

6-1-2011

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Recommended Citation

Eisenberg, Theodore and Heise, Michael, "Judge-Jury Difference in Punitive Damages Awards: Who Listens to the Supreme Court?" (2011). *Cornell Law Faculty Publications*. Paper 199.
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Journal of Empirical Legal Studies
Volume 8, Issue 2, 325–357, June 2011

Judge-Jury Difference in Punitive Damages Awards: Who Listens to the Supreme Court?

*Theodore Eisenberg and Michael Heise**

We analyze thousands of trials from a substantial fraction of the nation's most populous counties as well as a smaller sample of less populous counties. Evidence from four major Civil Justice Survey data sets spanning more than a decade establishes that: (1) compensatory awards are strongly associated with punitive awards and (2) the punitive-compensatory relation has not materially changed over time. But (3) 2005 data suggest, for the first time, systematic differences between judges and juries in the punitive-compensatory relation. Despite claims that the Supreme Court's *State Farm* decision changed the punitive-compensatory relation, we present evidence that the 2005 shift is not attributable to the *State Farm* case or to other possibly relevant likely factors such as the relative flow of personal injury cases to judges and juries, inclusion of 110 small counties in the 2005 data, or changes in the 2005 data coding. The judge-jury difference more likely turns on unobserved factors driving the selection of cases for adjudication before judges and jurors.

I. INTRODUCTION

Punitive damages in general and juries' role in particular persist as flashpoints in U.S. tort reform debates. Along with normative debates about whether punitive damages should exist, empirical debates about the pattern of punitive awards, as well as their relation to the underlying compensatory award, persist. This article presents results that update and supplement prior studies on the relation between compensatory and punitive damages awards and provides new results with respect to how judges and juries award punitive damages.

After decades of dispute, it is now generally understood that the bulk of punitive damages awards have been reasonably sober, modest in size, and relatively stable over time,

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Valerie Hans and Dawn Chutkow provided valuable comments on earlier drafts of this article. Cornell Law School reference librarians provided helpful research assistance. Earlier drafts of this article were presented at the European Association of Law and Economic meeting, Paris, 2010, and at the Randall Park Colloquium, University of Kentucky College of Law.

though some groups continue to question that reality.¹ For example, no credible debate exists about, in the mass of cases, the strong association linking punitive and compensatory awards.² The relation between punitive and compensatory awards has been strikingly consistent across many data sets.³ In *Exxon Shipping Co. v. Baker*, the Supreme Court observed that empirical research undercuts the most audible criticism of punitive damages and that discretion to award punitive damages has not produced a mass of runaway awards.⁴ Although the Supreme Court now recognizes that much of the criticism of punitive damages awards is misplaced, the Court nevertheless regards the punitive-compensatory relation as sufficiently important to expand the constitutional doctrine of substantive due process to restrict punitive damages.⁵

Related debates about the proper role of jurors in the punitive damages context similarly persist. Some observers suggest that greater reliance on judges and a corresponding reduced reliance on juries to award and set punitive damage levels will improve civil

¹E.g., Swiss Re, Focus Report: The Globalisation of Collective Redress: Consequences for the Insurance Industry at 2 (2009) (“Well publicised cases involving punitive damages have led to the commonly-held view that awards are becoming increasingly extreme.”).

²See, e.g., Theodore Eisenberg & Martin T. Wells, The Significant Association Between Punitive and Compensatory Damages in Blockbuster Cases: A Methodological Primer, 3 J. Empirical Legal Stud. 175, 177 (2006) [hereinafter Eisenberg, Association] (“It is no longer the mass of punitive awards that is said to be so troublesome.”). For a recent claim that jury punitive damages behavior is unpredictable, see Joni Hersch & W. Kip Viscusi, Punitive Damages by the Numbers: *Exxon Shipping Co. v. Baker*, 18 Sup. Ct. Econ. Rev. 259, 261, 279 (2010) [hereinafter Hersch & Viscusi, By the Numbers]. However, this claim seems based on Exxon-funded experiments that never reconciled their findings with real-world punitive damages data. See Theodore Eisenberg, Jeffrey Rachlinski & Martin T. Wells, Reconciling Experimental Incoherence with Real-World Coherence in Punitive Damages, 54 Stanford L. Rev. 1239 (2002). To our knowledge, no persuasive analysis of actual cases supports the absence of a relation between punitive and compensatory damages. See, e.g., Brief for Neil Vidmar et al. as Amici Curiae in Support of Respondent, Philip Morris USA v. Williams, 549 U.S. 346 (2007), 2006 WL 2689774 [hereinafter Amicus Brief]. It has been erroneously claimed that no significant relation exists between punitive and compensatory awards in very large cases. Joni Hersch & W. Kip Viscusi, Punitive Damages: How Judges and Juries Perform, 33 J. Legal Stud. 1 (2004) [hereinafter Hersch & Viscusi, Perform]. But see Eisenberg & Wells, supra. Others have incorrectly claimed no significant association between punitive and compensatory awards in sexual harassment cases. Cass R. Sunstein & Judy M. Shih, Damages in Sexual Harassment Cases, in Directions in Sexual Harassment Law (Catherine A. MacKinnon & Reva B. Siegel eds. 2004). But see Catherine M. Sharkey, Dissecting Damages: An Empirical Exploration of Sexual Harassment Awards, 3 J. Empirical Legal Stud. 1 (2006).

³See Amicus Brief, supra note 2; David A. Hyman, Bernard Black, Kathryn Zeiler, Charles Silver & William M. Sage, Do Defendants Pay What Juries Award? Post-Verdict Haircuts in Texas Medical Malpractice Cases, 1988–2003, 4 J. Empirical Legal Stud. 3, 25 (2007) (tbl. 6 model 2); Jonathan M. Karpoff & John R. Lott, Jr., On the Determinants and Importance of Punitive Damage Awards, 42 J.L. & Econ. 527, 543 (1999); Erik K. Moller, Nicholas M. Pace & Stephen J. Carroll, Punitive Damages in Financial Injury Jury Verdicts, 28 J. Legal Stud. 283, 300 n52 (1999); Margo Schlanger, Inmate Litigation, 116 Harv. L. Rev. 1555, 1605 & n136 (2003).

⁴*Exxon Shipping Co. v. Baker*, 554 U.S. 471, 497 (2008).

⁵E.g., Steven G. Calabresi, Substantive Due Process After *Gonzales v. Carhart*, 106 Mich. L. Rev. 1517, 1524–25 (2008).

justice.⁶ Others, however, either regard the reliance on the jury as a strength of the U.S. justice system or question calls for reducing jurors' power absent evidence of judges' comparative superiority.⁷ Assumed judge-jury differences with respect to the punitive-compensatory relation have not found consistent empirical support. Nevertheless, even well-designed empirical studies analyzing identical data sometimes point in different directions owing, in part, to debates about appropriate model specifications, assumptions, and statistical techniques.⁸ The emergence of new data covering trials completed in 2005 offers the opportunity for continued analysis of possible judge-jury differences in the punitive-compensatory relation. A recent analysis of the decision to award punitive damages (as distinct from the punitive-compensatory relation) using the same data provides some evidence of judge-jury difference.⁹

This study extends prior work¹⁰ principally by including the newly available 2005 data in the analysis. These data, combined with prior data sets, permit unprecedented analyses of judge and jury punitive damages behavior over time. Our study explores two broad issues: (1) the relation between compensatory and punitive damages and (2) possible ways in which judges and juries award punitive damages differently. Some of the findings from our current study comport with previous findings; other findings surprise and provide more texture to analytical comparisons between judges and juries.

With respect to the relation between compensatory and punitive damages, our main findings comport with past findings—that variation in punitive damage awards is largely a function of variation in the underlying compensatory award. The new data provide the first systematic evidence of judge-jury differences in the punitive-compensatory relation. After accounting for the size of the compensatory award (itself correlated with the decision to

⁶Hersch & Viscusi, *Perform*, supra note 2, at 2 (arguing that juries are more likely to award punitive damages and their awards are larger); David Schkade et al., *Deliberating About Dollars: The Severity Shift*, 100 *Colum. L. Rev.* 1139 (2000); Reid Hastie & W. Kip Viscusi, *What Juries Can't Do Well: The Jury's Performance as a Risk Manager*, 40 *Ariz. L. Rev.* 901, 916 (1998); Paul Mogin, *Why Judges, Not Juries, Should Set Punitive Damages*, 65 *U. Chi. L. Rev.* 179 (1998).

⁷E.g., Theodore Eisenberg, Neil LaFountain, Brian Ostrom, David Rottman & Martin T. Wells, *Juries, Judges, and Punitive Damages: An Empirical Study*, 87 *Cornell L. Rev.* 743 (2002) [hereinafter Eisenberg et al., *Punitive Damages*] (finding no substantial evidence suggesting that jurors and judges differ in the rate of awarding punitive damages or in the relation between punitive and compensatory awards); Richard Lempert, *Juries, Hindsight, and Punitive Damages Awards: Failures of a Social Science Case for Change*, 48 *DePaul L. Rev.* 867 (1999); Marc Galanter & David Luban, *Poetic Justice: Punitive Damages and Legal Pluralism*, *Am. U. L. Rev.* 1393, 1439 (1999); Michael L. Rustad, *How the Common Good is Served by the Remedy of Punitive Damages*, 64 *Tenn. L. Rev.* 793 (1997).

