European Journal of Law and Economics
https://doi.org/10.1007/s10657-019-09613-w

Does law and economics help decide cases?

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Abstract
Our answer is "less often than you might think." We qualify and defend this answer in several steps. First, we offer some suggestive evidence that major scholarly contributions in law and economics have had relatively more influence with academics than with judges. For example, ranking articles on the basis of judicial citations rather than academic citations produces interesting results: Judges cite Ronald Coase's "The Problem of Social Cost," by far the most cited paper in the legal academy, much less frequently than doctrinal papers that have received relatively little attention from scholars. Second, we argue that some common features of law and economics scholarship are unappealing to judges. The broadest form of explanatory law and economics—like the hypothesis that the common law has tended to produce efficient rules—is often of little use to judges, who require reasons for making or justifying current decisions. Prescriptive law and economics, meanwhile—like various arguments that the legal system should produce efficient rules—often proceeds from ideological premises that judges don't share, or fails to account for the institutional constraints under which judges operate. In short, much law and economics scholarship is insufficiently doctrinal to appeal to the average judge. These features of law and economics scholarship don't prevent judges from using *economics* all the time. After all, economics is a basic social science, and judges encounter economic questions with some regularity. But, even here, we find little evidence that today's judges are making greater use of concepts like "efficiency" and "incentives" than those of the past. Throughout this essay, we comment on Guido Calabresi's "The Future of Law and Economics" (2016) and Richard Posner's "Divergent Paths: The Academy and the Judiciary" (2016).

Keywords Judges · Judicial Behavior · Law and Economics · Citations · Legal Scholarship

JEL Classification K00 · K10 · K40

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Published online: 11 May 2019

1 Introduction

Law is a practical discipline. Is law and economics? At least when judged by one standard—the extent to which judges make use of some of the biggest law and econ scholarship—our answer is "less often than you might think." Much law and economics scholarship has common features—an emphasis on explanation, a lack of emphasis on doctrine—that make judges unlikely to use it. And we see this prediction borne out in the materials that judges actually cite.

This might not be a problem, but it at least presents a puzzle. We take it as a given that law and economics is near-dominant in the academy. We also take it as a given that the legal academy is, for better or worse, obsessed with judges. After all, the most common form of legal pedagogy remains the case method. Most scholars of law and economics teach cases, and some of the most important law and econ scholarship evaluates judicial decision making. ["The Problem of Social Cost" (1960) discusses far more cases than the average Ninth Circuit opinion.] Thus, even if it turns out to be perfectly innocent or reasonable that judges don't have much use for the big ideas in law and economics, we are still faced with an odd contrast: A major school of legal scholarship often seems divorced from the primary object of legal inquiry.

Consider some suggestive evidence. In the legal academy, the most-cited paper is (by a considerable margin) Coase's foundational article; Calabresi and Melamed's "Cathedral" is an impressive sixth. But if we rank the top articles based on judicial citations, as we do below, a different story emerges. The papers most cited by judges are Holmes's "The Path of the Law" and Frankfurter's "Some Reflections on the Reading of Statutes." The judiciary's favored scholarship leans toward doctrinal work of both ancient and recent vintage. The major law and econ papers, meanwhile, drop in the rankings. You have to go down to about 80th place to find Coase, and farther still to find the Cathedral.

There are explanations for this divergence that don't fall at the doorstep of law and econ, but there are also some features of law and econ don't make judicial application easy. Unless it's grounded in doctrine, the "explanatory" vision of law and economics that Guido Calabresi's new book advocates is of little immediate use to practical-minded judges, who require reasons for making or justifying a decision. And the explicitly reformist brand of law and econ, which Guido attributes to Richard Posner, is often pitched at an unhelpful level of abstraction: Judges are not the appropriate vessels for maximizing efficiency across the board. In short, both forms of law and econ are often insufficiently doctrinal to be of much use to judges, who labor under institutional constraints that economists and law professors do not.

These constraints don't keep judges from making use of basic economic reasoning with some frequency. It would be crazy to claim otherwise. After all, economics is a social science—the dominant one—and the social sciences do many things that judges require. Among other things, they are tools for describing and predicting human behavior. But, even here, we find no obvious increase in the degree to which judges bandy about broad economics concepts like incentives and efficiency.

Nonetheless, it would be too strong to claim that all law and economics is irrelevant to judges. That can't be right—as a moment's reflection on an area like antitrust of intellectual property will reveal. But the law and econ that judges use tends to be confined to a few substantive areas of law; the L&E scholarship that sweeps more broadly is used more narrowly. Relatively few litigants have found adequate shelter in the Cathedral, and few courts have bargained their way to a better outcome with the Coase Theorem.

We begin by providing some new evidence on the difference between academic and judicial citations, then comment on Guido's "explanatory" scholarship and Posner's "reformist" scholarship. We conclude with some thoughts on the uses and limits of basic economic prediction. And we even discuss a case.

2 Legal scholarship vs. legal practice

It shouldn't be surprising that a movement in the legal academy would be underappreciated by the judiciary. The broader version of this point—legal scholarship is divorced from practice—has become the conventional wisdom. Twenty-five years ago, Judge Harry Edwards wrote an influential article pointing out the growing disjunction between the legal academy and the legal profession (1992). Adam Liptak of *The New York Times* has written several pieces hitting the soft underbelly of a particularly easy target—law reviews—which are, in the usual narrative, edited by ignorant students and studiously ignored by practitioners. And even Chief Justice Roberts has noted that if you "[p]ick up a copy of any law review… the first article is likely to be, you know, the influence of Immanuel Kant on evidentiary approaches in 18th-century Bulgaria, or something, which I'm sure was of great interest to the academic that wrote it, but isn't of much help to the bar (Liptak 2013)."

More recently, Posner has entered the fray with a book that pursues some of these same themes, "Divergent Paths: The Academy and the Judiciary" (2016). But this general line of attack—legal scholarship is irrelevant to judges—puts critics like Posner in an unusual spot. After all, Posner is both a participant in legal scholarship and (until recently) a judge, and thus, one might think, especially invested in showing that his brand of scholarship matters in practice. But if everyone agrees that judges and scholarship are on divergent paths—as pretty much everyone seems to—why shouldn't this divergence apply to law and econ, too?

Posner sees this tension coming, but makes only a brief attempt to resolve it: "Economic analysis of law largely escapes the criticisms leveled at other intellectually ambitious modern legal scholarship because its value in illuminating difficult economic issues in federal cases and sparking legal reform to resolve them is acknowledged (2016, p. 33)." But the passive voice is doing some heavy lifting here. Who, exactly, does the acknowledging? And what's acknowledged looks like an understatement of law and econ's real ambition, doesn't it? Surely law and economics has attempted much more than "illuminating difficult economic issues in federal cases" (though of course it's done that). After all, the claim that the discipline has illuminated interesting economic questions is no more startling than the idea that medicine has illuminated difficult medical questions or that applied physics

has illuminated questions about the trajectory of a bullet. This kind of illumination reveals only that a discipline is hitting its ordinary benchmarks, not singling itself out for special praise.

And law and econ *has* been more ambitious: It's attempted to take the tools of economics and apply them to legal questions far beyond the issues with which academic economics has been traditionally concerned—to property rights, to accidents, to the decision to sue. These more wide-ranging contributions are what top the well-known lists of the most-cited legal scholarship.

