

ESSAY

EVIDENCE-BASED LAW

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Numerology is sweeping the professions. In the past decade, both medicine and business have witnessed a radical growth in efforts to subject common wisdoms to empirical testing, which has come to be called evidence-based medicine (or business). The rise of empirical legal scholarship suggests that law will soon face, or is already facing, a similar movement. With an increase in available data and user-friendly desktop statistical packages, any law professor (or student) can test any theory—from the deterrent effect of the death penalty to the existence of the litigation explosion. This trend is surely all to the good in all three disciplines. False myths are a nuisance that can mislead physicians into erroneous treatment, support costly business practices, and produce misguided legal reform. But medicine and business each have a relatively unified mission—the treatment of patients and the production of profits—meaning that their theories are either right or wrong. Law, however, lacks this uniformity of purpose. It is often politics by other means that sorts winners and losers, rather than right and wrong, thereby clouding the normative environment. What is accepted fact in medicine and business is contestable in law. Law’s political nature does not render empirical testing of widely held myths a hopeless misadventure but complicates the hope (and the value) of creating an evidence-based law.

INTRODUCTION

Consider the following story about a lecture at a medical school:

[A] very important Boston surgeon visited the school and delivered a great treatise on a large number of patients who had undergone successful operation for vascular reconstruction. At the end of the lecture, a young student at the back of the room timidly asked, “Do you have any controls?” Well, the great surgeon drew himself up to his full height, hit the desk, and said, “Do you mean did I not operate on half of the patients?” The hall grew very quiet then. The voice at the back of the room very hesitantly replied, “Yes, that’s what I had in mind.” Then the visitor’s fist really came down as he thundered, “Of course not. That would have doomed half of them

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to their death.” God, it was quiet then, and one could scarcely hear the small voice ask, “Which half?”¹

The story illustrates that medicine struggles with its foundations in both the scientific method and in clinical technique. The surgeon might be right that withholding his technique is wrong, but so too is the student right to wonder how it is the doctor knows that the treatment works. University hospitals are filled with research units using controlled techniques designed to test new drugs and procedures.² But medicine also has an inherently clinical focus on individual doctors and individual patients that can make it difficult for many doctors to think like statisticians and scientists. So it is that space remained for a modern “evidence-based medicine” movement to emerge.³ The idea behind this movement is to subject even the most innocuous assumptions to empirical scrutiny.⁴

More recently, business school professors have argued that the concept of evidence-based thinking should be extended to the field of business.⁵ As Stanford Graduate School of Business Professors Jeffrey Pfeffer and Robert Sutton put it, business is filled with “dangerous half-truths and total nonsense.”⁶ Books on business are filled, for example, with advice to managers that promote linking performance tightly to pay (“pay-for-performance programs”),⁷ spending significant energy on developing a clear strategy (“strategy is destiny”),⁸ and even such extreme measures as firing the worst performing ten percent of employees (“forced ranking”).⁹ In each case, virtually no evidence whatsoever can be found that these measures have significant benefi-

¹ *More and Bigger Clinical Trials Ahead*, MED. WORLD NEWS, Sept. 1, 1972, at 45.

² *See id.* at 46 (noting that, in 1972, the “multi-institutional approach to clinical research appear[ed] to be gaining popularity throughout medicine”).

³ *See generally* David L. Sackett et al., *Evidence Based Medicine: What It Is and What It Isn't*, 312 BRIT. MED. J. 71 (1996) (describing evidence-based medicine).

⁴ *See id.* at 71 (“Evidence based medicine is the conscientious, explicit, and judicious use of current best evidence in making decisions about the care of individual patients.”).

⁵ *See* JEFFREY PFEFFER & ROBERT I. SUTTON, *HARD FACTS, DANGEROUS HALF-TRUTHS AND TOTAL NONSENSE: PROFITING FROM EVIDENCE-BASED MANAGEMENT* 13 (2006) (“Evidence-based management proceeds from the premise that using better, deeper logic and employing facts to the extent possible permits leaders to do their jobs better.”).

⁶ *See id.* at 14 (“In almost every field there are accepted truths, or conventional wisdom, that guide decisions and actions. And in almost every field . . . many practitioners and their advisers are unwilling or unable to observe the world systematically because they are trapped by their beliefs and ideologies The result is that much conventional wisdom is wrong.”).

⁷ *See id.* at 126 (“[M]ost pay-for-performance programs fail to achieve their objectives . . .”).

⁸ *See id.* at 136 (calling many businesses’ focus on strategy a “half-truth[]” that “can obscure as much as it illuminates”).

⁹ *See id.* at 107 (“A survey of more than 200 human resource professionals . . . found that even though more than half of the companies used forced ranking, the respondents reported that forced ranking resulted in lower productivity . . .”).

cial effects that outweigh their accompanying harms, despite the thousands of studies business school faculty—who also write these books—conduct on actual firms. Unfortunately, this is not just a war among academics as to who can sell the most business books in airports. Managers apparently read and believe these books; Pfeffer and Sutton document dozens of cases of firms that openly and religiously embrace these principles.¹⁰

Increasingly, however, firms subject their deeply held beliefs to the rigors of empirical testing. For example, large-scale marketers, like Wal-Mart, trust no theories and simply manipulate every aspect of their business and test whether the results produce additional sales.¹¹ If putting an open freezer filled with frozen turkey breasts near the checkout counter produces more sales in July than a stand offering hot dog rolls, then turkey breasts it is. Never mind the strong intuition that summer is for hot dogs and people only eat turkey in November. Wal-Mart's thousands of stores enable it to collect data on millions of shopping decisions, thereby allowing them to test every aspect of conventional wisdom in the pursuit of greater revenue.¹²

Even economics has embraced the new religion of empiricism. Economics is a social science, of course, and as such has always had strong empirical ties. But recent decades have seen the field dominated by game theory and modeling, rather than empirical research.¹³ The field now embraces novel ways of testing a wide range of social phenomena, however, as evidenced by the popularity of Steven Levitt's publication of *Freakonomics*¹⁴ (and its more dubious successor, *Super Freakonomics*¹⁵). The popularity of these books and Levitt's rise as a public figure has made finding novel ways to test conventional wisdom fashionable in economics.

¹⁰ See *id.* at 57–187.

¹¹ According to Professor Ian Ayres, “retailers like Wal-Mart have more information in their databases than the U.S. Library of Congress.” Dana Flavelle, *What the Data Crunchers Know About You*, THESTAR.COM (Apr. 23, 2010), <http://www.thestar.com/business/article/799986—what-the-data-crunchers-know-about-you>; see also IAN AYRES, SUPER CRUNCHERS: WHY THINKING-BY-NUMBERS IS THE NEW WAY TO BE SMART 10–11 (2007) (“Business and government professionals are relying more and more on databases to guide their decisions.”).

¹² See AYRES, *supra* note 11, at 11 (noting that “Wal-Mart’s data warehouse . . . stores more than 570 terabytes” of data).

¹³ Multiple Nobel Prizes in Economics were awarded to practitioners of game theory in the past twenty years, including recipients such as John Nash, John Harsanyi, and Reinhard Selten in 1994; Thomas Schelling and Robert Aumann in 2005; and Roger Myerson, Leonid Hurwicz, and Eric Maskin in 2007. See *All Prizes in Economic Sciences*, NOBEL-PRIZE.ORG, http://nobelprize.org/nobel_prizes/economics/laureates/ (last visited Jan. 20, 2011).

¹⁴ STEVEN D. LEVITT & STEPHEN J. DUBNER, *FREAKONOMICS: A ROGUE ECONOMIST EXPLORES THE HIDDEN SIDE OF EVERYTHING* (2005).

¹⁵ STEVEN D. LEVITT & STEPHEN J. DUBNER, *SUPER FREAKONOMICS: GLOBAL COOLING, PATRIOTIC PROSTITUTES AND WHY SUICIDE BOMBERS SHOULD BUY LIFE INSURANCE* (2009).