⁸See, e.g., Hersch & Viscusi, *Perform*, supra note 2, at 30 (identifying sources of disagreement with the Eisenberg et al. study).

⁹See Theodore Eisenberg, Michael Heise, Nicole L. Waters & Martin T. Wells, *The Decision to Award Punitive Damages: An Empirical Study*, 2 *J. Legal Analysis* 577 (2010) [hereinafter Eisenberg et al., *Decision*].

¹⁰See, e.g., Theodore Eisenberg, Paula L. Hannaford-Agor, Michael Heise, Neil LaFountain, G. Thomas Munsterman, Brian Ostrom & Martin T. Wells, *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 (2006) [hereinafter Eisenberg et al., *Punitive*].

award punitive damages¹¹) and other critical background variables, one emerging result, in the 2005 data but not in earlier data sets, is the higher amount of punitive damage awards relative to compensatory damages awards in cases tried to juries than in bench trials.

One source of newly found judge-jury differences in the punitive-compensatory relation is the possible asymmetrical influence on judges and juries of a major Supreme Court punitive damages decision. The Court's 2003 *State Farm* decision¹² is important to punitive damages scholars and litigants seeking punitive damages because it demonstrates the Court's continuing sensitivity to proportionality between punitive and compensatory awards.¹³ From a research design standpoint, this 2003 decision could only have influenced judge and jury decisions in the 2005 data cohort, not in the data sets that predate 2003. Two reasons suggest that judges may have been far more influenced than lay jurors by the *State Farm* decision. One is that judges more than lay jurors are more likely to be aware of relevant Supreme Court precedent. Another reason is that judges—and not jurors—possess professional and reputational interests in avoiding having their damage awards adjusted on appeal. Interestingly, we find that the judge-jury differences we detect cut in a direction, if any, opposite to that of a *State-Farm*-based explanation.

We instead attribute, largely by default, the 2005 evidence of judge-jury differences to selection effects. Systematic differences in the streams of cases that wind up in front of judges and juries assuredly explain some of the difference between judges and juries. Because the data do not permit judge-jury comparisons with identical case streams (or a more perfectly controlled research design), however, we cannot be certain how judges and jurors would have behaved had they decided identical cases. Our findings make clear that assessments of judge-jury differences in the world of punitive damages persist as something of a puzzle, require continued careful analyses, and would benefit greatly from more data and more detailed data. The findings reveal a more nuanced and complex picture of judge and jury behavior than does conventional wisdom, which typically rests precariously on unstudied assumptions.

Section II describes our data, which include state civil trial court decisions involving punitive damages from four consistent data sets spanning 1991 through 2005. Section III presents descriptive results with emphasis on the relation between compensatory and punitive damages. The strong punitive-compensatory relation persists over time and applies to juries and judges. Section IV reports regression results that largely reinforce Section III's core results. Section V considers a prime candidate for why differences between judges and juries in the punitive-compensatory relation emerged after 2003: the *State Farm* decision. It also discusses the influence of selection effects on our results, differential impact of legal doctrine on judges and jurors, and considers other explanations. Section VI concludes.

¹¹Id. at tbl.8; Eisenberg et al., Decision, *supra* note 9.

¹²*State Farm Mut. Auto. Ins. Co. v. Campbell*, 538 U.S. 408 (2003).

¹³Id. at 425.

II. DATA

The Civil Justice Survey of State Courts, a project of the National Center for State Courts (NCSC) and the Bureau of Justice Statistics (BJS), presents data gathered directly from state court clerks' offices on tort, contract, and property cases resolved by trial in fiscal year 1991–1992 and then in calendar years 1996, 2001, and 2005. The four separate data sets cover state courts of general jurisdiction in a random sample of 46 of the 75 most populous counties in the United States.¹⁴ The 75 counties sampled include approximately 33 percent of the 1990 U.S. population; the actual 45 counties contributing data account for approximately 20 percent of the population.¹⁵ Although the initial data set (1991–1992) includes only jury trials, the three subsequent data sets, 1996, 2001, and 2005, include jury and bench trials, thereby allowing direct comparisons between judge and jury trials. The four data sets include all completed trials in all four years in most of the counties. Sampling in the 1992 and 1996 data sets is described in earlier publications.¹⁶ Sampling was used in three counties in the 2001 data set, Cook County, Illinois, Philadelphia County, and Bergen County, New Jersey.

To maintain backward compatibility with the earlier Civil Justice Surveys, the 2005 survey includes 46 of the 75 most populous counties. The 2005 data set expands the prior data set, however, by adding data from 110 counties selected to represent the 3,066 smaller counties not included in the country's 75 largest counties.¹⁷ The 2005 data include 8,872 trials of an estimated total of 27,128 in state courts in the United States in 2005, or 32.7 percent.¹⁸ Based on the sample design, the trials from the 46 counties represent 10,813 general bench and civil trials disposed of in the nation's 75 most populous counties.¹⁹ Trials from the 110 smaller counties represent 16,315 general civil and bench trials from outside the nation's 75 most populous counties. Similar to the prior data sets, the 2005 data include

¹⁴The 2005 data include 156 counties. The 2001 data included 46 counties; the 1991–1992 and 1996 data included 45. One county included in the 1991–1992 and 1996 study, Norfolk, MA, fell out of the nation's 75 most populous in the 2000 Census and was replaced by Mecklenburg County, NC, and El Paso County, TX. Two Maryland counties declined to participate in the 1991–1992 study, and were replaced with Fairfax County for all three iterations of the Civil Justice Survey.

¹⁵For a summary of the data and methodology, see Bureau of Justice Statistics Bulletin: Civil Justice Survey of State Courts, 2005: Civil Bench and Jury Trials in State Courts, 2005 (Oct. 2008) [hereinafter BJS, 2005]; Bureau of Justice Statistics Bulletin: Civil Justice Survey of State Courts, 2001: Civil Trial Cases and Verdicts in Large Counties, 2001 (Apr. 2004); Bureau of Justice Statistics Bulletin: Civil Justice Survey of State Courts, 1996: Civil Trial Cases and Verdicts in Large Counties (1996); Bureau of Justice Statistics Bulletin: Civil Justice Survey of State Courts, 1992: Tort Cases in Large Counties 6 (1995). See also Eisenberg et al., *Punitive*, supra note 7 (describing 2001 data); Hersch & Viscusi, *Perform*, supra note 2, at 10–13 (2004) (describing 1996 data); Michael Heise, *Justice Delayed?: An Empirical Analysis of Civil Case Disposition Time*, 50 *Case W. Res. Univ. L. Rev.* 813, 822–27 (2000) (describing 1992 data).

¹⁶See BJS sources cited in note 15 supra.

¹⁷BJS, 2005, supra note 15; Codebook, Inter-University Consortium for Political and Social Research, Civil Justice Survey of State Courts, 2005 [United States], Study No. 2386.

¹⁸See Eisenberg et al., *Decision*, supra note 9.

¹⁹*Id.*

all completed trials in the studied counties. Unlike the earlier data sets, the 2005 data include a variable that reports whether punitive damages had been sought in each case. These data are the most representative sample of state court trials in the United States. With direct access to state court clerks' offices, as well as approximately 100 trained coders recording data, the information gathered does not rely on litigants or third parties to report. Self-reports, common in many commercial verdict reporters, typically overstate plaintiff win rates and award levels.²⁰

III. CIVIL TRIALS AND PUNITIVE DAMAGES

Civil complaints that ripen into trials on the merits remain rare events.²¹ Within the small subset of cases that reach a final verdict at trial, those that involve punitive damages are even rarer. Table 1, which presents descriptive information based on the 16,412 cases in our data set where the plaintiff prevailed (Panel A), shows that punitive damages were awarded in less than 5 percent of the cases ($N = 732$). In prior research we noted that judges and juries awarded punitive damages at "roughly similar rates" and that jury trials numerically dominated punitive damages cases.²² The addition of the 2005 data does not materially dislodge our prior observations. As Panel A illustrates, judges and juries award punitive damages in approximately 4.8 percent and 3.4 percent of the cases, respectively. Moreover, applying any realistic rate of filed cases reaching trial, less than 1 percent of civil lawsuits filed resulted in the awarding of punitive damages to prevailing plaintiffs. As a consequence, studies of punitive damages cases—such as ours—are necessarily studies of rare events.