But do judges cite these broader contributions? Some suggestive evidence along these lines is displayed in Tables 1 and 2.[1] Table 1 takes the top 20 most-cited articles in legal scholarship, as compiled by Shapiro and Pearse (2012), and reranks them based on judicial citations. Table 2 assembles an original list of the top 20 articles most cited by judges, drawn from a unique database of tens of thousands of state and federal cases. (The details of these rankings can be found in a short appendix, along with a fuller table of the 100 articles most frequently cited by judges and some data on how that list compares to academic citations.)

The results: The most celebrated contributions of law and economics, which dominate in the academy, get relatively less attention from the judiciary. There are no law and economics papers in the top 20 articles cited by judges. The magnitudes are notable, too. Coase's "The Problem of Social Cost" is, by a considerable margin, the most cited paper in all of legal scholarship. Indeed, it's one of the most cited papers in the history of social science, with more than 5000 citations by Shapiro's count and more than 30,000 total citations on Google Scholar. But judges have cited Coase's article a grand total of 55 times. (Searching for "Coase Theorem" or "Coase" rather than the title of the original paper doesn't change matters.) By contrast, Professor Anthony Amsterdam's student note on the void for vagueness doctrine, published the same year as Coase's paper (1960), has been cited 270 times. A 2008 paper on class certification has been cited in 339 cases (Nagareda 2008). A 1970 Note in the Harvard Law Review has been cited 185 times. No matter what one thinks explains it, this is a remarkable fact: Judges have cited the Coase Theorem—which has spawned a sprawling literature and has been introduced to a generation of law students in 1L contracts and torts—a fraction as often as they cite these other works.

[1] One common criticism of article rankings is that author rankings are the more important metric (Posner and Landes 1995). While we think author rankings would provide interesting additional context, we do not think it's obvious that they are a better indication of what we are most interested in—which is the transmission of major ideas between the academy and judiciary. If we want to know whether judges find the Coase Theorem useful, it seems more sensible to see whether judges reference the theorem or the article, rather than count total cites to Ronald Coase. In addition, counting total citations to law and econ scholars is made more challenging by the fact that two of law and econ's godfathers—Calabresi and Posner—are both judges and scholars.

Table 1 The 20 most-cited articles in the legal academy

	Academic		Judicial	
	Rank	Cites	Rank	Cites
R.H. Coase, *The Problem of Social Cost*, 3 J.L. & Econ. 1 (1960), *reprinted in* 56 J.L. & Econ. 837 (2013)	1	5157	11	55
Samuel D. Warren & Louis D. Brandeis, *The Right to Privacy*, 4 Harv. L. Rev. 193 (1890)	2	3678	2	335
Oliver Wendell Holmes, Jr., *The Path of the Law*, 10 Harv. L. Rev. 457 (1897)	3	3138	1	481
Gerald Gunther, *The Supreme Court, 1971 Term—Foreword: In Search of Evolving Doctrine on a Changing Court: A Model for a Newer Equal Protection*, 86 Harv. L. Rev. 1 (1972)	4	2771	6	206
Herbert Wechsler, *Toward Neutral Principles of Constitutional Law*, 73 Harv. L. Rev. 1 (1959)	5	2343	9	73
Guido Calabresi & A. Douglas Melamed, *Property Rules, Liability Rules, and Inalienability: One View of the Cathedral*, 85 Harv. L. Rev. 1089 (1972)	6	1980	13	22
Charles A. Reich, *The New Property*, 73 Yale L.J. 733 (1964)	7	1874	8	105
Charles R. Lawrence, III, *The Id, the Ego, and Equal Protection: Reckoning with Unconscious Racism*, 39 Stan. L. Rev. 317 (1987)	8	1794	14	18
William J. Brennan, Jr., *State Constitutions and the Protection of Individual Rights*, 90 Harv. L. Rev. 489 (1977)	9	1701	4	248
Robert H. Bork, *Neutral Principles and Some First Amendment Problems*, 47 Ind. L.J. 1 (1971)	10	1653	12	23
Abram Chayes, *The Role of the Judge in Public Law Litigation*, 89 Harv. L. Rev. 1281 (1976)	11	1600	10	69
Frank I. Michelman, *Property, Utility, and Fairness: Comments on the Ethical Foundations of 'Just Compensation' Law*, 80 Harv. L. Rev. 1165 (1967)	12	1580	7	116
William L. Prosser, *The Assault upon the Citadel (Strict Liability to the Consumer)*, 69 Yale L.J. 1099 (1960)	13	1538	3	253
Duncan Kennedy, *Form and Substance in Private Law Adjudication*, 89 Harv. L. Rev. 1685 (1976)	14	1485	16	13
Stewart Macaulay, *Non-Contractual Relations in Business: A Preliminary Study*, 28 Am. Soc. Rev. 55 (1963)	15	1465	19	4
Robert M. Cover, *The Supreme Court, 1982 Term—Foreword: Nomos and Narrative*, 97 Harv. L. Rev. 4 (1983)	16	1370	18	9
Anthony G. Amsterdam, *Perspectives on the Fourth Amendment*, 58 Minn. L. Rev. 349 (1974)	17	1299	5	235
Angela P. Harris, *Race and Essentialism in Feminist Legal Theory*, 42 Stan. L. Rev. 581 (1990)	18	1286	20	0
Robert H. Mnookin & Lewis Komhauser, *Bargaining in the Shadow of the Law: The Case of Divorce*, 88 Yale L.J. 950 (1979)	19	1236	16	13
John Hart Ely, *The Wages of Crying Wolf: A Comment on* Roe *v.* Wade, 82 Yale L.J. 920 (1973)	20	1224	15	16

This table displays the most-cited articles in legal scholarship as reported by Shapiro and Pearse (2012), alongside their judicial citations. The first column displays the academic rank and number of academic citations. The second column displays the number of judicial citations