The empirical trend has also hit the legal academy. Empirical legal scholarship has witnessed exponential growth in just the past few years. Law review articles increasingly either rely heavily on empirical research or actually present original empirical evidence in support of their arguments.¹⁶ So common are empirical submissions that several notable law reviews are developing policies for reviewing empirical pieces. The *Yale Law Journal*, for example, requires authors to submit their data to the students who run the journal along with the article submission.¹⁷ The reliance on empirical methods has pushed others to mimic the peer-review process common to the social sciences.¹⁸ Similarly, the University of Chicago Law School's *Journal of Legal Studies* now commonly publishes empirical pieces.¹⁹

Most importantly, the newly founded *Journal of Empirical Legal Studies* (*JELS*) has experienced enormous success.²⁰ *JELS* exclusively publishes empirical work.²¹ Even though *JELS* is only in its eighth

¹⁶ See, e.g., Shari Seidman Diamond & Pam Mueller, *Empirical Legal Scholarship in Law Reviews*, 6 ANN. REV. L. & SOC. SCI. 581, 592 (2010) (reviewing the content of law reviews and concluding that although "original empirical work still accounts for only a modest portion of the work published in law reviews," "[t]he trend, however, continues to be upward"); Lee Epstein & Gary King, *The Rules of Inference*, 69 U. CHI. L. REV. 1, 2 (2002) ("The law reviews are replete with articles ranging from the normative to the descriptive, from narrow doctrinal analyses to large-sample-size (large-*n*) statistical investigations [M]any . . . evince a common characteristic: a concern, however implicit, with *empiricism*"); Tracey E. George, *An Empirical Study of Empirical Legal Scholarship: The Top Law Schools*, 81 IND. L.J. 141, 147 (2006) (reporting that in law reviews, "the number of references to ELS phrases—empiric, empirical, quantitative, statistically significant, statistical significance . . . continues to grow").

¹⁷ See Anthony Sebok, *Law Reviews Submission Guidelines, Fall '06 Version 1.0*, <http://www.concurringopinions.com/archives/Fall%2006%20Submission%20Guide%201.0.doc> (last visited Mar. 11, 2011) (noting that for empirical pieces, the *Yale Law Journal* requests authors to "please upload all materials required for replication (including computer programs and data sets)").

¹⁸ For example, the *Harvard Law Review* now asserts that it conducts peer review of articles. See *Submissions*, HARV. L. REV., <http://www.harvardlawreview.org/submissions.php> (last visited Mar. 11, 2011) ("[A]t least two editors review *every* submission, and many pieces go through substantially more stages of review, including an Articles Committee vote, a preemption check, faculty peer review, and a vote by the body of the *Review*.").

¹⁹ See *About Journal*, J. LEGAL STUD., <http://www.journals.uchicago.edu/page/jls/brief.html> (last visited Mar. 11, 2011) ("The *Journal of Legal Studies* is a journal of interdisciplinary academic research into law and legal institutions. It emphasizes social science approaches, especially those of economics, political science, and psychology, but it also publishes the work of historians, philosophers, and others who are interested in legal theory."); see also William M. Landes, *The Empirical Side of Law & Economics*, 70 U. CHI. L. REV. 167, 170 tbl.1 (2003) (reporting that 38.5% of the articles in the *Journal of Legal Studies* are empirical). Professor Landes also reports a 2.7% yearly increase in the rate of empirical articles in the *Journal of Law & Economics* between 1972 and 2002. Landes, *supra*, at 172.

²⁰ As a disclaimer, I am one of the editors, as are three others who have contributed to this Symposium: Theodore Eisenberg, Michael Heise, and Stewart Schwab.

²¹ See *Journal of Empirical Legal Studies*, WILEY-BLACKWELL, <http://www.wiley.com/bw/aims.asp?ref=1740-1453&site=1> (last visited Mar. 11, 2011) ("The *Journal of Empirical Legal Studies* (*JELS*) is a peer-edited, peer-refereed, interdisciplinary journal that publishes high-quality, empirically-oriented articles of interest to scholars in a diverse range of law and law-

year of existence, studies of the relative impact of law journals show it to be not only the most cited peer-reviewed law journal in the last three years, but also near the top ten of all journals generally.²² *JELS* also helped inspire the creation of the Society for Empirical Legal Studies, which now holds an annual conference that, by its second year, attracted over 300 attendees.²³ Combined with an ever-increasing demand for empirically trained legal scholars, these trends suggest that the reliance on empirical evidence represents a most significant trend in the legal academy, just as it does in other disciplines.

I

EMPIRICAL LEGAL STUDIES: WHY NOW?

Why has empirical legal study grown so quickly at this particular moment in time? After all, legal issues have always produced empirical questions. Recognition of the need to use empirical research to answer legal questions dates back to at least the time of the legal realists.²⁴ As a lawyer, Louis Brandeis famously compiled social science research to support his arguments about the need for legislation to protect women from excessive working hours.²⁵ Even the Supreme Court's venerable *Brown v. Board of Education* opinion cites social science evidence in support of its holding.²⁶ Studies of important legal issues within criminology—such as whether the use of the death penalty deters crime—have also been conducted for many decades.²⁷ Is it correct to conclude that empirical legal research is on the rise? And if it is on the rise, what has caused this trend?

related fields, including civil justice, corporate law, criminal justice, domestic relations, economics, finance, health care, political science, psychology, public policy, securities regulation, and sociology.”)

²² See *Law Journals: Submissions and Rankings*, WASH. & LEE U. SCH. L., <http://lawlib.wlu.edu/lj/> (follow “older surveys” hyperlink, then select check box labeled “2009” and “CF,” and click “Submit”) (last visited Mar. 11, 2011) (noting that, in 2009, the *Journal of Empirical Legal Studies* ranked first in “currency factor” among all refereed journals and fifteenth among all print journals, with currency factor measuring how rapidly journals cite a particular journal’s articles following publication).

²³ See *Cornell Law School Hosts Record-Breaking 2008 Conference on Empirical Legal Studies*, CORNELL U. L. SCH., <http://www.lawschool.cornell.edu/spotlight.cfm?pageid=152185> (last visited Jan. 1, 2011) (“The two-day conference, which featured original empirical and experimental legal scholarship from a diverse range of fields, attracted more than 300 participants from all over the world.”).

²⁴ See George, *supra* note 16, at 144 (“Legal realism was the first movement likely to bring empiricism to law.”); Herbert M. Kritzer, *Empirical Legal Studies Before 1940: A Bibliographic Essay*, 6 J. EMPIRICAL LEGAL STUD. 925 (2009) (cataloging early empirical legal work).

²⁵ See Ruth Bader Ginsburg, *Muller v. Oregon: One Hundred Years Later*, 45 WILLAMETTE L. REV. 359, 361–65 (2009) (discussing how Louis Brandeis’s use of social science influenced the Court’s decision in *Muller v. Oregon*, 208 U.S. 412 (1908)).

²⁶ 347 U.S. 483, 494 n.11 (1954).

²⁷ For discussion of the debate regarding the death penalty, see *infra* notes 50–74 and accompanying text.

As the use of social science in landmark cases like *Muller v. Oregon* and *Brown* demonstrate, the use of empirical methods in law is not new. The Law and Society Association was founded nearly fifty years ago in part to reflect the emergence of the social scientific study of law.²⁸ Its journal, the *Law and Society Review*, has published forty-four volumes worth of social science research in law.²⁹ Similarly, the American Psychology-Law Society's flagship journal, *Law and Human Behavior*, is in its thirty-fourth volume.³⁰

What is different today is that many law professors simply think differently about empirical legal scholarship. In 1986, Lawrence Friedman described law and social science as being akin to a "thick rug[] in the dean's office"; that is, something that is nice to have but hardly necessary.³¹ Most top law schools today now seem to view empirical scholars as essential. Harvard, Yale, Chicago, the University of Pennsylvania (Penn), Stanford, Duke, and most especially Northwestern all have radically increased the number of trained social scientists on their faculty. All have had economically trained or economically oriented faculty for many years, of course, but few of these have also been empiricists.³² Penn, for example, went from having one empiricist

²⁸ The Law and Society Association was founded in 1964. See LAW & SOC'Y ASS'N, <http://www.lawandsociety.org/> (last visited Nov. 12, 2010).

²⁹ See *Law & Society Review*, LAW & SOC'Y ASS'N, <http://www.lawandsociety.org/review.htm> (last visited Mar. 11, 2011) (stating that the *Law & Society Review*, founded in 1966, has published volumes on an annual basis).