The total sample of punitive damages cases (Table 1, Panel A) reveals interesting judge-jury differences that the addition of the 2005 data set enhanced. For example, between 1992 and 2001, the difference in the rate at which juries and judges awarded punitive damages was 0.92 percent.²³ For the 2005 sample (Panel B), however, the judge-jury difference increased to 1.67 percent. This substantial increase in the difference in the rate at which juries and judges award punitive damages from 1992 to 2005 hints at a possibly important trend that supports seeking possible causes of increased judge-jury differences.

²⁰Theodore Eisenberg et al., *The Predictability of Punitive Damages*, 26 *J. Legal Studies* 623, 641 n53 (1997) [hereinafter Eisenberg et al., *Predictability*] (finding bias in commercial verdict reporter samples); Deborah Jones Merritt & Kathryn A. Barry, *Is the Tort System in Crisis? New Empirical Evidence*, 60 *Ohio St. L.J.* 315, 324–26 (1999) (same); Moller et al., *supra* note 3, at 335 (reporting reasonable levels of confidence in the jury verdict reporters but acknowledging some potential bias). See also Paula L. Hannaford-Agor & Thomas Cohen, *Treading on Uncertain Ground: The Reliability of Jury Verdict Reporter Statutes* (unpublished paper) (finding that on average jury verdict reporter data sets contained half the number of jury trials as were included in the 2001 Civil Justice Survey, trial outcomes were skewed toward higher plaintiff win rates, and higher mean and median compensatory and punitive awards, but no difference in the rate of punitive awards).

²¹See Marc Galanter, *The Vanishing Trial: An Examination of Trials and Related Matters in Federal and State Courts*, 1 *J. Empirical Legal Stud.* 459, 509 tbl.5 (2004) (analyzing state courts of general jurisdiction for 10 states from 1992 to 2002).

²²Eisenberg et al., *Punitive*, *supra* note 10, at 268.

²³Computed from *id.* at 269, tbl.1.

Table I: Characteristics of Damages Awards

	A (1991-92, 1996, 2001, 2005 Data)			B (2005 Data Only)		
	Jury	Bench	Combined	Jury	Bench	Combined
Number of trials w/ plaintiff requested PD	—	—	—	328	146	474
Percent of trials w/ plaintiff requested PD	—	—	—	10.80	9.62	10.41
Number of trials w/ PD	590	142	732	141	45	186
Percent of trials w/ PD	4.81	3.42	4.46	4.64	2.97	4.03
Percent of trials w/ PD (when requested)	—	—	—	42.99	30.82	39.24
PD Characteristics						
Mean (\$ 2004)	2,906,238	353,422	2,411,020	2,867,701	242,838	2,232,653
Median (\$ 2004)	75,000	40,625	55,900	142,183	36,285	96,723
SD	2.11 · (10 ⁷)	2,296,455	1.90 · (10 ⁷)	1.08 · (10 ⁷)	643,191	9,436,638
Mean log ₁₀ (PD)	4.92	4.54	4.84	5.18	4.60	5.04
CD Characteristics in PD Cases (if CD > 0)						
Mean (\$ 2004)	1,841,038	949,245	1,668,191	2,555,649	1,369,378	2,275,742
Median (\$ 2004)	117,456	61,738	102,013	126,003	53,692	115,246
SD	8,499,713	5,458,770	8,005,561	9,153,457	7,763,221	8,838,542
Mean log ₁₀ (CD)	5.10	4.79	5.04	5.19	4.78	5.09
Ratio of PD : CD (if CD > 0)						
Mean	3.97	1.38	3.47	2.92	1.31	2.54
SD	26.93	3.53	24.25	4.77	1.39	4.28
Median	0.62	0.65	0.62	1.00	0.94	1.00
Percent of PD Awards in the Range						
\$1 to 9,999	21.19	25.35	21.99	14.89	24.44	17.2
\$10,000 to 99,999	34.24	45.07	36.34	32.62	48.89	36.56
\$100,000 to 999,999	16.44	19.01	16.94	16.31	11.11	15.05
\$300,000 to 999,999	12.37	7.04	11.34	10.64	11.11	10.75
\$1,000,000 or more	15.76	3.52	13.39	25.53	4.44	20.43

NOTE: PD = punitive damages; CD = compensatory damages. Panel A (all cases in BJS data) N = 732, of which 712 had a nonzero compensatory award. Panel B (BJS 2005 cases) N = 186, of which 178 had a nonzero compensatory award. Amounts are in inflation-adjusted 2004 dollars.

SOURCE: Civil Justice Survey of State Courts 1992-2005.

Preliminarily, note that the rate of punitive damage awards reported in Table 1, Panel A's fourth numerical row for combined judge and jury trials (4.46 percent) does not account for whether punitive damages were sought by the plaintiff. The 2005 data (Panel B) for the first time contain information on whether punitive damages were sought by the plaintiff. Surprisingly, plaintiffs only sought punitive damages in approximately 10 percent of the trials they won.²⁴ Among those cases where plaintiffs requested punitive damages, the overall rate at which punitive damages were awarded (the effective punitive damages award rate) in 2005 exceeds 39 percent.²⁵ Thus, a comparison of the 39.2 percent effective punitive damage rate for 2005 (Panel B) and the 4.46 percent punitive damage rate for the entire data set (Panel A) illustrates the importance of knowing whether punitive damages were requested. The magnitude of the difference between the 2005 effective punitive damages award rate and the rate for the entire data set—almost a factor of 10—underscores that interpretation warrants careful attention. It also suggests that changes in judge-jury treatment of punitive damages cases in the 2005 data may be attributable to enhanced coding of punitive damages information. We explore coding differences as a possible explanation in Section V.

A. *General Punitive Damages Award Patterns*

Punitive damages are most likely to be authorized in tort cases as punitive damages are generally not available for pure contract claims. Since tort trials are overwhelmingly jury trials,²⁶ it comes as no surprise that jury trials continued to dominate (80.6 percent: 590 cases of 732 total cases, per Table 1, Panel A, third numerical row) cases in which punitive damages were awarded. Even viewing all case categories in the aggregate, jury trials' dominance in the subset of punitive damages cases largely reflects litigants' overall preference for jury trials in the case categories studied. Of the 16,412 cases where the plaintiff prevailed, 74.7 percent involved jury trials.²⁷

Table 1 also makes clear that, consistent with conventional wisdom, jury trials involved higher compensatory and punitive damage awards than judge trials.²⁸ Nonrandom case routing ensured, however, that juries and judges decided different streams of cases. For example, as Table 2 illustrates, juries saw a higher proportion of torts than contract

²⁴Eisenberg et al., *Decision*, supra note 9. Also surprising is that in 25 of the 186 punitive damages cases in 2005 (13.4 percent) punitive damages were not initially requested. These may be cases in which statutory doubling or trebling of damages is mandated, as in some consumer actions. Alternatively, evidence of punitive damages being requested may not have been detected in some cases in which they were requested.

²⁵See *id.*

²⁶Bureau of Justice Statistics, *Civil Justice Survey of State Courts: Tort Bench and Jury Trials in State Courts, 2005*, at 2 (Nov. 2009) (90.0 percent of tort trials in the 2005 BJS data were jury trials).

²⁷A data set limitation also helps accentuate the influence of jury trials. Although the 1996, 2001, and 2005 data sets include judge and jury trials, the initial data set (1991–1992) contains only jury trials.

²⁸As expected, compensatory damages were awarded in almost all cases in which the plaintiff prevailed and received punitive damages. In our data set of 732 cases in which the plaintiff prevailed and received punitive damages, there are 20 instances where the compensatory award was zero.

Table 2: Summary of Jury and Bench Trial Characteristics in Punitive Damage Cases

	<i>Jury</i>	<i>Bench</i>	<i>Percent of Total Cases</i>
Case Category			
Torts	296	56	48.3
Contract	285	84	50.6
Property	7	1	1.1
Selected Case Types			
Motor vehicle accident	74	5	10.8
Premises liability	19	8	3.7
Product liability	7	0	1.0
Intentional tort	92	30	16.7
Medical and professional malpractice	31	3	4.6
Fraud	79	37	15.9
Employment discrimination or dispute	58	6	8.7
Rental/lease agreement	14	2	2.2
Selected Case Characteristics			
Bodily injury (motor vehicle)	73	5	10.7
Bodily injury (non-motor-vehicle)	142	30	26.3
No bodily injury	375	107	65.9
States			
Alabama	4	0	0.6
Arizona	30	5	4.8
California	155	54	28.6
Connecticut	4	4	1.1
Florida	25	1	3.6
Georgia	28	0	3.8
Hawaii	5	1	0.8
Illinois	22	2	3.3
Indiana	3	1	0.6
Kentucky	24	3	3.7
Massachusetts	10	1	1.5
Michigan	5	0	0.7
Minnesota	8	3	1.5
Missouri	16	9	3.4
North Carolina	3	1	0.6
New Jersey	20	7	3.7
New Mexico	4	1	0.7
New York	11	1	1.6
Ohio	42	7	6.7
Pennsylvania	20	4	3.3
Texas	109	27	18.6
Virginia	28	5	4.5
Washington	4	1	0.7
Wisconsin	6	4	1.4
<i>N</i>	590	142	

NOTE: Total cases *N* = 732.