Table 2 The 20 most-cited articles in the judiciary

	Academic				Judicial	
	Google Scholar		Shapiro			
	Rank	Cites	Rank	Cites	Rank	Cites
Oliver Wendell Holmes, Jr., *The Path of the Law*, 10 Harv. L. Rev. 457 (1897)	2	8239	2	3138	1	481
Felix Frankfurter, *Some Reflections on the Reading of Statutes*, 47 Colum. L. Rev. 527 (1947)	7	1904	10	814	2	414
Richard A. Nagareda, *Class certification in the age of aggregate proof*, 84 N.Y.U. L. Rev. 97 (2008)	15	440	•	•	3	339
Samuel D. Warren & Louis D. Brandeis, *The Right to Privacy*, 4 Harv. L. Rev. 193 (1890)	1	9674	1	3678	4	335
Archibald Cox & John T. Dunlap, Note, *Developments in the Law: Statutes of Limitation,* 63 Harv. L. Rev. 1177 (1950)	•	•	•	•	5	329
William L. Prosser, *Privacy*, 48 Calif. L. Rev. 383 (1960)	•	•	8	869	6	310
Henry J. Friendly, *Some Kind of Hearing*, 123 U. Pa. L. Rev. 1267 (1975)	8	1638	9	838	7	309
Anthony G. Amsterdam, Note, *The Void-for-Vagueness Doctrine in the Supreme Court*, 109 U. Pa. L. Rev. 67 (1960)	14	458	11	782	8	270
William L. Prosser, *The Assault upon the Citadel (Strict Liability to the Consumer)*, 69 Yale L.J. 1099 (1960)	6	2008	5	1538	9	253
William J. Brennan, Jr., *State Constitutions and the Protection of Individual Rights*, 90 Harv. L. Rev. 489 (1977)	4	2892	4	1701	10	248
Anthony G. Amsterdam, *Perspectives on the Fourth Amendment*, 58 Minn. L. Rev. 349 (1974)	5	2173	6	1299	11	235
William L. Prosser, *The Fall of the Citadel (Strict Liability to the Consumer)*, 50 Minn. L. Rev. 791 (1965)	9	1448	7	976	12	234
Seavey, Note, *Developments in the Law: Res Judicata*, 65 Harv. L. Rev. 818 (1952)	•	•	•	•	12	234
Calvert Magruder, *Mental and Emotional Disturbance in the Law of Torts*, 49 Harv. L. Rev. 1033 (1936)	12	896	•	•	14	214
Gerald Gunther, *The Supreme Court, 1971 Term—Foreword: In Search of Evolving Doctrine on a Changing Court: A Model for a Newer Equal Protection*, 86 Harv. L. Rev. 1 (1972)	3	4190	3	2771	15	206
Donald T. Trautman & A.T. Von Mehren, *Jurisdiction to Adjudicate: A Suggested Analysis*, 79 Harv. L. Rev. 1121 (1966)	11	1000	•	•	16	199
John W. Wade, *On the Nature of Strict Tort Liability for Products*, 44 Miss. L.J. 825 (1973)	10	1239	12	749	17	192
H.P. Monaghan, *Constitutional Adjudication: The Who and When*, 82 Yale L.J. 1363 (1973)	13	611	•	•	18	190
Note, *Developments in the Law: Federal Habeas Corpus*, 83 Harv. L. Rev. 1038 (1970)	•	•	•	•	19	185
Larry Simon, *Twice in Jeopardy*, 75 Yale L.J. 262 (1965)	16	28	•	•	19	185

This table reports and ranks the top 20 most-cited articles in the judiciary. We also include the number of academic citations according to Google Scholar and Shapiro and Pearse (2012)

A lot might explain this, and we know that using raw citation counts risks sacrificing quality on the altar of quantity.[2] It could be the case that the ideas of law and economics have trickled out of the academy and into the judiciary in a manner so subtle yet pervasive that no citations are required. (Although, as discussed below in part III, some evidence for this proposition is mixed.) And it might be that judges encounter fewer cases in which the ideas of law and economics can be readily deployed. An article on civil procedure or federal jurisdiction might be a go-to reference for judges (or their clerks), but Coase might not find a ready home in every case.

Yet not all of these explanations let law and econ off the hook. Even if it's right that, say, judges encounter fewer cases in which they can use law and economics than cases in which they can use a foundational text on vagueness or modern treatment of civil procedure, this might still suggest that the academy is devoting its resources in a surprising fashion. We're still stuck with the initial mystery: Some of law and econ's biggest ideas seem to have received relatively little notice from the judiciary.

3 Why judges don't use law and economics

So, why? We don't want to downplay reasons that have nothing to do with law and economics or apply to legal scholarship generally. Judges might be too busy or closedminded to read scholarship, or lack the technical training to understand technical fields. And some issues might be specific to the federal judiciary. Federal judges probably have less exposure than state judges to some areas of law—basic questions of contract and property and other common law subjects—that are the meat and potatoes of much law and econ.

But several common features of law and econ scholarship have made judges particularly unlikely to use it. First, much of the most prominent contemporary and historical law and econ scholarship purports to explain why certain legal doctrines exist or have the structure they do. Indeed, a major theme of Guido's new book is that explanation is the proper goal of law and economics scholarship: He stresses repeatedly that L&E should try to "explain the world as it actually is (2016, p. 6)." But, while explanation of this form can be a worthy goal, it's not one that's typically useful for judges.

It's worth spending a moment trying to clarify what explanatory law and economics is all about. Explanatory law and econ isn't a monolithic genre, and it can be

[2] Posner has made this point many times before: "What is needed… is a deep study of academic citations in judicial opinions, attempting to determine which of those citations is to a book or article or other academic work that can fairly be inferred to have influenced the judicial decision" (2016, p. 28). But we would be surprised if the number of citations was uncorrelated with whatever qualitative measure of influence such a deep study used. Indeed, there is some qualitative evidence that raw citations are thus correlated. For example, the law of antitrust is the most commonly cited (and perhaps best) example of an area transformed by economics. The law and economics paper most heavily cited by judges is (by some definitions) Areeda and Turner (1975), a paper on predatory pricing under the Sherman Act.

hard to know whether the genre's members are motivated by explanation or rationalization. Consider the mother of all law and econ's explanatory projects: Research purporting to show that the common law produces efficient rules. Sometimes this research appears to justify, rather than causally explain, why the common law advances efficiency: Because efficiency is a desirable goal, judges have tended to select efficient rules (Posner 1972). The implication is that judges have had good reasons for picking efficient rules, and should keep picking them, because efficiency is desirable. On this account, efficiency is just another way in which the law is supposedly working itself pure.

In our view, this type of explanation-meets-justification bears a close family resemblance to the reformist strain in law and econ. (More on that in a moment.) And justification can be useful for judges, especially when it's focused on explaining the deep purpose of a specific area of doctrine—think once more of antitrust or intellectual property—that can be characterized in economic terms. Still, even in these areas, it can be hard to discern the extent to which innovation in L&E scholarship is what drives innovation in legal doctrine. After all, if the purpose of these doctrines really is to serve some economic goal—maximizing consumer welfare or getting the incentives to innovate just right—it's not clear why the doctrine can't continue doing that without scholarly intervention. And, because many of these areas have been traditional objects of economics qua economics, it can be hard to disentangle the influence of economics (as a broadly imperialistic colonizing force) from that of law and economics (as a distinct scholarly movement). Economics has surely had some success in colonizing both law schools and legal actors, after all.

In any event, not all explanatory L&E is interested in revealing a deep logic in the law, or in justifying doctrine. Sometimes this scholarship really does try to offer a mechanism, grounded in individual rational choice, that explains why we should expect the commonlaw process to produce efficient rules. Paul Rubin, for example, has argued (1977) that the common law produces efficiency through a predictable process: He offers a model in which well-endowed repeat players are more likely to litigate over inefficient than efficient rules; thus, even if judicial decisions are made randomly, the common law will evolve toward efficiency. This type of explanation is both neutral and causal: The mechanism explains why we see what we see, but suggests nothing about the desirability of the process or the outcome.

Without commenting on the persuasiveness of Rubin's thesis, or the many others like it (e.g. Priest 1977), we offer the following observation: This scholarship offers nothing that can help judges decide cases. Even if Rubin and others have decisively proved that the common-law process tends to produce efficient rules, this historical regularity provides no guidance for a judge confronted with a decision in a present case. The argument cannot be, for example, that judges should treat repeat players differently, or consider the wealth of the parties when making a decision. The argument cannot be that a judge who fails to produce an efficient rule fails to perform his judicial duty. There is, in other words, no easy method for squeezing the hortative 'ought' (judges should be efficient) out of the explanatory 'is' (judges have tended to be efficient). Perhaps for this reason, we can find no evidence of any court ever citing Rubin's innovative and interesting paper.