³⁰ See *Law and Human Behavior*, SPRINGER, <http://www.springerlink.com/content/0147-7307> (last visited Nov. 12, 2010) (noting that the first volume of *Law and Human Behavior* was published in 1977 and the thirty-fourth volume in 2010).

³¹ Lawrence M. Friedman, *The Law and Society Movement*, 38 STAN. L. REV. 763, 777 (1986) ("Prestigious law schools offer courses in sociology, history, or philosophy of law; or in psychology or anthropology of law. But everybody knows that these are elegant frills, like thick rugs in the dean's office; they have nothing to do with 'real' legal education."). But see Roger C. Cramton, "The Most Remarkable Institution": *The American Law Review*, 36 J. LEGAL EDUC. 1, 9 (1986) ("Empirical studies dealing with legal institutions or the legal profession also find their way increasingly into new specialized faculty-edited journals."). Ironically, the first use of the term *Empirical Legal Studies* to mark a particular way of studying law also dates from roughly the same time. See David M. Trubek, *Where the Action Is: Critical Legal Studies and Empiricism*, 36 STAN. L. REV. 575, 585 (1984) ("[N]ondoctrinalists, influenced by a pragmatic concept of law, aware of the fact that legal rules often were only of marginal impact in daily life, and affected by positivist concepts of knowledge imbibed through contact with their social science allies, tended to think of themselves as 'empiricists' and to champion empirical legal studies.").

³² For example, Chicago's well-known law and economics orientation has long boasted Bill Landes, a trained economist, and Judge Richard Posner, both of whom have consistently produced empirical legal scholarship for many decades. See *The Faculty*, U. CHI.: L. SCH., <http://www.law.uchicago.edu/people/faculty> (follow hyperlinks "L" and "P") (last visited Mar. 11, 2011). The first volume of Chicago's *Journal of Legal Studies*, published in 1972 and cofounded by Judge Posner, included several notable empirical contributions. See, e.g., Richard A. Posner, *A Theory of Negligence*, 1 J. LEGAL STUD. 29 (1972) (presenting a somewhat systematic review of cases in which courts relied on implicit economic theories). The University of Michigan Law School has long boasted two well-known empirical scholars in Phoebe Ellsworth, a psychologist, and Richard Lempert, a sociologist.

cal scholar to having several in just a couple of years. Yale nearly doubled its numbers, as did Stanford. And Northwestern went from considering an association with the American Bar Foundation as adequate to having more than ten empirically trained faculty members (not even counting their now-outgoing Dean, David Van Zandt, who is a sociologist).³³ Empirically trained scholars now seem to be critical to a fully successful law faculty.³⁴

But why is all of this happening now? The need to shed empirical light on legal questions is not novel, but the ability and desire of legal scholars to conduct empirical work has changed in several ways. Three factors have produced this trend: a growth in the number of entry-level faculty members possessing empirical training,³⁵ the ease with which empirical research can now be conducted, and the influence of law and economics.

First, the supply of people trained to conduct empirical work has grown enormously. Law faculties are increasingly filled with scholars who possess both a law degree and a PhD in some other discipline.³⁶ The other discipline is not always a social science, of course; PhDs in history and other humanities are common. But scholars who hold so-

See Professors of Law, MICH. L.: U. MICH. L. SCH., http://web.law.umich.edu/_FacultyBioPage/index.asp (last visited Mar. 11, 2011); *see also Professors Emeriti*, MICH. L.: U. MICH. L. SCH., http://web.law.umich.edu/_FacultyBioPage/index.asp?Category=5 (last visited Mar. 11, 2011).

³³ Northwestern University School of Law's web site boasts that the majority of its faculty have earned PhDs, eighteen of whom hold these degrees in social sciences that are empirically focused (e.g., political science, psychology, sociology, anthropology, and economics). *See Faculty Research & Achievement*, Nw. L., <http://www.law.northwestern.edu/faculty/> (last visited Mar. 11, 2011). Not all of these are necessarily empirical scholars (political science and economics includes subdisciplines that are not primarily empirical), and the faculty includes scholars who produce empirical work but who do not hold PhDs. My identification of specific schools is meant only to be illustrative and is necessarily impressionistic. A specific accounting is obviously perilous, as it will inevitably be incomplete, and those omitted might feel slighted—for which I apologize. The listing in this Essay, for example, omits the law school faculties of the University of Southern California and New York University, which successfully hosted the fourth and the second Conference on Empirical Legal Studies, respectively, and which both have sizeable sets of empirical scholars. My listing also omits two of my own empirically minded coauthors: Mitu Gulati of Duke University School of Law and Chris Guthrie, the Dean of Vanderbilt University Law School, which has a large group of scholars devoted to studying human behavior and law.

³⁴ *See* George, *supra* note 16, at 152–53 (reporting the percentage of faculty at top institutions who have social science PhDs); Kathleen M. Sullivan, *Foreword: Interdisciplinarity*, 100 MICH. L. REV. 1217, 1222 (2002) (“[T]he increasingly empirical study of law is one of the most dramatic trends in recent legal scholarship.”).

³⁵ *See* George, *supra* note 16, at 159–60 (“[T]he University of Pennsylvania, the University of Southern California, and Northwestern University have hired remarkable numbers of social scientists into entry-level posts.”).

³⁶ *See id.* at 152 tbl.2 (noting that for the 2003–04 academic year, over 20% of the tenure-track law faculty at the University of California, Berkeley; George Mason University; Northwestern University; the University of Pennsylvania; and Stanford University had doctorates in social science).

cial science PhDs and law degrees represent a large chunk of the dual J.D./PhD holders who now teach at law schools.

The attractiveness of J.D./PhDs (in any field) to law faculties is not hard to understand. Why hire someone with only a J.D. when you can have someone from a top school who not only has the J.D. but also many years of additional training? Furthermore, that additional training is in how to produce scholarship—something law schools do not train their J.D. candidates to do.³⁷ Most law schools know that a decision to hire an entry-level candidate is likely to lead to a decision to tenure that entry-level faculty member a few years later. Hiring a J.D. with little or no proven track record of scholarship thus is far riskier than hiring one who already has published several articles. Graduate school provides law-faculty candidates the time and training needed to produce publications, thereby providing law school hiring committees with an assurance that these candidates can get work out the door. Such a record also gives hiring committees an indication of what that scholarship will look like. Job candidates who have not spent a great deal of time producing scholarship in an academic environment are increasingly at a disadvantage on the entry-level teaching market.

As law schools increasingly hire junior faculty members who possess empirical training, law will naturally see an increase in empirical work.³⁸ But those J.D.s trained in the social sciences—more so than those trained in humanities—are apt to convert at least some of their colleagues into producers of empirical work.³⁹ Social scientists, by nature, collaborate.⁴⁰ Because collaborative work is a core aspect of their training, they will look for collaborators among their colleagues.⁴¹ Social scientists are thus apt to spread their methods among the faculties that they join.⁴²

Second, empirical legal scholarship has become far easier to conduct. In the 1970s, an empirical study of a legal issue would probably

³⁷ *Id.* at 149–50 (“Law professors with social science doctorates *usually* are better positioned to undertake empirical research than are other professors. Law schools generally do not teach courses in survey methodology, statistical analysis, or research design. Graduate social science programs do.”).

³⁸ *See id.* at 150 (“[A] law school with a greater proportion of its faculty holding social science doctorates is more likely to produce [empirical legal scholarship] than a law school with a lower proportion.”).

³⁹ *See id.* (“Non-social scientists benefit from the presence of social scientists for informal interactions, such as advice on how to undertake an empirical project or what method would be appropriate, and for formal collaborations, such as co-authorship.”).

⁴⁰ *See* Tracey E. George & Chris Guthrie, *Joining Forces: The Role of Collaboration in the Development of Legal Thought*, 52 J. LEGAL EDUC. 559, 566 fig.4 (2002) (documenting the rate of coauthorship in various social science disciplines).

⁴¹ *See* George, *supra* note 16, at 150 (“[A] trend toward increased collaboration can be seen in law schools.”).

⁴² *See id.*

have required hiring a sizeable number of research assistants to gather data from the original court records—assuming one could obtain the cooperation of a judge or other official to gain access to those records. The data would then have to be coded onto punch cards and run through the university's mainframe computer system (which might charge dearly for mainframe computer time). Simply learning how to use the complex statistical packages that existed in the 1970s was a full-time job. A would-be legal researcher faced an obstacle of hazards, from inaccurately punched computer cards and inept research assistants to irritable court clerks and misfiled cases.