SOURCE: Civil Justice Survey of State Courts 1992–2005.

cases while the opposite was true for judges. Such systematic differences in the streams of cases brought to juries and judges likely contribute to variations in how juries and judges approach punitive damages.

Much of the furor over punitive damages involves cases with the largest awards (the so-called blockbuster awards²⁹). As defined by Professors Hersch and Viscusi, “blockbuster” punitive damages awards are at least \$100 million. As they correctly note, juries tended to dominate these large punitive damages cases.³⁰ Table 1 illustrates, however, that “blockbuster” punitive damage awards are rare and occupy the high end of the punitive damage continuum. Fewer than 14 percent of the punitive damages cases involved awards that exceeded \$1 million. Most punitive damages awards (86.6 percent) involved less than \$1 million and more than one-half (58.3 percent) were less than \$100,000. It is clear, however, that judge trials are relatively more common for the smaller punitive damages cases and jury trials more common for the larger punitive damages cases.

The different streams of cases that flow to juries and judges help explain differences in various case characteristics in bench and jury trials. As noted, juries saw a disproportionate number of torts cases and judges saw a higher number of contract cases than chance would suggest. Similar variation is present in the distribution of more specific case types. For example, more than one-half (52.1 percent) of the punitive damages cases involved one of four case types (motor vehicle accident, intentional tort, fraud, and employment disputes). Of the most frequent case types, juries saw a disproportionate number of the motor vehicle accident cases. Moreover, the distribution of judge-jury punitive damages cases across states varied tremendously as well. The distribution ranged from one state (Connecticut) where judges and juries evenly split punitive damages cases, to another state, Georgia, where all 28 punitive damages cases were tried to juries.

Cases involving personal injury and motor vehicle accidents warrant special attention. Bodily injury occupies a privileged place in the popular lore of U.S. tort law.³¹ Motor vehicle cases constitute a sizable percentage of torts in general and our punitive damages data set in particular.³² As a result, we separate motor vehicle and non-motor-vehicle personal injury cases. Consistent with the overall distribution of jury and judge trials that resulted in punitive damages awards,³³ 82.6 percent of the non-motor-vehicle-related bodily injury cases and 77.8 percent of the non-bodily-injury cases went to a jury. Somewhat at odds with the overall case trial mode distribution, however, is that virtually all (93.6 percent) of the motor vehicle bodily injury cases went to a jury.

²⁹Hersch & Viscusi, *Perform*, supra note 2, at 4–10, tbl.1.

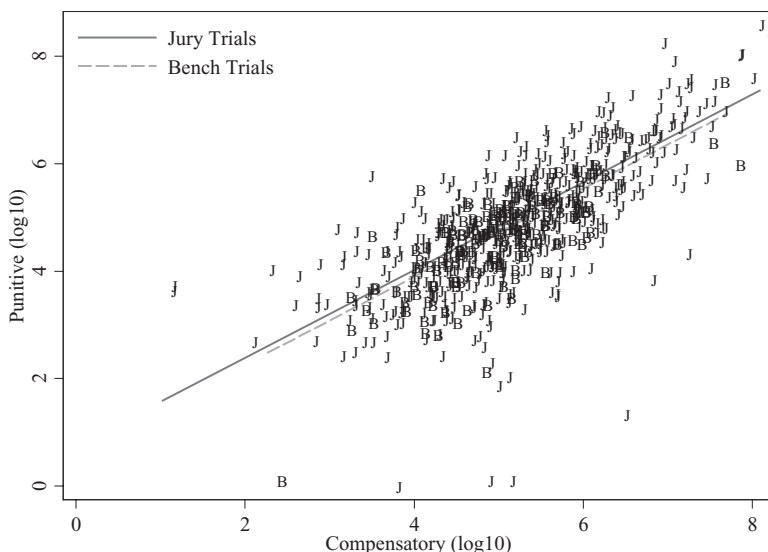
³⁰However, there is little evidence that juries so do beyond the juries’ presumably large share of high-stakes tort trials.

³¹See, e.g., Dan B. Dobbs, *The Law of Torts* 9 (2000) (“Many people think of personal injury cases when they think of [U.S.] tort law.”).

³²Of the 215 punitive damages cases that involved personal injury, 73 (34.0 percent) involved motor vehicle accidents.

³³As Table 1 shows, of the 732 cases that involved punitive damages awards, 80.6 percent went to a jury and 19.4 percent went to a judge.

Figure 1: Bench and jury punitive and compensatory (logs) damages (all cases).



NOTE: The figure shows a scatterplot of punitive awards with the corresponding compensatory award for cases in the four Civil Justice Survey of State Courts data sets. Jury trials are labeled “J” and bench (judge) trials are labeled “B.”
 SOURCE: Civil Justice Survey of State Courts 1992–2005.

1. The Enduring Relation Between Compensatory and Punitive Damages

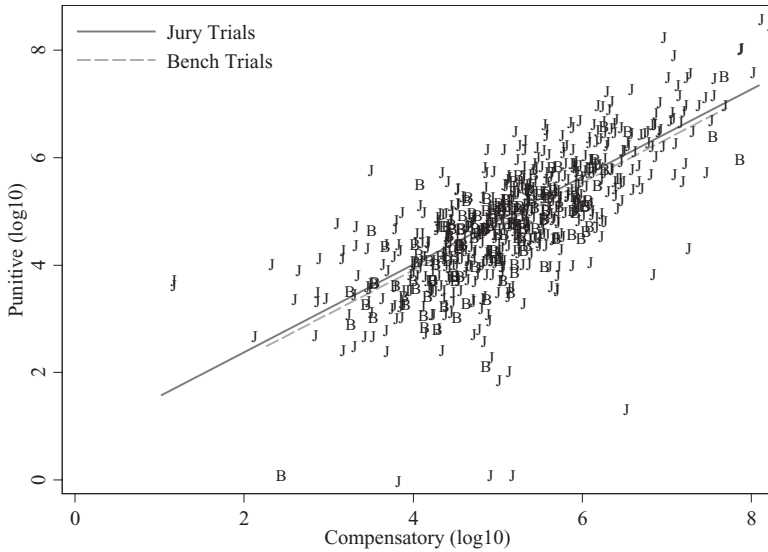
One key line of inquiry focuses on the relation between compensatory and punitive damages. Figures 1, 2, and 3 permit visual inspection of both jury and bench trials over the four data cohorts. The three scatterplots reveal a robust and consistent pattern over time across both trial modes in the ratio of logged punitive and compensatory damages.

Figures 1 and 2 present scatterplots of punitive (log) and compensatory damages (log) with individual bench and jury trials from all four data sets separately identified with “J” and “B,” respectively. We use logarithmic scales because, as is typical with award amounts, linear scales fail to reveal the relation between the variables.³⁴ Both figures also include best-fitting regression lines for jury and bench trials.³⁵ Notably, the two regression lines that describe the relation between compensatory and punitive damages awards are

³⁴Equally important is that untransformed punitive and compensatory award damages are not normally distributed, do not possess a linear relation, and, therefore, violate standard regression assumptions. For a discussion of the need to transform award damages into logarithmic scales, and of the need for such transformations to satisfy basic regression assumptions, see generally Eisenberg & Wells, Association, *supra* note 2.

³⁵Simple regression models of punitive damages (log) as the dependent variable and compensatory damages (log) as the independent variable, run separately for judge and bench trials and using weighted data, yield the following results.

Figure 2: Bench and jury punitive and compensatory (logs) damages (excluding nonurban counties newly added in the 2005 data).



