kahan & Michael Klausner, *Standardization and Innovation in Corporate Contracting (or “The Economics of Boilerplate”)*, 83 VA. L. REV. 713 (1997).

Daniel Keating, *Exploring the Battle of the Forms in Action*, 98 MICH. L. REV. 2678 (2000).

Daniel Keating, *Measuring Sales Law Against Sales Practice: A Reality Check*, 17 J.L. & COM. 99 (1997).

Pauline Kim, *Bargaining with Imperfect Information: A Study of Worker Perceptions of Legal Protection in an At-Will World*, 83 CORNELL L. REV. 105 (1997).

Russell Korobkin, *Inertia and Preference in Contract Negotiation: The Psychological Power of Default Rules and Form Contracts*, 51 VAND. L. REV. 1853 (1998).

Russell Korobkin, *The Status Quo Bias and Contract Default Rules*, 83 CORNELL L. REV. 608 (1998).

Fred McChesney, *Tortious Interference with Contract Versus “Efficient” Breach: Theory and Empirical Evidence*, 28 J. LEGAL STUD. 131 (1999).

Willy E. Rice, *Insurance Contracts and Judicial Discord Over Whether Liability Insurers Must Defend Insureds’ Allegedly Intentional and Immoral Conduct: A Historical and Empirical Review of Federal and State Courts’ Declaratory Judgments—1900–1997*, 47 AM. U. L. REV. 1131 (1998).

Willy E. Rice, *Judicial Bias, the Insurance Industry, and Consumer Protection: An Empirical Analysis of State Supreme Courts’ Bad-Faith, Breach-of-Contract, Breach-of-Covenant-of-Good-Faith and Excess-Judgment Decisions, 1900-1991*, 41 CATH. U. L. REV. 325 (1992).

Deborah A. Schmedemann & Judi McLean Parks, *Contract Formation and Employee Handbooks: Legal, Psychological, and Empirical Analysis*, 29 WAKE FOREST L. REV. 647 (1994).

Stewart Schwab, *A Coasean Experiment on Contract Presumptions*, 17 J. LEGAL STUD. 237 (1988).

J. Hoult Verkerke, *An Empirical Perspective on Indefinite Term Employment Contracts: Resolving the Just Cause Debate*, 1995 WIS. L. REV. 837.

Russell J. Weintraub, *A Survey of Contract Practice and Policy*, 1992 WIS. L. REV. 1.

James J. White, *Promise Fulfilled and Principle Betrayed*, 1988 ANN. SURV. AM. L. 7.

Peter J. Whitmore, *Empirical Study: A Statistical Analysis of Non-competition Clauses in Employment Contracts*, 15 J. CORP. L. 483 (1990).