Guido's new book offers a different set of directions to a similar conclusion about the relationship between theory and reform. In Guido's view, when economic theory can't provide a satisfactory explanation (or justification?) for some feature of the legal landscape, we should be open to reforming the theory. Guido reminds us that a mismatch between economic theory and legal reality can always be taken in two directions: It can be used to reform the law, or used to reform the theory. But, if that's right, it takes much of the sting out of using economic theory to change the law. After all, when legal reality doesn't fit economic theory, how do we know which one is supposed to change?

Of course, not all L&E scholars are as open-minded as Guido about modifying economic theory. This brings us to the reformist tradition that Guido's new book describes and attributes to Posner. In Guido's telling, the explicitly reformist law and econ agenda has "demonstrated how powerful an existing economic theory can be when it is used to… cast doubt upon the world of law."

There are certainly cases in which judges can and do make use of this reform-minded scholarship. But this scholarship is typically not useful to judges, for two related reasons.

First, much classical law and econ scholarship advocates, explicitly or implicitly, that efficiency be the appropriate goal of the legal system. But efficiency is not a self-explicating concept,[3] and judges don't take an oath to maximize it. Instead, judges are, or at least view themselves as, constrained by doctrines and institutions. If these constraints happen to maximize efficiency, then judges will happen to maximize efficiency. But the doctrinal constraints, and not the untethered concept of efficiency—much less a law-review article's after-the-fact ascription of efficiency—will be what cuts the ice.

In other words, judges do not share the view that efficiency is the obvious or uncontroversial goal of the judiciary—do most economists?—and instead approach the run-of the-mine case with a narrower set of questions in mind: What does our precedent dictate? What does the Constitution command? What does the statute mean? As we'll see below, economics does have a role to play in answering these questions, and some of these questions—like the meaning of the Sherman and Clayton Acts—are explicitly bound up with economics. But, in the average case, reform-minded law and economics has little to say about these questions, and thus has little say to say to judges.

Therein lies the second point: Much reform-minded law and econ scholarship is not *attempting* to say anything to judges. This genre of law and economics, much like traditional welfare economics, often adopts the perspective of the hypothetical social planner at the heart of its models. Such abstract policy analysis might be sensibly pitched to legislators or regulators or perhaps the Supreme Court. But it's not always clear that the prescriptions of law and economics could be executed by most judges, even if they wanted to. Think, for example, of the motivating questions of

[3] To take just one small piece of this vast debate: There is considerable controversy as to whether "efficiency" involves utility maximization or wealth maximization. See, e.g., Coleman (1980) and Kornhauser (1980).

Calabresi and Melamed's classic "Cathedral" article (1972): "In what circumstances should we grant a particular entitlement?"—the foundational allocation of rights and resources—and "In what circumstances should we decide to protect that entitlement by using a property, liability, or inalienability rule?" Note that the "we" here is a broad one: Not judges, legislators or the extant legal community, but the amorphous "we" of optimal social planning. It's an admirable and ambitious scope. But we—the real and concrete we of the present day—already occupy a world in which initial entitlements have been allocated and their barricades erected by centuries of legislative, executive and judicial work. Against this backdrop, judges have very few new decisions to make—as Calabresi and Melamed seem to acknowledge.[4]

Even if judges did have decisions to make—even if they viewed the suggestions of law and economics as coherent and desirable principles and were completely unconstrained by existing doctrine—it's not clear that the judiciary, acting alone, is capable of pursuing law and econ's solution. Consider, in this regard, Louis Kaplow and Steven Shavell's famous argument (1994) that the income tax, rather than legal rules, should be used to redistribute resources from the rich to the poor. Their argument, in a nutshell, is that redistributive legal rules—like, say, a tort rule that linked the amount of damages owed to the income of the parties—distort behavior more than do income taxes. This is because such legal rules change both the regulated conduct at issue (in the tort context, risky behavior) and the incentive to earn income. Income taxes distort only the latter. For Kaplow and Shavell, the risk of such "double distortion" is why redistribution should be pursued only through the income tax: Legal rules, like common law tort and property, should maximize the size of the pie, and redistributive taxation can take care of the rest in one fell swoop.

But no single actor—especially not a judge—controls all the relevant policy levers. Even if a judge were utterly persuaded by Kaplow and Shavell's reasoning,[5] he would still face towering hurdles of coordination. The legislative branch might be too venal or gridlocked to pursue the ideal amount of redistribution. In which case, what's our distortion-phobic judge to do? Should he apply rules that redistribute, knowing full well that the tax system will never keep pace? Or should he be ruthless and single-minded in the pursuit of efficiency, hoping that the other branches get their acts together? The bare notion of double distortion, standing alone, doesn't and cannot tell us. And, once more, we can find no evidence of any court ever citing Kaplow and Shavell's influential article on this subject.

We don't state that as a knock on Kaplow and Shavell (or Rubin); this research has other justifications, and probably doesn't have judges in mind. The big theme behind these points is a really simple one: The prescriptions of law and economics,

[4] We doubt judges are their intended audience. They write: "[W]e shall not address ourselves to those fundamental legal questions which center on what institutions and what procedures are most suitable for making what decisions, except insofar as these relate directly to the problems of selecting the initial entitlements and the modes of protecting these entitlements." For this reason, the Cathedral article is only weakly prescriptive; it can also be understood as implicitly explaining why existing entitlements are protected as they are.

[5] There may be good reasons why such a judge would not be persuaded. See Sanchirico (2001), Markovits (2005) and Liscow (2014).

in their broadest form, are rarely couched in the kind of institutional and doctrinal arguments that help judges decide cases. Posner and other reform-minded scholars of law and economics might view the judiciary's emphasis on doctrine as wrong-headed. Indeed, Posner has said so explicitly: "The proper way to approach a new case is to ask… what would be a sensible answer as a matter of policy" (Posner 2016). But Posner's realism is unrealistic: Few judges share this view.

The debate between realism and formalism is an old one. We aren't going to resolve it. The idea here is narrower: Judges have formalist sympathies, and require doctrinal arguments. Even Coase's original statement of his eponymous theorem seemed to acknowledge as much. He wrote the paper so as not to "confuse economists about the nature of the economic problem involved." But, he concluded, "Judges have to decide on legal liability." Law and economics scholarship can sometimes couch its arguments in doctrinal terms—say, by revealing a deep structure in an area of doctrine that economic theory can in turn illuminate. But less often than you might think.

4 Why judges use economics (sometimes)

Still, judges use basic economics with some frequency. It's not too hard to see why: One obvious function of economics, and law and economics—and of the social sciences more generally—is to describe the world and make predictions. As price increases, demand falls. As punishment increases, crime becomes less rewarding. Facts and predictions matter to judges. Legal tests often ask for judges to engage in an open-ended evaluation of magnitudes and directions. What's a "compelling government interest"? What's a "substantial harm"? What's a "rational basis"? Implicitly, these "tests" (such as they are) are simply vehicles for arguments about prediction and effects.

In describing and predicting human behavior, there's nothing particularly magical about economics. Economic predictions are often wrong; statistical results don't always generalize. Other fields—psychology, political science—make predictions too, and are chock full of trained empiricists eager to test them. But, even if economics doesn't quite hold the field, it occupies the biggest chunk of it, gobbling up other academic territory and setting the terms of the social-science debate.