NOTE: The figure shows a scatterplot of punitive awards with the corresponding compensatory award for cases in the four Civil Justice Survey of State Courts data. Jury trials are labeled “J” and bench (judge) trials are labeled “B.” This figure excludes the smaller counties added to the 2005 Civil Justice Survey. SOURCE: Civil Justice Survey of State Courts 1992–2005.

similar in terms of their respective slopes and intercepts. Also notable is that the overall pattern displayed in Figures 1 and 2 remains consistent with those in previous studies.³⁶

The 2005 data set expands the three prior data sets by adding data from 110 counties selected to represent the 3,066 smaller counties not included in the country’s 75 largest counties.³⁷ To preserve continuity with the three prior data sets, Figure 2 reproduces

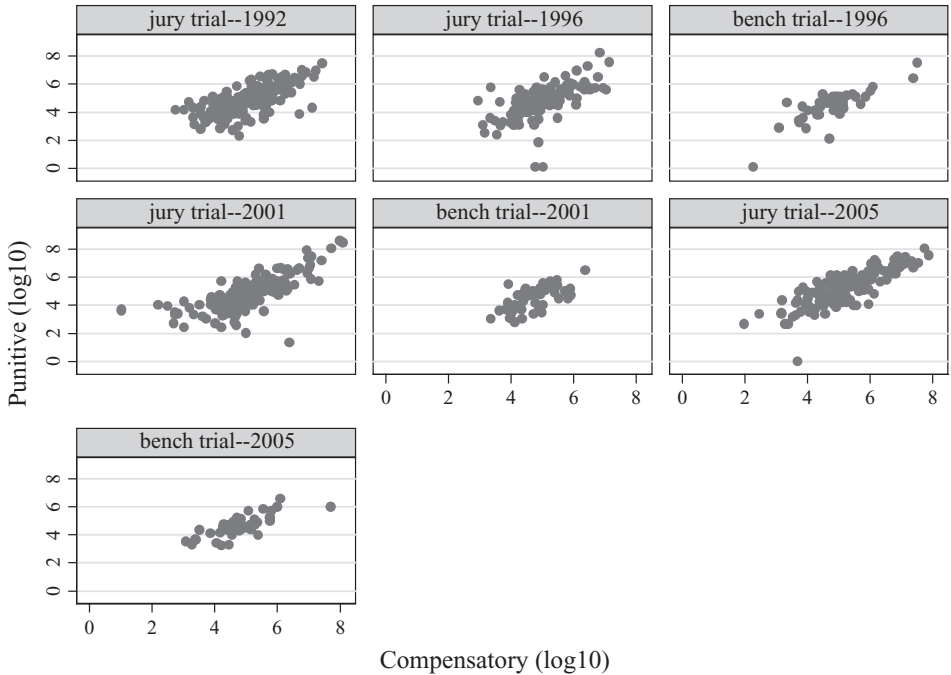
<i>Trial Mode</i>	<i>Compensatory(Log) Coefficient</i>	<i>SE</i>	<i>Intercept</i>	<i>r²d</i>	<i>N</i>
Bench	0.932**	0.116	0.051	0.608	138
Jury	0.857**	0.075	0.736	0.589	574

***p* < 0.01.

³⁶See, e.g., Eisenberg et al., Punitive, supra note 10 (1992–2001 data); Denise E. Antolini, Punitive Damages in Rhetoric and Reality: An Integrated Empirical Analysis of Punitive Damages Judgments in Hawaii, 1985–2001, 20 J.L. & Pol. 143 (2004) (we analyzed the Hawaii data made available on Professor Antolini’s website); Eisenberg et al., Predictability, supra note 20, at 638 fig.3 (1991–1992 data); Moller et al., supra note 3, at 300 n52.

³⁷See supra note 14.

Figure 3: Punitive and compensatory awards (logs) by trial mode and year.



NOTE: The figure shows scatterplots of punitive awards with the corresponding compensatory award for cases in the four Civil Justice Survey of State Courts data sets. Each year of the data sets and each adjudicator are shown in separate scatterplots. This figure includes the smaller counties added to the 2005 Civil Justice Survey, but a figure that excludes them does not materially differ from this figure.
 SOURCE: Civil Justice Survey of State Courts 1992–2005.

Figure 1 but excludes all nonoriginal counties. Not only are the results in Figure 2 visually similar with those in Figure 1, but the general pattern in Figure 2 also comports with the patterns that emerged in prior studies.

Figure 3 explores the compensatory and punitive damages relation in greater detail by reporting the relation separately for each of the seven year and trial adjudicator combinations in the BJS data. It illustrates that the general trend presented in Figures 1 and 2 persists over time and across trial modes.

2. The Punitive-Compensatory Ratio

Further insight into the relation between punitive and compensatory damages emerges by computing a punitive-compensatory ratio for each punitive damages case. Our punitive-compensatory damage award level (log) ratio was constructed by dividing a case’s punitive award (log) by its compensatory award (log). Commentators describe such a ratio as a

Table 3: Punitive-Compensatory Award Ratio by Trial Mode

	<i>Mean Ratio</i>	<i>Median Ratio</i>	<i>SD</i>	<i>Untransformed Median Ratio</i>	<i>N</i>
Bench trial	0.943	0.963	0.155	0.646	138
Jury trial	0.966	0.962	0.235	0.620	574
Significance of bench-jury trial difference	0.265	0.480	0.000	0.503	

NOTE: Ratio is the ratio of punitive award (log) to compensatory award (log). Untransformed ratio is the ratio of punitive award to compensatory award. The significance of means difference is based on a *t* test; the significance of medians differences is based on a Mann-Whitney test; the significance of standard deviations differences is based on an *f* test.

SOURCE: Civil Justice Survey of State Courts 1992–2005.

“widely cited barometer of whether a punitive damages award is out of line.”³⁸ More importantly, the Supreme Court considered such a ratio in its important review of punitive damages in light of due process protections.³⁹

Table 3 summarizes various punitive-compensatory damage ratios by trial mode to facilitate comparisons. Means and median ratios for jury and bench trials do not differ significantly. Although the standard deviations do differ, a test of the entire distribution precludes the rejection of the hypothesis that they are the same ($p = 0.205$).⁴⁰ Although bench trial untransformed median ratios exceed those of jury trials, they do not significantly differ.⁴¹ Power calculations suggest that sample size is not a likely explanation for the overall absence of statistically significant differences between bench and jury trial ratios.

Figure 4 presents kernel density estimates⁴² of the distributions of the punitive-compensatory damages award levels over time for jury and bench trials. Although the overall visual impression is one of congruence, the distributions of the jury and bench trials also include some differences in their respective shapes. Notably, the jury trial distribution evidences slightly more “spread” than the bench trial distribution. Differences between jury and bench trial distributions, however, do not achieve statistical significance.

³⁸See, e.g., Hersch & Viscusi, Perform, *supra* note 2, at 9. Although Hersch and Viscusi report that juries award punitive damages more frequently than judges, they do not question the very strong relation between punitive and compensatory awards in the mass of cases. They do so only for what they call “blockbuster” awards and even their data show a significant relation between punitive and compensatory awards. See Eisenberg & Wells, Association, *supra* note 2 (showing substantial, statistically significant association between punitive and compensatory awards in blockbuster cases); Alison F. Del Rossi & W. Kip Viscusi, The Changing Landscape of Blockbuster Punitive Damages Awards, 12 *Am. L. & Econ. Rev.* 116, 147 (2010) (tbl. 9) (showing significant association between punitive and compensatory awards in an expanded set of blockbuster cases).

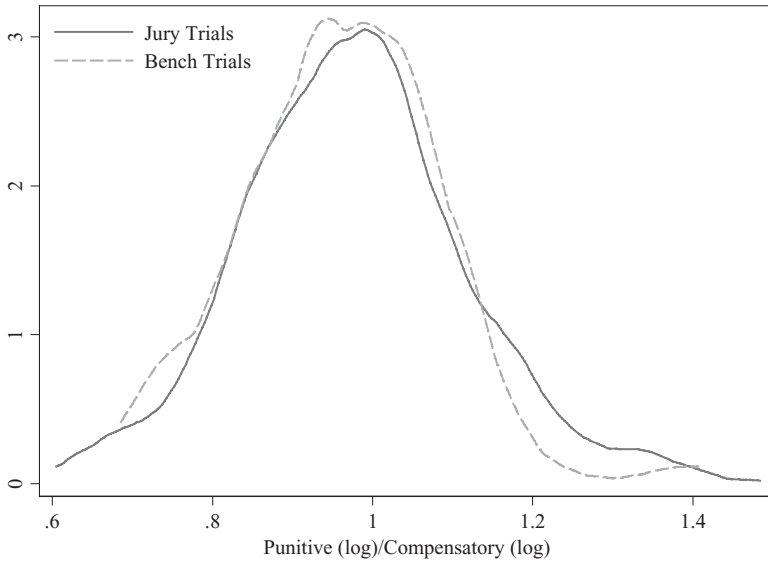
³⁹See *State Farm Mut. Auto. Ins. Co. v. Campbell*, 538 U.S. 408 (2003) (noting that to satisfy due process concerns, the punitive-compensatory damage ratio (not in logs) should not typically exceed a single digit).

⁴⁰This result is based on a Kolmogorov-Smirnov test.

⁴¹A Kolmogorov-Smirnov test of the entire untransformed ratio distribution yields $p = 0.103$.

⁴²For a discussion of kernel density estimation, see B.W. Silverman, *Density Estimation for Statistics and Data Analysis* (1986).

Figure 4: Kernel density estimates of punitive-compensatory ratio (logs).



NOTE: Kernel density estimates of the ratio of punitive damages in cases containing both kinds of awards, by judge or jury trial mode. Jury trials show greater “spread” than judge trials. Y-axis is a measure of density, but the shape of the distributions is identical if frequency is used. SOURCE: Civil Justice Survey of State Courts 1992–2005.