The combination of the Internet and the desktop computer has liberated the modern empirical legal researcher. The Internet has induced courts, government agencies, and others to compile and make available mountains of data on all manner of subjects related to law. The Internet also gives the researcher direct access to cases without leaving the comfort of his or her office. Legal research services such as Westlaw and LexisNexis make easily available all court decisions that produce opinions at essentially no cost to legal academics. And although it does charge, PACER makes every federal court filing available.⁴³ All of this data can be gathered without cumbersome transcription and analyzed with software that runs conveniently on any laptop computer. Complex statistical analyses still require some care, of course. But the ability of law faculty to consult the newly hired social scientists makes even difficult statistical undertakings manageable for any legal academic.⁴⁴

Third, the contribution of law and economics to empirical legal study cannot be overlooked. Although the field can be readily attacked for embracing facile assumptions about how legal rules are apt to work, it creates a framework for developing empirical tests. Law and economics, more so than other approaches to law, aspires to identify its assumptions carefully and state the foundations for its conclusions clearly. Both its assumptions and conclusions can thus easily be tested. Furthermore, economics' concern with effect sizes (that is, the extent of the influence that any social or legal factor has on behavior) demands an empirical approach; the magnitude of the influence of any legal reform on behavior cannot be assessed by intuition. It is thus perhaps not surprising that many of the contemporary empirical pieces are presented at the American Law and Economics Association and published in the *Journal of Legal Studies*.

⁴³ PACER: PUB. ACCESS TO CT. ELECTRONIC RECS., <http://www.pacer.gov/> (last visited Mar. 11, 2011) (“[PACER] is an electronic public access service that allows users to obtain case and docket information from federal appellate, district and bankruptcy courts . . .”).

⁴⁴ See George, *supra* note 16, at 150 (noting that law faculty can consult their colleagues trained in the social sciences for advice on appropriate methods, among other things).

Furthermore, law and economics has proven to be amenable to questioning its own assumptions. The field has embraced behavioral law and economics as a creditable subdiscipline.⁴⁵ Behavioral law and economics is, at its core, empirical; its very reason for existence is the belief that careful empirical work will show that human beings often do not conform to the assumptions of microeconomic theory.⁴⁶ Law and economics provided a vast gold mine of basic observations concerning deterrence and incentives. As researchers slowly played this mine out (and the vein of game theory and law), they embraced more broad-minded approaches, which included the empirically informed subdiscipline of behavioral law and economics and work that tested the basic economic assumptions underlying law and economics scholarship.⁴⁷

These three factors are largely responsible for the explosive growth in empirical work. More social scientists in the legal academy, using the more readily available sources of data and tools to analyze them, have joined the surge in interest in empirical work in law and economics to produce this new wave.

II

EMPIRICAL LEGAL SCHOLARSHIP IS NOT THE SAME AS EVIDENCE-BASED LAW

Empirical legal scholarship, however, is not the same as evidence-based law. Empirical legal scholarship resides primarily in the academy. The point of evidence-based law is not to produce a set of empirical term papers that we academics can present to each other at conferences. The point is to create better law—law informed by reality.

At this point, the jury is still out on whether the empirical legal studies movement will produce evidence-based law. In fact, the trial is still in progress. Compared to other disciplines, evidence-based law lags. Medicine has long relied on empirical research and continues to

⁴⁵ See Cass R. Sunstein, *Behavioral Analysis of Law*, 64 U. CHI. L. REV. 1175, 1175 (1997) (“The future of economic analysis of law lies in new and better understandings of decision and choice.”).

⁴⁶ See Jeffrey J. Rachlinski, *The “New” Law and Psychology: A Reply to Critics, Skeptics, and Cautious Supporters*, 85 CORNELL L. REV. 739, 766 (2000) (“Economics provided law with a behavioral theory that is rigorous and precise, but lacks an empirical foundation. Psychology offers an empirical, scientific source for theories of human behavior. We have only begun to see how the scientific study of human behavior will reshape the study of law.”).

⁴⁷ See Sunstein, *supra* note 45, at 1175 (“[S]ocial scientists have learned a great deal about how people actually make decisions. Much of this work calls for qualifications of rational choice models. Those models are often wrong in the simple sense that they yield inaccurate predictions.” (footnote omitted)).

find new ways to integrate research into the practice.⁴⁸ Although many businesses cling to existing theories that lack support,⁴⁹ the widespread availability of research tools and statistical analysis has encouraged others to test more and more of their ideas before putting them into practice. Economics, as noted above, is on the move to empiricism, and is working to sell its new ideas to the general public. Although empiricism is a big trend within the legal academy, moving these ideas from the academy into the courts and the legislatures remains a challenge.

Debates on the death penalty and tort reform provide two prime examples of the failure of empirical work to influence public policy. The death penalty has remained a part of public debate since 1972, when the Supreme Court ordered a temporary moratorium on its use in *Furman v. Georgia*.⁵⁰ In *Furman*, the Court declared all extant death penalty statutes fundamentally deficient in failing to provide juries with adequate guidance in when they can impose a death sentence.⁵¹ States reacted quickly by creating more detailed death penalty statutes, and the Court proclaimed itself satisfied with the new measures enacted by Georgia four years later in *Gregg v. Georgia*.⁵²

The temporary moratorium sparked enormous public debate on the death penalty. Given *Furman's* focus on the instructions to the jury, it naturally produced a great deal of legislative activity.⁵³ The time was ripe for an informed debate, and several social scientists produced research on the role of death penalty in criminal justice.⁵⁴ To be sure, the deterrent effect of the death penalty was not central to *Furman's* holding, and neither is evidence that it deters crime essential to embracing the death penalty as a sentencing option. The death penalty can be justified on retributive grounds alone, even if the penalty has no instrumental value in deterring crime.⁵⁵ But embracing

⁴⁸ See Sackett et al., *supra* note 3; see also PFEFFER & SUTTON, *supra* note 5, at 13–14 (briefly discussing evidence-based medicine).

⁴⁹ See PFEFFER & SUTTON, *supra* note 5, at 217 (arguing that many companies “are more interested in just copying others, doing what they’ve always done, and making decisions based on beliefs in what ought to work rather than on what actually works”).

⁵⁰ 408 U.S. 238, 240, 305, 310, 314, 370–71 (1972) (per curiam).

⁵¹ *Id.* at 370–71.

⁵² 428 U.S. 153, 207, 226–27 (1976).

⁵³ See STUART BANNER, *THE DEATH PENALTY: AN AMERICAN HISTORY* 267 (2002) (“The Supreme Court’s 1972 decision in *Furman v. Georgia* . . . touched off the biggest flurry of capital punishment legislation the nation had ever seen.”).

⁵⁴ See John J. Donohue & Justin Wolfers, *Uses and Abuses of Empirical Evidence in the Death Penalty Debate*, 58 STAN. L. REV. 791, 792–94 (2005) (briefly reviewing some of the evidence on the death penalty).

⁵⁵ See Carol S. Steiker, *No, Capital Punishment Is Not Morally Required: Deterrence, Deontology, and the Death Penalty*, 58 STAN. L. REV. 751, 752 (2005) (noting that one of the two principle arguments for the death penalty is retributive: “The first gambit is to consider in detail the facts of one or more capital murders and to propose that only the punishment of

retributive goals may seem barbaric to many, and most who support the death penalty believe it both to be a just punishment in some cases and an effective deterrent.⁵⁶ In the mid-1970s, a majority of Americans both supported the death penalty and believed it to be an effective deterrent.⁵⁷ This belief doubtless helped spur numerous state legislatures to address the concerns the Court raised in *Furman* so as to restore its use.