But are judges making *greater* use of basic economics? In Fig. 1 (and the appendix) we offer some suggestive evidence on this question by tracking the frequency with which judicial opinions make use of basic concepts like "efficiency" and "incentives." The evidence is mixed. On the one hand, there does appear to be a slight (if noisy) uptick in the proportion of opinions that make use of these concepts since the 1970s. On the other, the proportion of opinions using basic economic concepts has fallen more recently, and remained flat since the early 1990s.

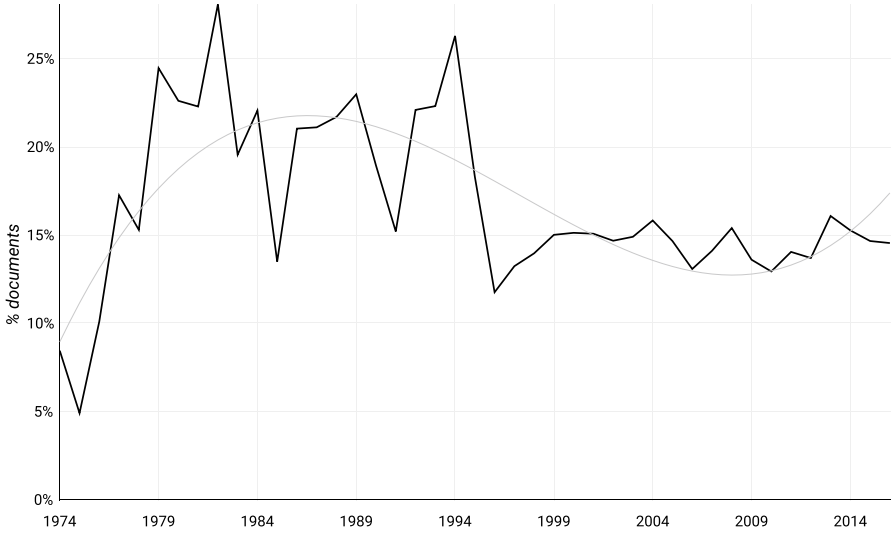

Fig. 1 Judicial use of common economics terms. This figure displays the percentage of judicial opinions that make use of a common economics term (such as "efficient") over time

One reason for this: Even when economic theory can set the terms of legal debates, it can rarely resolve them. For this reason, even the most interesting predictions in all of economics (and law and economics) are unlikely to be of much help to judges—and, indeed, it can be dangerous when judges pretend otherwise.

To see both sides of this—the obvious relevance of economics and its equally stubborn inability to satisfactorily resolve cases—consider the recent D.C. Circuit case of *Edwards v. District of Columbia* (2014). In *Edwards*, the court considered a First Amendment challenge to a municipal regulation requiring that would-be tour guides pay $200 and pass a 100-question multiple-choice exam. The case required asking whether the regulation was narrowly tailored to serve a substantial government interest. The plaintiffs, who operated a Segway touring service, argued that the record was "utterly devoid" of any evidence that the 100-question exam served the district's intended purpose of weeding out guides who might spread "misinformation."

In the court's framing, the case was about "whether the government's regulations actually accomplish their intended purpose." "Perhaps most fundamentally," the court asked, "what evidence suggests market forces are an inadequate defense to seedy, slothful tour guides? "To state the obvious," it continued, a tour company "already has strong incentives to provide a quality consumer experience—namely,

the desire to stay in business and maximize a return on its capital investment." With this fundamental and crushingly obvious cudgel in hand, the D.C. Circuit reversed the district court and ordered that summary judgment be granted in favor of the company.

This is how economics is often employed by the judiciary: A prediction informed by theory (here, that the market can self-regulate) is carried into a open-ended test to produce or justify a result (here, that the policy wasn't narrowly tailored). Add a dash of vaguely technical jargon ("maximize a return on its capital investment") and you've got a recipe for an "obvious" result. Who could possibly object?

The answer, it turns out, is none other than Posner, who has been an especially savage critic of the court's reasoning. In Posner's view, the *Edwards* opinion "seems based entirely on hostility to regulation, as nothing else in it provides even a minimally plausible ground for the decision" (2016). Ouch! According to Posner, this is because the market for tour guides has distinctive features that make it different from the market for toasters or oatmeal: "Not only is a tourist likely to be unfamiliar with prices, services, product quality, and other elements of a foreign market and thus unlikely to know when he is being cheated, but upon returning home he's unlikely to concern himself further with that market, as he plans never to return."

Perhaps another way of putting Posner's point is to say that the market for tour guides is a market with quality uncertainty: Sellers know more than buyers, so the bad sellers may drive out the good (Akerlof 1970). But a well-placed citation to Akerlof would not have resolved this case in favor of the government. After all, other models predict that quality certification can disarm the problem of asymmetrical information, and quality certification doesn't always require government intervention (Viscusi 1978). Indeed, plenty of evidence suggests that markets for lemons don't fall apart (Bond 1982). The hard issue in the *Edwards* case turns out to be both factual and interpretive—is the market for tour guides the kind of market that deserves government regulation?—and won't be resolved by a few stray references to economic theory.

Most cases in which economic theory might be deployed are like this: Squint hard enough at any market, and you can find something that resembles market failure. Search long enough on Google Scholar, and you can probably find a theoretical model that predicts a litigant's desired result. That's not a problem, of course, but it at least serves as a reminder: Even with all its colonizing exploits and academic successes, there's only so much that economics can do to change the law.

Acknowledgements The views expressed in this paper are the authors' only and do not necessarily reflect the views of the Department of Justice or the Office of Legal Counsel. For helpful comments and feedback, we thank Guido Calabresi, Wendy Gordon, Louis Kaplow, Grace Kim, Zachary Liscow, Richard Posner, three anonymous reviewers, the editors of the *European Journal of Law and Economics*, and participants in the Boston University Conference on Guido Calabresi's The Future of Law and Economics. We also thank Sai for generous and unflagging assistance with the empirical aspects of this paper, Norvik Asarian for research assistance, and Westlaw and Courtlistener (a part of the Free Law Project) for permitting the access necessary to conduct this research.

Appendix

This appendix offers a general overview of our data and tables. This data was gathered in May 2017; of course, precise citation counts will change with time.

Table 1 reranks the most-cited law review articles of all time, as reported by Shapiro and Pearse (2012). Shapiro and Pearse track and report academic citations influential legal publications, including publications in both law reviews and various "law and" interdisciplinary journals. Our Table 1 reranks this list using judicial citations from Westlaw. Because there is variation in how Westlaw formats citations, our extremely simple strategy was to run slightly over-inclusive searches—usually based on title—and then remove false positives by hand. For articles with titles that are also words or common phrases—Prosser's "Privacy" and Holmes's "The Path of the Law" come to mind—we ran searches for both title and author information in close proximity (e.g., "Prosser/s privacy" or "Prosser/p privacy"), and again weeded out false positives by hand. Variations on this strategy—mixing in automation or varying the degree of over-inclusivity—produce consistent results.