3. Award Ratios Over Time and Across Trial Modes

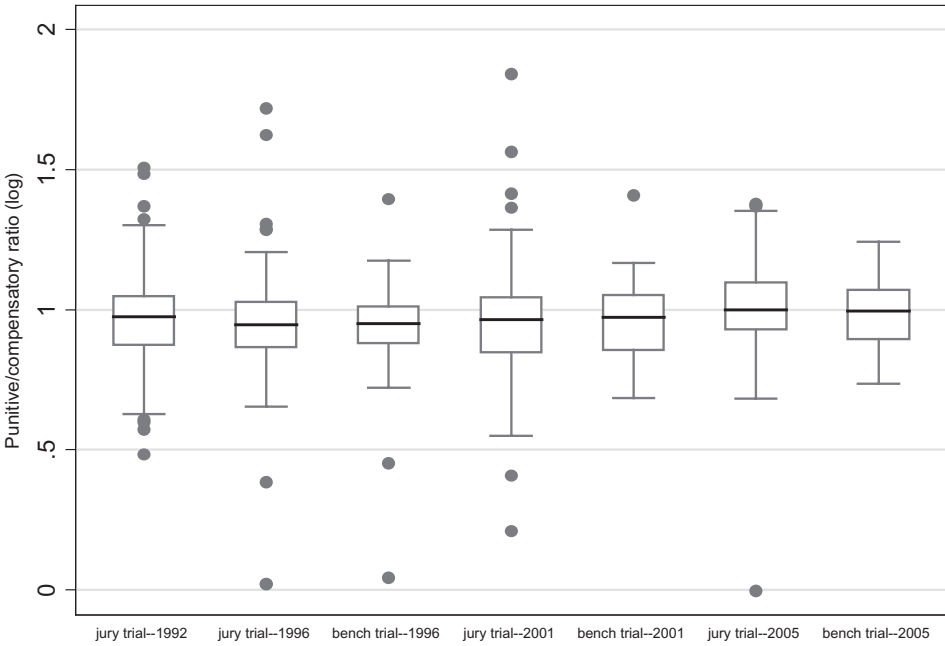
Figure 5 presents another perspective on the punitive-compensatory ratio and reinforces the pattern suggested in Figure 4. The box plots in Figure 5 convey stability in the dispersion of the punitive-compensatory damages ratio that is robust to time and trial mode. Setting aside the incoherent distribution of the outlier ratios, separation between the 25th and 75th percentiles (the lower and upper borders of the boxes) implies relatively small levels of variation. Aside from 1996 bench trials, separation between the 25th and 75th percentiles appears to have settled into a relatively consistent pattern. The most striking finding in Figure 5, however, is the stability in the median ratios. The line dissecting each box denotes the median ratio. These lines consistently hover at or just below 1.0. This descriptive consistency illustrates similarity between judges and juries as well as stability over time.

4. Judge-Jury Comparisons

Past research noted judge-jury differences in discrete areas and attributed the likely cause to different streams of cases routed to judges and juries.⁴³ To assess possible judge-jury differences we again begin with scatterplots of punitive (log) and compensatory damages (log) with individual bench and jury trials separately identified.

⁴³See Eisenberg et al., Punitive, *supra* note 10, at 288–93; Eisenberg et al., Decision, *supra* note 9.

Figure 5: Punitive-compensatory award ratio (logs) by trial mode and year.



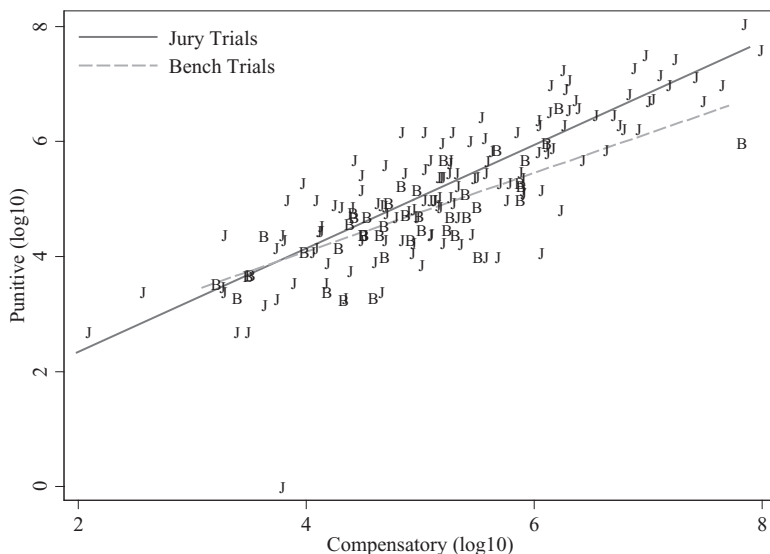
NOTE: The figure shows the 25th and 75th percentiles, the median, the upper and lower adjacent values, and the data points more extreme than the adjacent values. Excludes two jury trial outliers in 2001.
 SOURCE: Civil Justice Survey of State Courts 1992–2005.

Figure 6 displays the relation between punitive and compensatory damages for all 2005 punitive damages cases. Figure 7 displays the same relation for the 1992–2001 cases. Comparing Figures 6 and 7 reveals important differences and provides visual evidence of a divergence between judge and jury cases. Specifically, the slopes of the respective best-fitting regression lines display more separation between judge and jury trials in 2005 cases (Figure 6) than they do for 1992–2001 cases (Figure 7). Thus, combining all the BJS data into a single scatterplot, as in Figures 1 and 2, can obscure judge-jury heterogeneity in the 2005 data. We explore the *State Farm*-based explanation for this increased heterogeneity, as well as other possible explanations, in Section V.

IV. PUNITIVE DAMAGES MODELS

Our descriptive results imply a robust and persistent relation between compensatory and punitive awards damages. Evidence of differences in how judges and jurors behave with respect to the punitive-compensatory relation emerges in the 2005 cases. This section explores whether these findings survive in regression models that simultaneously account for more than one factor.

Figure 6: Bench and jury punitive and compensatory (logs) damages (all 2005 cases).



NOTE: The figure shows a scatterplot of punitive awards with the corresponding compensatory award for cases in the 2005 Civil Justice Survey of State Courts data set. Jury trials are labeled “J” and bench (judge) trials are labeled “B.” The lines are the best-fitting regression lines.
SOURCE: Civil Justice Survey of State Courts 2005.

Tables 4 and 5 report results from two distinct though related models. Taken together, the tables provide strong support for the argument that the amounts of compensatory awards are associated with punitive awards as well as with the punitive-compensatory ratio. The tables also illustrate that, in the 2005 data, the punitive-compensatory ratio differs between jury and bench trials.

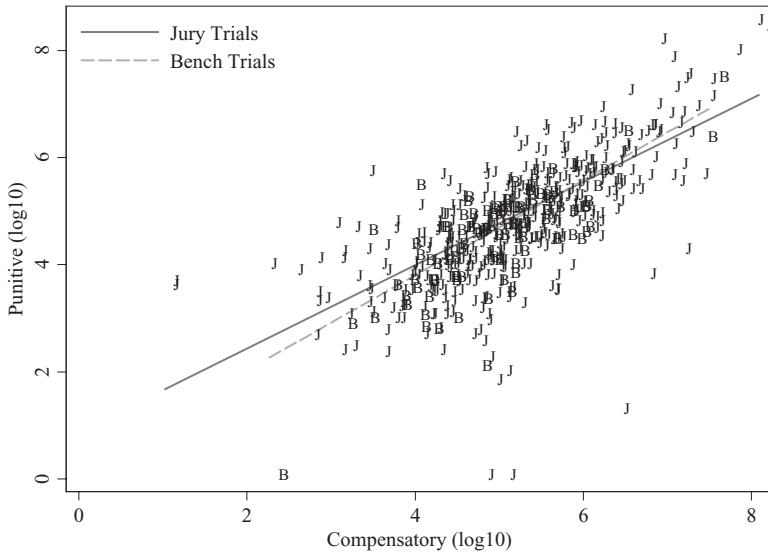
We analyze the 712 trials where the plaintiff won and was awarded a nonzero compensatory award.⁴⁴ Our sample is nested on two levels. Individual cases are clustered at the county level and the counties are embedded in larger geographical units, states, the laws of which vary and can influence punitive damages case outcomes.⁴⁵ Our data are thus amenable to using hierarchical or multilevel models that account for the sample structure.⁴⁶ For both Tables 4 and 5, Column A, the most parsimonious model, includes a single independent variable—the (log) compensatory damages award. Column B adds a dummy variable

⁴⁴We excluded from our analyses the 20 cases where the plaintiff received a punitive award though no compensatory award. See *supra* note 28 and, for a general discussion, see Eisenberg et al., *Predictability*, *supra* note 20, at 629–30.

⁴⁵Eisenberg et al., *Decision*, *supra* note 9.

⁴⁶See Andrew Gelman & Jennifer Hill, *Data Analysis Using Regression and Multilevel/Hierarchical Models* 251 et seq. (2007). For discussion of the number of groups and the number of observations per group needed in multilevel models, see *id.* at 275–76.

Figure 7: Bench and jury punitive and compensatory (logs) damages (1992–2001 cases).