Social science research on the subject, however, provides no clear answer to the question of whether the death penalty deters crime. Studies published on the issue in the mid-1970s were divided. Some suggested that the death penalty deters violent crime, while others—using much the same data—showed no effect.⁵⁸

Surprisingly, little has changed in over thirty years of study.⁵⁹ Researchers who took up the issue in recent years produced an analogous result; some studies concluded that the death penalty deters crime, and others concluded that it does not.⁶⁰ The contemporary debate includes some claims that are extremely difficult to support—such as that each execution deters eighteen homicides, but researchers remain divided.⁶¹ Curiously, researchers today also often use the same sources of data to reach completely different conclusions.⁶²

It might be unfair to hope that social science—so divided on a subject as the death penalty—could shape public policy. But if empirical legal scholars using the same data and assessing the same subject cannot reach consensus on an important public policy issue, then there clearly are problems with converting empirical legal studies into evidence-based law. Furthermore, the only clear result of the debate

death is an adequate and proportional response to the terrible suffering of the victim intentionally inflicted by the perpetrator—a predominantly retributive argument.”).

⁵⁶ See Donohue & Wolfers, *supra* note 54, at 792 (asserting that beliefs about deterrence affect public debate on the death penalty).

⁵⁷ See BANNER, *supra* note 53, at 268 (stating that by 1976, supporters of the death penalty outnumbered opponents of the death penalty 65% to 28%).

⁵⁸ See Donohue & Wolfers, *supra* note 54, at 792 (reviewing research on the deterrent effect of the death penalty).

⁵⁹ See *id.* at 792–94.

⁶⁰ See *id.*

⁶¹ See Hashem Dezhbakhsh et al., *Does Capital Punishment Have a Deterrent Effect? New Evidence from Postmortality Panel Data*, 5 AM. L. & ECON. REV. 344, 344 (2003).

⁶² Both Donohue and Wolfers and Dezhbakhsh used the Federal Bureau of Investigation’s Uniform Crime Reports as primary sources of data to conclude that the death penalty does not and does deter violent crime, respectively. See *id.* at 360 (“The crime and arrest rates are from the Federal Bureau of Investigation’s (FBI) Uniform Crime Reports.”); Donohue & Wolfers, *supra* note 54, at 796 (“[W]e present two series for homicides—one from the Uniform Crime Reports and the other compiled from Vital Statistics sources, based on death certificates.”). Donohue and Wolfers explicitly attempted to replicate the results of Dezhbakhsh and his colleagues. See Donohue & Wolfers, *supra* note 54, at 805 (“Column 2 shows our replication attempt based on independently collected data (but using the same sources).”).

is that no one should be confident. A reasoned observer should conclude that there is no clear evidence that the death penalty deters and no clear evidence that it does not. Further reflection might allow for the possibility that even if it does deter crime, the effect is small and is not easily shown with simple statistical techniques (as a more robust effect would be expected to). As two of the leading researchers in this field have argued, the data available provides at best a weak and inevitably inconclusive test of whether the death penalty deters crime.⁶³

Whether the death penalty deters crime or it does not, it is clear that social science research on the death penalty has no effect whatsoever on the public or on legislatures.⁶⁴ In the 2000 presidential campaign, then-candidate George W. Bush (who signed over 150 death warrants as Governor of Texas⁶⁵) asserted that the death penalty could not be supported unless it functions effectively as a deterrent.⁶⁶ Despite the conflicting evidence, the eventual President stated the position of many Americans by asserting his belief that it does.⁶⁷ The belief that the death penalty deters crime plays a notable role in public support for the death penalty.⁶⁸ And public support for the death penalty has remained largely constant since the mid-1970s, at least until very recently.⁶⁹ Its recent decline in use is also likely unrelated to the current social science debate, but rather stems from several high-

⁶³ See Donohue & Wolfers, *supra* note 54, at 794 (“[T]he death penalty—at least as it has been implemented in the United States since *Gregg* ended the moratorium on executions—is applied so rarely that the number of homicides it can plausibly have caused or deterred cannot be reliably disentangled from the large year-to-year changes in the homicide rate caused by other factors.”).

⁶⁴ See BANNER, *supra* note 53, at 281 (“Academic studies of deterrence had scarcely any impact, in any event, on the pervasive folk wisdom that the death penalty *had* to have a deterrent effect, simply because it was more severe than any other.”).

⁶⁵ See Alan Berlow, *The Texas Clemency Memos*, ATLANTIC MONTHLY, Jul./Aug. 2003, at 91, 91 (“During Bush’s six years as governor 150 men and two women were executed in Texas—a record unmatched by any other governor in modern American history.”).

⁶⁶ *The Third Gore-Bush Presidential Debate: October 17, 2000 Debate Transcript*, COMMISSION ON PRESIDENTIAL DEBATES, <http://www.debates.org/index.php?page=october-17-2000-debate-transcript> (last visited Mar. 11, 2011) (noting that when asked if he believed the death penalty deterred crime, Bush responded: “I do. It’s the only reason to be for it. Let me finish, sir. I don’t think you should support the death penalty to seek revenge. I don’t think that’s right. I think the reason to support the death penalty is because it saves other people’s lives.”).

⁶⁷ *Id.*

⁶⁸ See Jeffrey M. Jones, *Support for the Death Penalty 30 Years After the Supreme Court Ruling*, GALLUP (June 30, 2006), <http://www.gallup.com/poll/23548/Support-Death-Penalty-Years-After-Supreme-Court-Ruling.aspx> (reporting that, in 2003, 11% of those who supported the death penalty cited deterrence as the primary reason for their support).

⁶⁹ BANNER, *supra* note 53, at 275 (noting that “[c]apital punishment’s popularity held steady” from the 1970s to the 1990s).

profile cases of convicted defendants who were later exonerated through the use of DNA testing.⁷⁰

Even the application of the death penalty is largely unaffected by social science. Findings that jurors are confused by death penalty instructions,⁷¹ are overly influenced by victim impact statements,⁷² and are more prone to impose the death penalty due to certain screening procedures⁷³ have not changed how the courts implement the death penalty. Neither has evidence that the death penalty is administered in a way that produces large racial disparities had any real influence on its administration.⁷⁴ Execution rates continue apace, with only modest reforms.

Second, consider the tort reform movement. Since at least the 1980s, if not before, the general public has embraced the myth that the civil litigation system is out of control.⁷⁵ Popular books like *The Litigation Explosion* express the concern that civil juries are ruining American business with arbitrary judgments of enormous size.⁷⁶ The supposed litigation juggernaut forces reasonable businesses to shut

⁷⁰ See Robert Ruby, *Capital Punishment's Consistent Constituency: An American Majority*, PEW RES. CENTER (June 26, 2007), <http://pewresearch.org/pubs/523/capital-punishments-constant-constituency-an-american-majority> (noting the rising number of exonerations and stating that “[m]eanwhile, support for the death penalty among the public has declined somewhat from its peak in the mid 1990s”). *But see id.* (noting that support for the death penalty “still remains at a substantial 64%”).

⁷¹ See Theodore Eisenberg & Martin T. Wells, *Deadly Confusion: Juror Instructions in Capital Cases*, 79 CORNELL L. REV. 1, 9 (1993) (“In addition to jurors’ imposed ignorance of the sentencing alternative, their lack of understanding of the standards of proof applicable to mitigating circumstances and the required level of interjuror agreement also hamper the decisionmaking process.”).

⁷² See Bryan Myers & Edith Greene, *The Prejudicial Nature of Victim Impact Statements: Implications for Capital Sentencing Policy*, 10 PSYCHOL. PUB. POL’Y & L. 492, 506–07 (2004) (noting that “[t]here is mounting empirical evidence that the status and character of the victim have a significant effect on jurors’ decisions about life and death” and recommending that such victim impact evidence be limited or eliminated). *But see* Theodore Eisenberg et al., *Victim Characteristics and Victim Impact Evidence in South Carolina Capital Cases*, 88 CORNELL L. REV. 306, 340 (2003) (“VIE [victim impact evidence] has a modest effect, if any, on sentencing outcomes.”).

⁷³ See William C. Thompson, *Death Qualification After Wainwright v. Witt and Lockhart v. McCree*, 13 LAW & HUM. BEHAV. 185, 185 (1989) (“Critics of death qualification have argued for many years that death qualified jurors (those who survive death qualification) are more conviction-prone than those who are excluded . . .”).

⁷⁴ See DAVID C. BALDUS, GEORGE WOODWORTH & CHARLES A. PULASKI, JR., EQUAL JUSTICE AND THE DEATH PENALTY: A LEGAL AND EMPIRICAL ANALYSIS 399–404 (1990) (describing evidence of race-of-victim discrimination but noting that there was weaker evidence of race-of-defendant discrimination post-*Furman*).