Table 2 constructs a new ranking of the law review articles most cited by judges. We proceeded in four basic steps. First, we obtained a large sample of 85,000 HTML cases from the Westlaw database, all of which cite at least one law review article. (This sample amounts to more than half of all Westlaw cases that cite law review articles.) Second, we processed these cases using custom software to extract all highly cited articles. Third, we took these highly cited articles and searched by hand using the complete Westlaw database and the basic strategy outlined for Table 1.

Fourth, we conducted robustness checks by checking our list against the judicial citations of highly cited articles from Google Scholar and Shapiro and Pearse (2012). The key intuition behind our approach is that Westlaw's search interface does not allow programming of sufficient sophistication to reliably and automatically extract all highly cited articles. Extracting a large sample of raw HTML cases, however, allows us to construct a rough list of highly cited articles, and then refine the number of citations by conducting hand searches of the entire Westlaw universe. In short, the raw HTML database allows us to generate a reliable list of highly cited articles, and manual searches allow us to obtain a reliable number of citations for each article.

For each case in our HTML database, we extracted every link embedded in the HTML. These include unique reference numbers for each law review article. For example, the HTML for *Yablonski v. United Mine Workers of America*, 314 F. Supp. 616 (1970) contains the following:

```
See also <a id="co_link_I7c9ca2aedaaa11e08b-
05fdf15589d8e8" class="co_link co_drag ui-dragga-
ble" href="https://1.next.westlaw.com/Link/Docu-
ment/FullText?findType=Y&amp; serNum=0332652645&amp;
pubNum=1292&amp; originatingDoc=Ib9430b52550011d9bf30d7
fdf51b6bd4&amp; refType=LR&amp; fi=co_pp_sp_1292_468&amp;
originationContext=document&amp; transitionType=Documen
tItem&amp; contextData=(sc.Search)#co_pp_sp_1292_468">
```

Comment, Counsel Fees for Union Officers under the Fiduciary Provision of Landrum-Griffin, 73 Yale L.J. 443, 468-470 (<span class="co_searchTerm"id="co_term_2388">1964).

This embedded link contains a reference to the paper "Counsel Fees for Union Officers under the Fiduciary Provision of Landrum-Griffin," 73 Yale L.J. 443 (1964). The paper is tagged with a unique serial number (332652645), a publication number 1292 (Yale L.J.), and reference type ("LR," indicating that it is a law review article). In total, we extracted 14,397,725 links, of which 96,652 were of reference type "LR." For each law review article found—i.e., for each unique serial number of reference type "LR"—we then counted the number of unique cases citing that article (Fig. 1).

The data on the use of economics terms in judicial opinions over time is based on a simple count of the percentage of annual opinions containing an economics term, based on the full text of 797,816 court opinions between 1974 and May 2017, obtained in bulk courtesy of the Free Law Project (courtlistener.com). Our sample of opinions was drawn from the 3,712,230 total opinions, and limited to opinions for which the filing date and plain text were readily available.

We searched for all variations on common economic and law and economics terms. These include "economic" and its variants (economy, economists, economically, etc.), "incentive" and its variants ("incentives, disincentives, incentivized, etc.) and "efficient" and its variants (efficiently, inefficiently, and so forth).

Our results are not sensitive to simple variations in the terms included. The data analysis was done using Google's Compute Engine, BigQuery, DataPrep, and Data Studio tools, together with code written in Bash, Ruby, and SQL. Details are available upon request.

Table 3 offers our ranking of the top 100 law articles cited by judges as of May 2017.

Table 3 The 100 most-cited articles in the judiciary

	Academic				Judicial	
	Scholar		Shapiro			
	Rank	Cites	Rank	Cites	Rank	Cites
Oliver Wendell Holmes, Jr., *The Path of the Law*, 10 Harv. L. Rev. 457 (1897)	3	8239	3	3138	1	481
Felix Frankfurter, *Some Reflections on the Reading of Statutes*, 47 Colum. L. Rev. 527 (1947)	14	1904	24	814	2	414
Richard A. Nagareda, *Class certification in the age of aggregate proof*, 84 N.Y.U. L. Rev. 97 (2008)	59	440	•	•	3	339
Samuel D. Warren & Louis D. Brandeis, *The Right to Privacy*, 4 Harv. L. Rev. 193 (1890)	2	9674	2	3678	4	335
Archibald Cox & John T. Dunlap, Note, *Developments in the Law: Statutes of Limitation,* 63 Harv. L. Rev. 1177 (1950)	•	•	•	•	5	329
William L. Prosser, *Privacy*, 48 Calif. L. Rev. 383 (1960)	•	•	19	869	6	310
Henry J. Friendly, *Some Kind of Hearing*, 123 U. Pa. L. Rev. 1267 (1975)	20	1638	21	838	7	309
Anthony G. Amsterdam, Note, *The Void-for-Vagueness Doctrine in the Supreme Court*, 109 U. Pa. L. Rev. 67 (1960)	58	458	25	782	8	270
William L. Prosser, *The Assault upon the Citadel (Strict Liability to the Consumer)*, 69 Yale L.J. 1099 (1960)	13	2008	10	1538	9	253
William J. Brennan, Jr., *State Constitutions and the Protection of Individual Rights*, 90 Harv. L. Rev. 489 (1977)	9	2892	7	1701	10	248
Anthony G. Amsterdam, *Perspectives on the Fourth Amendment*, 58 Minn. L. Rev. 349 (1974)	11	2173	11	1299	11	235
William L. Prosser, *The Fall of the Citadel (Strict Liability to the Consumer)*, 50 Minn. L. Rev. 791 (1965)	26	1448	12	976	12	234
Seavey, Note, *Developments in the Law: Res Judicata*, 65 Harv. L. Rev. 818 (1952)	•	•	•	•	12	234
Calvert Magruder, *Mental and Emotional Disturbance in the Law of Torts*, 49 Harv. L. Rev. 1033 (1936)	36	896	•	•	14	214
Gerald Gunther, *The Supreme Court, 1971 Term—Foreword: In Search of Evolving Doctrine on a Changing Court: A Model for a Newer Equal Protection*, 86 Harv. L. Rev. 1 (1972)	5	4190	4	2771	15	206
Donald T. Trautman & A.T. Von Mehren, *Jurisdiction to Adjudicate: A Suggested Analysis*, 79 Harv. L. Rev. 1121 (1966)	34	1000	•	•	16	199
John W. Wade, *On the Nature of Strict Tort Liability for Products*, 44 Miss. L.J. 825 (1973)	29	1239	26	749	17	192
H.P. Monaghan, *Constitutional Adjudication: The Who and When*, 82 Yale L.J. 1363 (1973)	51	611	•	•	18	190

Table 3 (continued)