NOTE: The figure shows a scatterplot of punitive awards with the corresponding compensatory award for cases in three Civil Justice Survey of State Courts data sets, 1992, 1996, and 2001. Jury trials are labeled “J” and bench (judge) trials are labeled “B.” The lines are the best-fitting regression lines.
 SOURCE: Civil Justice Survey of State Courts 1992–2001.

indicating whether the case was tried to a jury (vs. a bench trial) to assess the potential influence of trial mode. Column C includes an additional variable, an interaction term between the compensatory award and the jury trial dummy variable.⁴⁷ Both tables facilitate comparisons between all punitive damages cases (top panel; $N = 712$) and 2005 punitive damages cases in which the plaintiff requested punitive damages (bottom panel; $N = 152$). Note that by limiting coverage to 2005 cases, the bottom panel isolates a subset of the entire universe of punitive damages cases (top panel).

Table 4 presents results from our models of punitive damages award levels. In all three models and in both panels, the compensatory damages coefficient achieves statistical significance. This finding comports with our prior research on earlier versions of the Civil Justice Survey data sets.⁴⁸ Also interesting is that in the full data set (top panel), neither the jury trial dummy nor the interaction variables achieve statistical significance. Thus, with

⁴⁷Although the analytic differences distinguishing Columns B and C are slight, we include the two separate models in response to earlier concerns about possible multicollinearity raised by Hersch and Viscusi (Perform, supra note 2, 33–34). As these results illustrate (similar to past results; see Eisenberg et al., Punitive, supra note 10, at 281–82 tbls. 4, 5), because it bears on the influence of the compensatory award, the inclusion of a jury trial dummy variable or an interaction variable (or both) makes little difference.

⁴⁸Eisenberg et al., Predictability, supra note 20, at 648 tbl. 5 (1992 data); Eisenberg et al., Punitive Damages, supra note 7, at 747–78 (1996 data); Eisenberg et al., Punitive, supra note 10, at 281–82 tbls. 4, 5 (1992–2001 data).

Table 4: Multilevel Regression Models of Punitive Damages (Log) Levels

	A	B	C
All Cases			
Compensatory damages (log)	0.819** (0.029)	0.812** (0.030)	0.812** (0.080)
Jury trial dummy (1 = yes)	—	0.126 (0.075)	0.126 (0.424)
Jury trial × compensatory (log)	—	—	-0.000 (0.086)
Constant	0.712** (0.158)	0.644** (0.157)	0.644 (0.391)
N	712	712	712
Number of states	26	26	26
Number of counties	66	66	66
Prob. > chi-square	0.000	0.000	0.000
2005 Cases; Punitives Requested			
Compensatory damages (log)	0.847** (0.054)	0.819** (0.055)	0.564** (0.139)
Jury trial dummy (1 = yes)	—	0.311* (0.138)	-1.157 (0.749)
Jury trial × compensatory (log)	—	—	0.296* (0.148)
Constant	0.752* (0.293)	0.628* (0.295)	1.881** (0.692)
N	152	152	152
Number of states	21	21	21
Number of counties	49	49	49
Prob. > chi-square	0.000	0.000	0.000

NOTE: The “All Cases” (top) panel includes all cases with punitive damages from the four Civil Justice Survey data sets. Models that exclude cases from the smaller counties added to the 2005 Civil Justice Survey do not yield results materially different from those in the table. The “2005 Cases; Punitives Requested” (bottom) panel includes only cases from the 2005 Civil Justice Survey in which punitive damages were requested (see footnote 24). Variations on Models A and B that do not limit the sample to cases in which punitive damages were requested and that do not include cases from smaller counties added to the 2005 Civil Justice Survey do not yield results materially different from those in the table. Variations on Model C that do not limit the sample to cases in which punitive damages were requested and that do not include cases from smaller counties added to the 2005 Civil Justice Survey yield results in which the interaction term is not statistically significant. However, in models that include only the interaction term and not the jury trial dummy, the interaction term is statistically significant. * $p < 0.05$; ** $p < 0.01$. Standard errors in parentheses. Multi-level models are used with random intercepts for locale and state.

SOURCE: Civil Justice Survey of State Courts 1992–2005.

respect to explaining punitive damage awards, the top panel (all cases) underscores the importance of the compensatory award rather than trial mode.

The 2005 results in Table 4 (bottom panel) reveal a complicating wrinkle—the emerging importance of trial mode. The import of the compensatory damages award remains intact as that coefficient achieves statistical significance in all three models. What changes, however, is that the jury trial (Column B) and the interaction variable (Column C) coefficients are now statistically significant. This finding suggests that, as of 2005, trial mode, along with compensatory damages awards, is associated with punitive damages

Table 5: Multilevel Regression Models of Punitive-Compensatory Ratios

	A	B	C
All Cases			
Compensatory damages (log)	-0.060** (0.008)	-0.062** (0.008)	-0.016 (0.464)
Jury trial dummy (1 = yes)	—	0.047* (0.020)	0.304** (0.115)
Jury trial × compensatory (log)	—	—	-0.053* (0.023)
Constant	1.275** (0.041)	1.248** (0.042)	1.027** (0.106)
N	712	712	712
Number of states	26	26	26
Number of counties	66	66	66
Prob. > chi-square	0.000	0.000	0.000
2005 Cases; Punitives Requested			
Compensatory damages (log)	-0.037** (0.012)	-0.043** (0.012)	-0.080* (0.031)
Jury trial dummy (1 = yes)	—	0.062* (0.031)	-0.154 (0.167)
Jury trial × compensatory (log)	—	—	0.044 (0.033)
Constant	1.193** (0.065)	1.169** (0.065)	1.353** (0.155)
N	152	152	152
Number of states	21	21	21
Number of counties	49	49	49
Prob. > chi-square	0.002	0.001	0.001

NOTE: The "All Cases" (top) panel includes all cases with punitive damages from the four Civil Justice Survey data sets. Models that exclude cases from the smaller counties added to the 2005 Civil Justice Survey do not yield results materially different from those in the table. The "2005 Cases; Punitives Requested" (bottom) panel includes only cases from the 2005 Civil Justice Survey in which punitive damages were requested (see footnote 24). Variations on all three models that do not limit the sample to cases in which punitive damages were requested and that do not include cases from smaller counties added to the 2005 Civil Justice Survey do not yield results materially different from those in the table. * $p < 0.05$; ** $p < 0.01$. Standard errors in parentheses. Multilevel models are used with random intercepts for locale and state.

SOURCE: Civil Justice Survey of State Courts 1992–2005.

award levels, independent of the compensatory award influence. Figure 6 confirms that the slope of the judge and jury trial lines noticeably differ.

Table 5 presents results from our models of the ratio of punitive and compensatory awards. Using the punitive-compensatory award ratio as a dependent variable allows us to consider whether judges and juries systematically differ in the amount of punitive damages they award per unit of compensatory damages. Although the results in Table 5 generally comport with those in Table 4, important differences emerge. Both tables confirm the importance of compensatory damages' influence on punitive damages. The negative sign on the compensatory damages coefficient in Table 5 suggests that the ratio of punitive to compensatory damages decreases as the level of compensatory damages increases. A lower punitive multiple is thus applied for higher compensatory awards.

Tables 4 and 5 also illustrate the influence of trial mode in their lower panels (2005 cases). In both panels, however, the findings for the punitive-compensatory ratio (Table 5) are less robust than the findings for punitive damages award levels (Table 4). The Appendix reports results from similar though more complex models that include additional explanatory variables.

V. DISCUSSION

Our core descriptive results in Section III persist in Section IV's regression analyses. Compensatory awards systematically influence punitive awards. We also find evidence of differences in how judges and jurors behave in the punitive damages context once we limit the sample to the 2005 cases. Beginning in 2005, juries awarded more punitive damages than judges per unit of compensatory damages. We discuss here factors that might influence the judge-jury difference. These include selection effects, the possible differential influence on judges and juries of the Supreme Court's 2003 *State Farm* decision, the possible difference in judge and jury results for cases involving personal injury, the 2005 data's inclusion of a variable that allows one to limit the sample to cases in which punitive damages were requested, and the 2005 data's inclusion of 110 smaller counties not included in the earlier Civil Justice Surveys.

A. Selection Effect Considerations

Our interpretation of judge-jury differences pivots on the nonrandom stream of cases decided by judges and juries. Table 1 illustrates that larger stakes cases tend to be routed to juries rather than judges for adjudication. This finding is especially true for the subset of 2005 cases (Table 1, Panel B). Moreover, prior studies suggest that one would expect juries rather than judges to see a sample of cases more amenable to punitive damages awards.⁴⁹ Of course, if plaintiffs route cases more amenable to punitive damages awards to juries, our findings may overstate the juries' propensity to award punitive damages and preclude a confident rejection of the hypothesis that judges are more likely than juries to award punitive damages. We simply cannot tell with certainty how judges would have responded to a stream of cases similar to the stream of cases juries decided.