⁷⁵ Stephen S. Meinhold & David W. Neubauer, *Exploring Attitudes About the Litigation Explosion*, 22 JUST. SYS. J. 105, 106 (2001) (stating that “[i]t is now conventional wisdom that the United States suffers from a litigation explosion” but that social scientists have debunked this myth); see Marc Galanter, *The Day After the Litigation Explosion*, 46 MD. L. REV. 3, 3–5 (1986) (documenting observations of an increasingly litigious society).

⁷⁶ See WALTER K. OLSON, *THE LITIGATION EXPLOSION: WHAT HAPPENED WHEN AMERICA UNLEASHED THE LAWSUIT* 152–77 (1991) (discussing wildly disparate jury verdicts).

down and raises everyone's insurance rates or makes insurance unavailable.⁷⁷ Stories abound of undeserving plaintiffs recovering hundred of thousands of dollars. Newspapers tell of "ghost riders" who board city buses after accidents so they can claim injuries and extract large settlements from municipalities.⁷⁸ To many, greedy lawyers con foolish juries into rendering decisions that hang like a dead weight around the economy's neck.

Concerns about medical malpractice have been among the most prominent in the debate about tort reform. Doctors have complained endlessly, vocally, and effectively about frivolous medical malpractice claims.⁷⁹ Concerns about rising insurance premiums or the complete unavailability of policies have led many legislatures to limit medical malpractice claims through difficult pleading requirements⁸⁰ or damage caps.⁸¹ Even with these reforms, the belief that medical malpractice suits lead doctors to conduct unnecessary tests and otherwise practice "defensive medicine" is pervasive.⁸² In addition to ruining businesses and raising taxes, the civil litigation system is also believed to be part of the reason why health care is so expensive in the United States.⁸³

The central parable motivating these beliefs arose, oddly enough, from an injury at a McDonald's. The anecdote tells of an elderly woman who ordered coffee from a McDonald's drive-through window and accidentally spilled it on herself, causing serious burns.⁸⁴ She sued,

⁷⁷ See *id.* at 184 (noting that in the context of automobile insurance, for example, people pay higher rates when there is more lawsuit exposure).

⁷⁸ See Peter Kerr, 'Ghost Riders' Are Target of an Insurance Sting, N.Y. TIMES, Aug. 18, 1993, at A1.

⁷⁹ See TOM BAKER, THE MEDICAL MALPRACTICE MYTH 43, 45 (2005) (stating that the standard refrain of the American Medical Association is that "[t]he tort system is out of control" and arguing that "when it comes to medical malpractice, the organized interests who want to downplay the impact of malpractice and exaggerate the impact of lawsuits have outthusted, outspent, and just plain beat the other team in mobilizing public opinion").

⁸⁰ Mary Margaret Penrose & Dace A. Caldwell, *A Short and Plain Solution to the Medical Malpractice Crisis: Why Charles E. Clark Remains Prophetically Correct About Special Pleading and the Big Case*, 39 GA. L. REV. 971, 983-84 (2005) (noting that many states have enacted legislation that "heighten[s] the standard of pleading required to bring a medical malpractice action").

⁸¹ Catherine M. Sharkey, *Unintended Consequences of Medical Malpractice Damages Caps*, 80 N.Y.U. L. REV. 391, 412 (2005) (stating that, in 2005, twenty-nine states had compensatory damage caps).

⁸² See BAKER, *supra* note 79, at 118-39 (discussing defensive medicine).

⁸³ See *id.* at 5-6 ("[P]ublic opinion remains firmly anchored to the view that . . . medical malpractice lawsuits contribute significantly to the high cost of health care in the United States."). But see CONG. BUDGET OFFICE, LIMITING TORT LIABILITY FOR MEDICAL MALPRACTICE I (2004) ("[M]alpractice costs account for less than 2 percent of [health care] spending.").

⁸⁴ *Liebeck v. McDonald's*, No. CV-93-02419, 1994 WL 16777703 (N.M. Dist. Ct. Jul. 29, 1994) (trial order).

and a jury awarded her \$2.7 million in punitive damages against McDonald's.⁸⁵ If Americans can name any civil case in the United States, it is this one. And the case is well known the world over; it is the poster child for an allegedly out-of-control legal system that is choking the society in which it exists.

The reality could not be more different. The statistics undermining this story are overwhelming. Virtually every aspect of the litigation explosion has proven to be false.⁸⁶ Studies of case filings over previous decades indicate slow and steady growth consistent with increases in the size of the economy and population generally.⁸⁷ Studies of amounts paid out are similar.⁸⁸ Insurance premiums are more erratic, but their fluctuations do not track litigation trends.⁸⁹ Attorney's fees in large (i.e., class action) cases have remained constant for many years.⁹⁰ *Jury* awards, far from being erratic, seem predictable and stable.⁹¹ They seem little different from judges' awards, in fact.⁹² Even the supposed "judicial hellholes," where corporate defendants supposedly pay endlessly to any plaintiff lucky enough to bring suit, do not exist; jurisdiction-to-jurisdiction variances in damages awards attributable to demographic factors are minimal.⁹³

Tort reform thus pits social science against anecdote.⁹⁴ Thus far, anecdote has won handily. Damage caps are rampant, with one legis-

⁸⁵ *Liebeck v. McDonald's Rests., P.T.S., Inc.*, No. CV-93-02419, 1995 WL 360309, at *1 (N.M. Dist. Ct. Aug. 18, 1994).

⁸⁶ See Michael J. Saks, *Do We Really Know Anything About the Behavior of the Tort Litigation System—and Why Not?*, 140 U. PA. L. REV. 1147, 1149 (1992) ("Much of what we think we know about the behavior of the tort litigation system is untrue, unknown, or unknowable.").

⁸⁷ See Marc Galanter, *Real World Torts: An Antidote to Anecdote*, 55 MD. L. REV. 1093, 1103-05 (1996).

⁸⁸ See *id.* at 1113-15 (suggesting that while the volume of awards has been increasing, this could be because "the composition of the pool of tried cases has changed" and "the cost of compensating victims has changed").

⁸⁹ See BAKER *supra* note 79, at 45 (stating that in the medical malpractice context, it is "[n]ot crazy, but not right" to "think that malpractice lawsuits are the reason for the insurance premium hikes").

⁹⁰ See Theodore Eisenberg & Geoffrey P. Miller, *Attorney Fees in Class Action Settlements: An Empirical Study*, 1 J. EMPIRICAL LEGAL STUD. 27, 28 (2004) ("Contrary to popular belief, we find no robust evidence that either recoveries for plaintiffs or fees of their attorneys as a percentage of the class recovery increased during the time period studied.").

⁹¹ See Kevin M. Clermont & Theodore Eisenberg, *Litigation Realities*, 88 CORNELL L. REV. 119, 147-48 fig.5 (2002) (arguing that trial awards are not out of control and noting that the ratio of the mean personal injury tort award to the mean general contract award has actually been decreasing).

⁹² See Theodore Eisenberg et al., *Juries, Judges, and Punitive Damages: Empirical Analyses Using the Civil Justice Survey of State Courts 1992, 1996, and 2001 Data*, 3 J. EMPIRICAL LEGAL STUD. 263, 265 (2006).

⁹³ See Theodore Eisenberg & Martin T. Wells, *Trial Outcomes and Demographics: Is There a Bronx Effect?*, 80 TEX. L. REV. 1839 (2002).

⁹⁴ See Saks, *supra* note 86, at 1161 ("Anecdotes have a power to mislead us into thinking we know things that anecdotes simply cannot teach us.").

lature after another adopting them.⁹⁵ Reforms have brought heightened pleading to prisoners' rights litigation,⁹⁶ securities litigation,⁹⁷ and most recently, to all cases filed in federal court.⁹⁸ In response to the existence of the supposed judicial hellholes, the Federal Class Action Fairness Act also limits the ability of plaintiffs to sue in their preferred forum.⁹⁹ To be sure, the advocates of tort reform have not gotten their way in every respect. The jury remains in widespread use. And even though it would likely have smoothed the path to health insurance reform, doctors have not seen the implementation of any kind of no-fault liability system that they have long sought. But the reforms have mounted even while the social science evidence strongly suggests that they serve a nonexistent problem.¹⁰⁰

In short, although the rise of the empirical legal studies movement within law promises to bring more well-informed legal policy to the academy, so far, it is well short of creating an evidence-based legal system.