	Academic				Judicial	
	Scholar		Shapiro			
	Rank	Cites	Rank	Cites	Rank	Cites
Note, *Developments in the Law: Federal Habeas Corpus*, 83 Harv. L. Rev. 1038 (1970)	•	•	•	•	19	185
Larry Simon, *Twice in Jeopardy*, 75 Yale L.J. 262 (1965)	89	28	•	•	19	185
L. Sargentich, *First Amendment Overbreadth Doctrine*, 83 Harv. L. Rev. 844 (1970)	90	17	•	•	21	183
Austin Wakeman Scott, *Collateral Estoppel by Judgment*, 56 Harv. L. Rev. 1 (1942)	65	397	•	•	22	181
B. Kaplan, Continuing *Work of the Civil Committee: 1966 Amendments of the Federal Rules of Civil Procedure (I)*, 81 Harv. L. Rev. 356 (1967)	38	869	•	•	23	176
Charles B. Hochman, *The Supreme Court and the Constitutionality of Retroactive Legislation*, 73 Harv. L. Rev. 692 (1960)	50	613	•	•	23	176
Harlan M. Blake, *Employee Agreements Not to Compete*, 73 Harv. L. Rev. 625 (1960)	43	767	•	•	25	174
Robert E. Keeton, *Insurance Law Rights at Variance With Policy Provisions*, 83 Harv. L. Rev. 961 (1970)	46	663	•	•	26	164
Paul M. Bator, *Finality in Criminal Law and Federal Habeas Corpus for State Prisoners*, 76 Harv. L. Rev. 441 (1963)	32	1165	34	649	27	158
Henry J. Friendly, *Indiscretion About Discretion*, 31 Emory L.J. 747 (1982)	53	481	•	•	28	151
Economic Loss in Products Liability Jurisprudence, 66 Colum. L. Rev. 917 (1966)	•	•	•	•	29	144
Joseph H. King, *Causation, Valuation and Chance in Personal Injury Torts Involving Pre-existing Conditions and Future Consequences*, 90 Yale L.J. 1353 (1981)	52	600	•	•	30	135
Karl N. Llewellyn, *Remarks on the Theory of Appellate Decision and the Rules or Canons about How Statutes Are to Be Construed*, 3 Vand. L. Rev. 395 (1949)	16	1763	18	882	31	133
Eugene R. Wedoff, *Means Testing and the New § 707(b)*, 79 Am. Bank. L.J. 231 (2005)	80	217	•	•	32	131
Steven J. Burton, *Breach of Contract & the Common Law Duty to Perform in Good Faith*, 94 Harv. L. Rev. 369 (1980)	39	861	•	•	33	127
Arthur R. Miller, *Confidentiality, Protective Orders, and Public Access to the Courts*, 105 Harv. L. Rev. 427 (1991)	63	403	•	•	34	126

Table 3 (continued)

	Academic				Judicial	
	Scholar		Shapiro			
	Rank	Cites	Rank	Cites	Rank	Cites
Paul J. Mishkin, *Foreward: the High Court, the Great Wit, and the Due Process of Time and Law*, 79 Harv. L. Rev. 56 (1965)	•	•	•	•	35	119
Daniel K. Mayers & Fletcher L. Yarbrough, *Bis Vexari: New Trials & Successive Prosecutions*, 74 Harv. L. Rev. 1 (1960)	74	262	•	•	35	119
Frank I. Michelman, *Property, Utility, and Fairness: Comments on the Ethical Foundations of 'Just Compensation' Law*, 80 Harv. L. Rev. 1165 (1967)	8	2972	9	1580	37	116
William W. Van Alstyne, *The Demise of the Right-Privilege Distinction in Constitutional Law*, 81 Harv. L. Rev. 1439 (1968)	54	470	14	932	38	113
Philip Areeda & Donald F. Turner, *Predatory Pricing and Related Practices Under Section 2 of the Sherman Act*, 88 Harv. L. Rev. 697 (1975)	19	1649	29	728	39	110
A. Lowenfeld & A. Mendelsohn, *The United States and the Warsaw Convention*, 80 Harv. L. Rev. 497 (1967)	54	470	•	•	40	107
Charles A. Reich, *The New Property*, 73 Yale L.J. 733 (1964)	6	3582	6	1874	41	105
David L. Shapiro, *Some Thoughts on Intervention before Courts, Agencies and Arbitrators*, 81 Harv. L. Rev. 721 (1968)	69	318	•	•	42	103
Henry J. Friendly, *In Praise of* Erie*—and of the New Federal Common Law*, 39 N.Y.U. L. Rev. 383 (1964)	31	1187	30	717	43	99
S. Breyer, *Federal Sentencing Guidelines and Key Compromises Upon Which They Rest*, 17 Hofstra L. Rev. 1 (1988)	40	860	•	•	44	95
Note, *Developments in the Law: Privileged Communications*, 98 Harv. L. Rev. 1450 (1985)	•	•	•	•	45	93
Edwin M. Borchard, *Government Liability in Tort*, 34 Yale L.J. 1 (1924)	37	870	33	663	45	93
Henry M. Hart, Jr., *The Power of Congress to Limit the Jurisdiction of Federal Courts: An Exercise in Dialectic*, 66 Harv. L. Rev. 1362 (1953)	25	1480	16	905	47	92
John P. Dawson, *Lawyers and Involuntary Clients: Attorney Fees From Funds*, 87 Harv. L. Rev. 1597 (1974)	68	328	•	•	48	90

Table 3 (continued)

	Academic				Judicial	
	Scholar		Shapiro			
	Rank	Cites	Rank	Cites	Rank	Cites
Michael T. Andrew, *Executory Contracts in Bankruptcy: Understanding Rejection*, 59 U. Colo. L. Rev. 845 (1988)	70	297	•	•	49	89
Thomas I. Emerson, *Toward a General Theory of the First Amendment*, 72 Yale L.J. 877 (1963)	18	1678	17	891	49	89
John Kennedy, *A Primer on the Louisiana Products Liability Act*, 49 La. L. Rev. 565 (1989)	87	83	•	•	51	80
Laurence H. Tribe, *Trial by Mathematics: Precision and Ritual in the Legal Process*, 84 Harv. L. Rev. 1329 (1971)	21	1622	32	688	51	80
Joseph L. Sax, *Takings and the Police Power*, 74 Yale L.J. 36 (1964)	23	1614	13	975	51	80
Abraham S. Goldstein, *The State and the Accused: Balance of Advantage in Criminal Procedure*, 69 Yale L.J. 1149 (1960)	49	636	•	•	54	79
Lon L. Fuller & William R. Perdue, Jr., *The Reliance Interest in Contract Damages*, 46 Yale L.J. 52 (1936)	17	1711	22	831	54	79
Donald F. Turner, *Definition of Agreement Under the Sherman Act: Conscious Parallelism and Refusals to Deal*, 75 Harv. L. Rev. 655 (1962)	42	823	•	•	56	78
William O. Douglas & Carrol M. Shanks, *Insulation from Liability Through Subsidiary Corporations*, 39 Yale L.J. 193 (1929)	64	398	•	•	56	78
Interlocutory Appeals in the Federal Courts Under 28 U.S.C § 1292(b), 88 Harv. L. Rev. 607 (1974)	•	•	•	•	58	76
Richard H. Fallon Jr., *Applied and Facial Challenges and Third Party Standing*, 113 Harv. L. Rev. 1321 (2000)	66	383	•	•	59	74
Kathleen M. Sullivan, *Unconstitutional Conditions*, 102 Harv. L. Rev. 1413 (1988)	30	1237	•	•	59	74
Louis L. Jaffe, *Suits Against Governments and Officers: Sovereign Immunity*, 77 Harv. L. Rev. 1 (1963)	48	645	•	•	59	74
Herbert Wechsler, *Toward Neutral Principles of Constitutional Law*, 73 Harv. L. Rev. 1 (1959)	4	4365	5	2343	62	73
Other Crimes Evidence at Trial: of Balancing and Other Matters, 70 Yale L.J. 763 (1961)	•	•	•	•	63	71
Powers of Congress and the Court Regarding the Availability and Scope of Review, 114 Harv. L. Rev. 1551 (2001)	•	•	•	•	64	70

Table 3 (continued)

	Academic				Judicial	
	Scholar		Shapiro			
	Rank	Cites	Rank	Cites	Rank	Cites
P.N. Leval, *Toward a Fair Use Standard*, 103 Harv. L. Rev. 1105 (1990)	24	1537	•	•	64	70
Abram Chayes, *The Role of the Judge in Public Law Litigation*, 89 Harv. L. Rev. 1281 (1976)	7	3250	8	1600	66	69
Frank I. Schechter, *Rational Basis of Trademark Protection*, 40 Harv. L. Rev. 813 (1927)	27	1342	•	•	66	69
Friedrich Kessler, *Contracts of Adhesion—Some Thoughts about Freedom of Contract*, 43 Colum. L. Rev. 629 (1943)	15	1784	23	819	68	68
P.N. Leval, *Judging Under the Constitution: Dicta About Dicta*, 81 N.Y.U. L. Rev. 1249 (2006)	72	290	•	•	69	67
Michael C. Dorf, *Facial Challenges to State and Federal Statutes*, 46 Stan. L. Rev. 235 (1994)	61	407	•	•	69	67
Learned Hand, *Historical and Practical Considerations Regarding Expert Testimony*, 15 Harv. L. Rev. 40 (1901)	45	713	•	•	69	67
James O. Freedman, *Prospective Overruling and Retroactive Application in the Federal Courts*, 71 Yale L.J. 907 (1962)	91	5	•	•	72	66
John C. Coffee, *Understanding the plaintiff's attorney: The implications of economic theory for private enforcement of law through class and derivative actions*, 86 Colum. L. Rev. 669 (1986)	35	975	•	•	73	64
Robert Heidt, *Conjurer's Circle: The Fifth Amendment Privilege in Civil Cases*, 91 Yale L.J. 1062 (1982)	83	147	•	•	73	64
William A. Fletcher, *Structure of Standing*, 98 Yale L.J. 221 (1988)	44	740	•	•	75	63
American Bar Association, *ABA Guidelines for the Appointment and Performance of Counsel in Death Penalty Cases*, 31 Hofstra L. Rev. 913 (2003)	88	48	•	•	76	62
Dix W. Noel, *Manufacturer's Negligence of Design and Directions for Use of a Product*, 71 Yale L.J. 816 (1962)	71	296	•	•	77	61
Antonin Scalia, *The Rule of Law as a Law of Rules*, 56 U. Chi. L. Rev. 1175 (1989)	10	2396	15	931	78	60
Lea Brilmayer, Jennifer Haverkamp, Buck Logan & Loretta Lynch, *A General Look at General Jurisdiction*, 66 Tex. L. Rev. 721 (1987)	73	271	•	•	79	59
Martin B. Louis, *Federal Summary Judgment Doctrine: A Critical Analysis*, 83 Yale L.J. 745 (1974)	82	199	•	•	80	55

Table 3 (continued)

	Academic				Judicial	
	Scholar		Shapiro			
	Rank	Cites	Rank	Cites	Rank	Cites
R.H. Coase, *The Problem of Social Cost*, 3 J.L. & Econ. 1 (1960), *reprinted in* 56 J.L. & Econ. 837 (2013)	1	30,135	1	5157	80	55
Arthur L. Goodhart, *Costs*, 38 Yale L.J. 849 (1929)	60	427	•	•	80	55
P.M. Wald, *Some Observations on the Use of Legislative History in the 1981 Supreme Court Term*, 68 Iowa L. Rev. 195 (1983)	47	648	•	•	83	54
Civil RICO: The Temptation and Impropriety of Judicial Restraint, 95 Harv. L. Rev. 1101 (1982)	•	•	•	•	83	54
Arthur Allen Leff, *Unconscionability and the Code—The Emperor's New Clause*, 115 U. Pa. L. Rev. 485 (1967)	28	1334	28	734	83	54
Robert Allen Sedler, *Standing to Assert Constitutional Jus Tertii in the Supreme Court*, 71 Yale L.J. 599 (1962)	76	245	•	•	86	53
Clyde W. Summers, *The Law of Union Discipline: What the Courts Do in Fact*, 70 Yale L.J. 175 (1960)	81	205	•	•	87	52
John Calvin Jeffries & Paul B. Stephan, *Defenses, Presumptions and Burden of Proof in Criminal Law*, 88 Yale L.J. 1325 (1979)	61	407	•	•	88	51
Joseph L. Sax, *The Public Trust Doctrine in Natural Resource Law: Effective Judicial Intervention*, 68 Mich. L. Rev. 471 (1970)	12	2041	20	856	88	51
Richard H. Fallon Jr., *Making Sense of Overbreadth*, 100 Yale L.J. 853 (1991)	67	364	•	•	90	50
Orin S. Kerr, *A User's Guide to the Stored Communications Act and a Legislator's Guide to Amending It*, 72 Geo. Wash. L. Rev. 1208 (2004)	56	468	•	•	91	49
John Hart Ely, *Legislative and Administrative Motivation in Constitutional Law*, 79 Yale L.J. 1205 (1970)	33	1032	31	700	91	49
Denis F. McLaughlin, *Federal Supplemental Jurisdiction Statute: A Constitutional and Statutory Analysis*, 24 Ariz. St. L.J. 849 (1992)	84	129	•	•	93	48
Ronan E. Degnan, *Federalized Res Judicata*, 85 Yale L.J. 741 (1976)	78	238	•	•	93	48
Fleming James, *Right to a Jury Trial in Civil Actions*, 72 Yale L.J. 655 (1963)	75	259	•	•	93	48
Guido Calabresi, *Some Thoughts on Risk Distribution and the Law of Torts*, 70 Yale L.J. 499 (1961)	22	1621	27	739	93	48

Table 3 (continued)

	Academic				Judicial	
	Scholar		Shapiro			
	Rank	Cites	Rank	Cites	Rank	Cites
Robert G Bone, Twombly, *Pleading Rules, and the Regulation of Court Access*, 94 Iowa L. Rev. 873 (2009)	77	242	•	•	97	47
Marianne B. Culhane & Michaela M. White, *Catching Can-Pay Debtors: Is the Means Test the Only Way*, 13 Am. Bankr. Inst. L. Rev. 665 (2005)	86	122	•	•	97	47
Jonathan R. Macey & Geoffrey P. Miller, *Plaintiff's Attorney's Role in Class Action and Derivative Regulation: Economic Analysis and Recommendations for Reform*, 58 U. Chi. L. Rev. 1 (1991)	41	849	•	•	97	47
Ted Finman, *The Request for Admissions in Federal Civil Procedure*, 71 Yale L.J. 371 (1962)	85	124	•	•	97	47
William O. Douglas & George E. Bates, *The Federal Securities Act of 1933*, 43 Yale L.J. 171 (1933)	57	461	•	•	97	47

This table reports and ranks the top 100 most-cited articles in the judiciary. For comparison, we include the number of academic citations according to both Google Scholar and Shapiro and Pearse (2012). The symbol • indicates articles that were not ranked by Shapiro, or not reliably counted by Scholar. Rankings are limited to articles in this table

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