III

THE OBSTACLES TO EVIDENCE-BASED LAW

Why have the evidence-based movements made so much headway in medicine and in business, but not in law? Two principle reasons seem important: first, law has conflicting goals, unlike medicine and business; and second, people do not reason about social phenomena the way they reason about medicine and business. The first is a problem, to be sure, but it is the second that is the most significant impediment to evidence-based law.

A. The Nature of Law Itself Impedes Evidence-Based Law

Medicine and business have clear goals. In medicine, the goal is a positive outcome for the patient's health. Bad treatments can per-

⁹⁵ See David A. Hyman et al., *Estimating the Effect of Damage Caps in Medical Malpractice Cases: Evidence from Texas*, 1 J. LEGAL ANALYSIS 355, 356 (2009) (noting that thirty states have damage caps).

⁹⁶ Prison Litigation Reform Act of 1995, Pub. L. No. 104-134, 110 Stat. 1321-66 to 1321-77.

⁹⁷ Private Securities Litigation Reform Act of 1995, Pub. L. No. 104-67, 109 Stat. 737 (codified in scattered sections of 15 U.S.C.).

⁹⁸ See Kevin M. Clermont & Stephen C. Yeazell, *Inventing Tests, Destabilizing Systems*, 95 IOWA L. REV. 821, 826-31 (2010) (reviewing recent changes to pleading practice).

⁹⁹ Class Action Fairness Act of 2002, Pub. L. No. 109-2, 119 Stat. 4 (codified as amended in scattered sections of 28 U.S.C.); see Kevin M. Clermont & Theodore Eisenberg, *CAFA Judicata: A Tale of Waste and Politics*, 156 U. PA. L. REV. 1553, 1554-55 (2008) (noting that CAFA's intent was to "defeat[] the plaintiffs' bar's manipulation of state courts" by "funnel[ing] more class actions away from the state courts and into the federal courts, and perhaps thereby to discourage class actions").

¹⁰⁰ See *supra* notes 75-93 and accompanying text.

sist for long periods of time, but doctors agree that treatments proved to be ineffective should be abandoned. Evidence-based medicine serves that goal, and hence it is easy to see why it finds acceptance. Medicine embraces the scientific method as a basis for consensus, and if that method shows that a particular treatment saves more lives, doctors will embrace it. Self-interest and other obstacles can impede the process, but both the goal and the methods are clear.

Business likewise has a clear yardstick by which success can be measured—perhaps even a clearer one than medicine. A business is judged by its bottom line. Investors in Wal-Mart do not care if Wal-Mart has a clever theory, they care if Wal-Mart makes money for them. And if selling turkeys in July makes money, then so be it. Just as in medicine, inefficient business practices can persist.¹⁰¹ But over time, methods that produce more money ultimately will keep a business going.

Law, however, lacks such a unifying, organizing principle. Efforts to define its purpose lead only to greater complexity. Almost every area of law is filled with conflicting purpose. Tort and contract law both embrace efforts to achieve efficiency, but also fairness. Criminal law balances rights of the accused with society's broader need to control crime. Conflicting themes run through every area of law.

Consequently, empirical study alone cannot dictate legal policy. Even if most people agreed that the death penalty deters crime, the result of this research would not conclusively demonstrate that the death penalty should be retained. The death penalty could still be considered immoral or unjust.¹⁰² Similarly, even if social science evidence revealed that malpractice damage awards were stable and reasonable, a legislature could support a damage cap as a means of quantifying societal views of what constitutes the outermost value of malpractice. Multiple and sometimes conflicting justifications underlie most legal rules.

Empirical legal studies can rule out certain theories, however. Empiricism is particularly adept at subjecting the reasons people offer for their support for or opposition to a particular rule or system to serious testing. If people say that the death penalty must deter crime or else it is not acceptable, then deterrence can be tested.¹⁰³ If the business community asserts that the jurors are effectively "spinning a roulette wheel" to ascertain a punitive damage award, then that claim

¹⁰¹ See PFEFFER & SUTTON, *supra* note 5, at 13–14 (arguing that in almost any field, inefficient practices persist).

¹⁰² See Steiker, *supra* note 55, at 755.

¹⁰³ See BANNER, *supra* note 53, at 280–81 (describing studies on the deterrent effect of the death penalty and stating that "[a] few studies found a deterrent effect, but most did not").

can be assessed.¹⁰⁴ Empirical studies cannot always answer the ultimate question, but they can rule out certain arguments. The problem of multiple purposes is thus an impediment to evidence-based law, but not an insurmountable one.

B. Human Inference as an Impediment to Evidence-Based Law

The power of anecdote stands as a significant impediment to the development of evidence-based law. Anecdotes about ghost riders or people who obtain a multimillion-dollar judgment for spilled coffee are hard to ignore. So too are stories about criminals who are released from prison only to commit horrible crimes powerful contributors to the popularity of the death penalty. Statistics are invariably more pallid than anecdotes. No single anecdote can capture the idea that the civil justice system is stable, or that the murder rate would be the same without the death penalty.

But the power of anecdote alone cannot entirely explain why public opinion on the legal system diverges so markedly from reality. Anecdotes come from somewhere, and not all anecdotes take hold. The anecdotes that support tort reform, in particular, seem to be promoted actively by the business community and the insurance industry.¹⁰⁵ For example, the insurance industry benefits enormously from the belief in the runaway jury.¹⁰⁶ To insurance firms, the introduction of a damage cap represents a surprising exogenous shock that reduces their payouts. Because insurers price premiums based on a prediction as to the likely payouts, any such shock will temporarily bring them extra profits. Furthermore, damage caps make their awards more predictable. The business community also benefits from reductions in damage awards. These groups will do their utmost to encourage the media to report on stories of out-of-control juries, ensuring that these kinds of anecdotes proliferate widely.

Some politicians likewise benefit from highly publicized stories involving violent criminals. In the United States, the Republican Party has been seen as the champion of law and order for the past few decades. This ensures that virtually every election will feature a candidate who will want to appear to be “tough on crime.” A hard approach to crime control, however, is only useful if the polity per-

¹⁰⁴ See Theodore Eisenberg et al., *Juries, Judges, and Punitive Damages: An Empirical Study*, 87 CORNELL L. REV. 743, 750–79 (2002) (subjecting claims regarding damage awards to empirical analysis).

¹⁰⁵ See Theodore Eisenberg, *U.S. Chamber of Commerce Liability Survey: Inaccurate, Unfair, and Bad for Business*, 6 J. EMPIRICAL LEGAL STUD. 969, 1002 (2009) (arguing that “[t]he Chamber [of Commerce] needs devils to justify its tort reform budget” and to promote legislation).

¹⁰⁶ See Robert L. Habush, *The Insurance “Crisis”: Reality or Myth? A Plaintiffs’ Lawyer’s Perspective*, 64 DENV. U. L. REV. 641 (1988).

ceives crime as an important social issue. Making sure the public has access to anecdotal accounts of violent crime thus serves the interest of one of the major political parties. Every voter old enough to remember the 1988 U.S. presidential campaign will recall that candidate Michael Dukakis was hurt badly by the fact that when he was Governor of Massachusetts, his administration released a criminal named Willie Horton, who went on to rape and kill a resident of Maryland.¹⁰⁷ This anecdote likely eliminated parole for thousands of offenders nationwide, as politicians shuddered to think the same might happen to them if they too released the wrong inmate.

But even this is an incomplete account of the influence of anecdotes. Anecdotes likely also affect medicine and business in much the same way. Anecdotes are always potent as easily understandable and commonly available mechanisms for inspiring belief. Medicine and business also certainly have their own entrenched interests that benefit from certain commonly held beliefs. For example, drug companies benefit when doctors believe their products work and are safe, while CEOs have benefitted amazingly from the belief among corporate boards that the firm benefits when the CEO has a powerful incentive to keep stock prices high. But the law is especially vulnerable to the power of anecdotes—why?

The answer lies in an assessment of which anecdotes stick and which ones influence the public. Anecdotes are not all created equal. There are anecdotes of individuals who have been given dramatically long and apparently unjust sentences under California's three-strikes law¹⁰⁸ or under the federal sentencing guidelines for convictions for low-level drug sales and drug possession.¹⁰⁹ But these are harder to come by. At the same time, everyone remembers Willie Horton. Likewise, stories that would support a robust tort system also exist—such as those involving medical doctors engaged in outrageous conduct or drug companies lying about the adverse consequences of their drugs. But these anecdotes do not seem to have as much bite as a cup of hot coffee at McDonald's.

It is also important that the anecdotes supporting civil justice reform or the death penalty are not even always accurate. The plaintiff

¹⁰⁷ See Carol S. Steiker & Jordan M. Steiker, *Abolition in Our Time*, 1 OHIO ST. J. CRIM. L. 323, 342 (2003) ("Willie Horton's face [was] so powerfully used in the late 1980s as the symbol of what was wrong with American crime policy . . .").

¹⁰⁸ See Emily Bazelon, *Arguing Three Strikes*, N.Y. TIMES, May 23, 2010, § 6 (Magazine), at 40 (describing the case of Norman Williams, who was sentenced to life in prison under California's repeat-offender law for stealing a floor jack from a tow truck).

¹⁰⁹ See Adam Liptak, *Long Term in Drug Case Fuels Debate on Sentencing: Mandatory Minimums Called Too Tough*, N.Y. TIMES, Sept. 12, 2004, at N20 (describing the case of a man facing over fifty years in prison for selling several hundred dollars worth of marijuana).

in the McDonald's coffee case was severely burned on her genitalia.¹¹⁰ Her lawyer also produced convincing evidence that: McDonald's had received a long list of complaints about their coffee, McDonald's knew its coffee was too hot, and it refused to change the temperature (partly because the company believed the coffee tasted better when hot).¹¹¹ The plaintiff also only received a modest settlement, not millions of dollars. Furthermore, although Willie Horton's story was true, he was one of many thousands of prisoners released on a program that might have reduced recidivism rates (and hence violent crime) overall. The anecdotes that stick and that have force are not random stories. They are the anecdotes that speak to closely held political, cultural, or social beliefs. They are available to people because they resonate with more deeply held beliefs.

In effect, the anecdotes are the symptom, not the disease. People who already shun lawyers, embrace a stylized kind of individualism where people take care of themselves, and who do not seek compensation through some collective mechanism believe that the tort system is an unnecessary lodestone, whether it is out of control or not. People who hold law and order to be a central purpose of government believe in the death penalty even without the specter of Willie Horton to encourage their beliefs. This is largely why beliefs that the criminal justice system is too favorable to criminals, that the death penalty is critical to crime control, and that the tort system is out of control do not fluctuate much with the existence or absence of a recent vivid anecdote.

American society is fertile ground for these anecdotes and for the beliefs that animate these anecdotes. Many people in our society embrace a hierarchical worldview that supports a stern criminal justice system.¹¹² We also have many deeply individualistic people who believe that everyone should take care of themselves and thus should blame themselves rather than corporations when they are injured.¹¹³ These beliefs are important to people and are resilient. The anecdotes provide a kind of defense mechanism, making it easy for people to explain the veracity of their beliefs to themselves and to others.

The deeply held nature of these beliefs also shows why they cluster together so tightly.¹¹⁴ For example, despite former President

¹¹⁰ See Andrea Gerlin, *A Matter of Degree: How a Jury Decided That a Coffee Spill Is Worth \$2.9 Million*, WALL ST. J., Sept. 1, 1994, at A1.

¹¹¹ *Id.*

¹¹² See Dan M. Kahan, *The Cognitively Illiberal State*, 60 STAN. L. REV. 115, 122–23 (2007) (noting that some “support a relatively hierarchical social order” and are more likely to worry about “forms of behavior that denigrate traditional, stratifying norms” (emphasis omitted)).

¹¹³ See *id.* at 122.

¹¹⁴ See *id.* at 122–25.

Bush's remarks, the belief that the death penalty deters crime is not essential to believing that it should be a part of a criminal justice system; retributive goals would suffice. And yet, people who support the death penalty nearly uniformly believe that it deters crime. They also tend to believe that gun ownership makes society safer, that abortion should be illegal, that legalization of gay marriage would increase divorce rates, and that climate change is not a serious problem.¹¹⁵ Many are also creationists. These beliefs are significantly correlated because they reflect more fundamental beliefs about how society should run and what it should value. Social science evidence (or even biological and geological evidence in the case of evolution) is beside the point.

The fundamental difficulty that the persistence of these anecdotes raises is thus not the power of anecdotes, but the fundamental nature of how people think about their society. How people see themselves and what they value as important indicates how they react to social science evidence. Dan Kahan and his coauthors have published study after study showing that people's cultural commitments affect how they react to social science.¹¹⁶ People reject evidence that is inconsistent with their views about society and their role in it.¹¹⁷ They embrace evidence that affirms their views.

Medicine and business have similar problems of course, but cultural commitments have a much more superficial influence on these fields. Medicine has a shared ethic and faith in science that is, in part, what draws people to it. Training deepens this ethic. Business draws more broadly from society and has less rigorous training, but also attracts and promotes the success of people who attend to the bottom line. Law is really about governing society. It is a form of politics. Evidence-based law thus faces a far steeper climb than does evidence-based medicine or business.

IV

CONCLUSION: WHAT HOPE IS THERE FOR EVIDENCE-BASED LAW?

This Essay is meant to praise the empirical legal studies movement and evidence-based law—not to criticize it. But it is hard to be optimistic about the prospect for empirically informed legal policy. Law is a hard area in which to conduct empirical research—harder than medicine or business. The lack of shared goals means that many studies are essentially irrelevant to underlying legal policy. Worse yet, the overwhelming tendency among the polity is to treat all social science as essentially meaningless. People interpret social science evi-

¹¹⁵ See *id.* at 122–42.

¹¹⁶ *Id.*

¹¹⁷ *Id.*

dence in ways that are consistent with their beliefs, embracing work that supports them and rejecting work that does not.

This landscape would seem to relegate empirical legal studies to a set of term papers that attendees at the annual empirical legal studies conference happily present to one another—and to no one else. This image is overly bleak, of course. We are not merely in the business of writing term papers to each other (at least, not any more than any other area of legal scholarship). The findings from empirical legal studies get picked up from time to time in the popular press and may change the nature of arguments relating to ongoing issues. And even though politics seems often dominated by extremists, a vast middle of the polity may be open to listening to the consensus of the research.

Furthermore, law is not always crafted in the open glare of political influences. Administrative agencies and congressional staffers are heavy consumers of science and social science. So too are many judges. Entities that need not be subject directly to the electoral crucible and who embrace the professional aim of “getting the science right” can be open to the work of empirical legal studies. For example, the Federal Rules Advisory Committee itself not only commissioned an empirical legal study to assess the impact of the Supreme Court’s recent decisions on pleading, but also seems completely open to accepting the study’s results.¹¹⁸ Similarly, the United States Sentencing Commission undertook a similar inquiry to assess the impact of the Court’s recent decisions on sentencing.¹¹⁹ And the Office of Information and Regulatory Assessment is now headed by an empirical legal scholar, Cass Sunstein, who currently is drafting instructions to all federal agencies to attend to the real-world effects of their regulatory undertakings.¹²⁰

In sum, even as the empirical legal studies movement expands, evidence-based law faces real obstacles. Empirical study of important social phenomena do not always provide clear answers, given the conflicting purposes of many legal rules and that the messages of empirical study will often conflict with deeply held political beliefs, undermining their influence. But as policymakers continue to be exposed to empirical ways of thinking about legal questions, at least in some quarters, evidence-based law might begin to emerge as a real social phenomenon.

¹¹⁸ Memorandum from Andrea Kuperman, Rules Law Clerk to Judge Lee H. Rosenthal, to the Civil Rules Comm. and the Standing Rules Comm. (July 26, 2010), available at http://www.uscourts.gov/uscourts/RulesAndPolicies/rules/Iqbal_memo_072610.pdf.

¹¹⁹ U.S. SENTENCING COMM’N, FINAL REPORT ON THE IMPACT OF *United States v. Booker* on Federal Sentencing (2006).

¹²⁰ *Office of Management and Budget: About OIRA*, WHITEHOUSE.GOV, http://www.whitehouse.gov/omb/inforeg_administrator/ (last visited Mar. 11, 2011).