Conventional wisdom about the relative strengths and weaknesses of judges and juries may also influence plaintiff selection of a bench or jury trial. Plaintiffs (or, more precisely, their attorneys) may regard judges as more reliable, and therefore select bench trials in their strongest cases on the legal merits.⁵⁰ Conversely, defendants in cases prone to punitive awards might demand jury trials in an effort to exploit perceived (or real) comparative unpredictability. If so, we should observe judges awarding punitive damages at a rate that exceeds that of juries. However, perceptions that juries are more amenable to

⁴⁹See Eisenberg et al., *Punitive*, supra note 10, at 289.

⁵⁰*Id.*

awarding punitive damages and awarding higher levels of punitive damages are widespread and persist. Indeed, until the 1996 Civil Justice Survey data were gathered and analyzed, the surprisingly robust role of judges in the punitive damages area was underappreciated. Thus, systematically seeking a reliable judge to bolster the prospect of punitive damages strikes us as unlikely. Similar to the empirical uncertainty surrounding how judges might respond to a stream of cases identical to the stream of cases decided by juries, uncertainty about whether plaintiffs and defendants are more likely to seek jury or bench trials for cases with legitimate punitive damages potential cannot be dismissed based on our data. That litigants might act strategically in their decisions about whether to seek a bench or jury trial comports with prior research.⁵¹

B. State Farm's Possible Differential Impact on Judges and Juries

Even if selection effects help explain judge-jury differences, one important question is why such a difference emerges only in the 2005 data. Assuming that the judge-jury difference observed in the 2005 punitive damages data set did not exist in prior data sets, what accounts for its emergence in 2005? One factor distinguishing the 2005 data cohort from the prior three cohorts is that in 2003 the U.S. Supreme Court rendered its *State Farm*⁵² decision. Thus, one alternative (or additional) explanation for the judge-jury difference observed in the 2005 cases involves evolving legal doctrine and its differential impact on judges and jurors. At least one article has attributed substantial changes in blockbuster punitive damages cases to *State Farm*,⁵³ and another reports a *State Farm* effect, though this claim is questionable because the study did not include pre-*State Farm* cases.⁵⁴ One might pause before embracing a case-based explanation for the change we report because similar claims were made about *BMW of North America, Inc. v. Gore*, the Supreme Court case that first invalidated a punitive award on the constitutional ground that the punitive-compensatory ratio was excessive.⁵⁵ Empirical study of cases decided before and after *BMW* provided no evidence that the punitive-compensatory ratio was materially affected by that case.⁵⁶

⁵¹See, e.g., Kevin M. Clermont & Theodore Eisenberg, Trial by Jury or Judge: Transcending Empiricism, 77 Cornell L. Rev. 1124 (1992) (explaining a higher plaintiff win rate in judge trials in products liability and medical malpractice cases partly as a function of the routing of cases between judges and juries).

⁵²*State Farm Mut. Auto Ins. Co. v. Campbell*, 538 U.S. 408 (2003).

⁵³Del Rossi & Viscusi, *supra* note 38.

⁵⁴Lauren R. Goldman & Nikolai G. Levin, *State Farm at Three: Lower Courts' Application of the Ratio Guidepost*, 2 N.Y.U. J.L. & Bus. 509, 509 (2006) (study of 199 post-*State Farm* cases finds that *State Farm* "significantly altered the landscape of punitive damages litigation in a wide range of cases").

⁵⁵517 U.S. 559 (1996).

⁵⁶Theodore Eisenberg & Martin T. Wells, The Predictability of Punitive Damages Awards in Published Opinions, the Impact of *BMW v. Gore* on Punitive Damages Awards, and Forecasting Which Punitive Awards Will Be Reduced, 7 Sup. Ct. Econ. Rev. 59 (1999).

Nevertheless, *State Farm* is important to punitive damages cases as it illustrates the Court's continued sensitivity to proportionality between punitive and compensatory awards.⁵⁷ By expressly noting that "few awards exceeding a single-digit ratio between punitive and compensatory, to a significant degree, will satisfy due process,"⁵⁸ the Court spoke directly to the level of the punitive-compensatory damages ratio. *State Farm* makes clear that in cases with particularly large compensatory awards, the punitive damages award should more closely hew to a one-to-one ratio.⁵⁹

Although the *State Farm* Court assiduously steered clear of setting any bright-line ratio for the punitive-compensatory relation,⁶⁰ many commentators inferred as much. In particular, conventional wisdom understood the *State Farm* decision to mean that any punitive damage award that is more than nine times larger than the underlying compensatory award is presumptively unconstitutional.⁶¹ Moreover, Justice Ginsburg, in dissent, reacted against what she felt was the Court's articulation of a functional "bright-line" ratio rule.⁶² Finally, the Court's growing discomfort with ratios exceeding one was confirmed in its nonconstitutional *Exxon Shipping*⁶³ decision in 2008.

The Supreme Court's concerns about proportionality between punitive and compensatory damages were clearly understood by some lower courts as well. Lower courts adopted a functional understanding of *State Farm* similar to what conventional wisdom implied. Mindful of the Court's admonition of a "single-digit" ratio, lower courts called on to review punitive damages awards have repeatedly reduced punitive awards so that they are consistent with *State Farm*'s perspective on the appropriate relation between punitive and compensatory awards.⁶⁴ Results presented in Table 1 may suggest that judges and juries were mindful of the Court's admonition about the punitive-compensatory ratio as the mean

⁵⁷538 U.S. at 425. To be fair, concerns about proportionality were never the exclusive province of the Supreme Court. For example, tort reform advocates note that the American Bar Association, the American College of Trial Lawyers, and the American Law Institute have all advocated limiting punitive damages to a multiple of compensatory damages. See, e.g., Victor E. Schwartz & Mark A. Behrens, Punitive Damages Reform—State Legislatures Can and Should Meet the Challenge Issued by the Supreme Court in *Haslip*, 42 Am. U.L. Rev. 1365, 1378–79 n82 (1993).

⁵⁸538 U.S. at 425.

⁵⁹*Id.*

⁶⁰*Id.*

⁶¹See, e.g., Mark G. Bonino, The U.S. Supreme Court and Punitive Damages: On the Road to Reform, 70 Def. Couns. J. 432, 432 (2003) (arguing that the Court set a "single-digit multiplier" as the ordinary constitutional limit for the permissible ratio between punitive and compensatory damages).

⁶²538 U.S. at 438 (Ginsburg, J., dissenting) (characterizing the "numerical controls" as "boldly out of order").

⁶³*Exxon Shipping Co. v. Baker*, 128 S. Ct. 2605, 2624 (2008).

⁶⁴See, e.g., *Eden Elec., Ltd. v. Amana Co., L.P.*, 258 F. Supp. 2d 958, 974 (N.D. Iowa 2003) (court observed that after *State Farm* the punitive-compensatory award ratio cannot exceed a 10-to-1 ratio); *Diamond Woodworks, Inc. v. Argonaut Ins. Co.*, 135 Cal. Rptr. 2d 736, 760–61, 762 (Ct. App. 2003) (reducing a punitive damage award and noting that "anything exceeding four-to-one would not comport with due process under *Campbell*").

ratios dropped in the 2005 cohort (Panel B) of punitive damages cases.⁶⁵ However, these results are equivocal because the median ratios reported in Table 1 show an increase, not a decrease, over time.

Could *State Farm* explain the 2005 difference in judge-jury results by having influenced judges and juries differently? Recent punitive damages research suggests an increased importance to trial type (jury vs. bench trial) in explaining when punitive damages will be awarded.⁶⁶ Specifically, non-personal-injury cases tried to juries award punitive damages at a higher rate than cases tried to judges. Moreover, evidence of a jury trial effect when it comes to predicting punitive damage awards is especially pronounced in large-county models.⁶⁷ We find similar results, presented in Figure 6, in our analyses of the 2005 data.

We hypothesize two reasons that might support an asymmetrical influence of *State Farm* on judges and juries. First, in general, court decisions—including many (but not all) Supreme Court decisions—tend to be absorbed and propagated by judges more directly than by lay jurors. Although the *State Farm* decision was described by many judges and academics as “significant” and “important,” the decision—and its ratio nuances—might strike the lay public as less so.

Despite what many lawyers and judges (and law professors) may wish to believe, the empirical research on the “impact” of Supreme Court decisions on citizens is mixed, at best. According to Professor Kritzer, research on the public’s knowledge of the Supreme Court suggests that “the public knows little about the Court or its workings.”⁶⁸ Indeed, Kritzer’s own analysis of the Court’s *Bush v. Gore*⁶⁹ decision—revealing only modest impact on public perceptions and knowledge of the Court—contributes to the conventional wisdom.⁷⁰ Kritzer’s finding of only modest impact on public perceptions and knowledge of the Court incident to its *Bush v. Gore* decision is remarkable given the unprecedented public, media, and political attention to the Court decision that may have functionally decided the 2000 presidential race. That only “modest” impact flowed from this unprecedented Court decision speaks volumes about the public’s attention to the Court’s specific decisions. Moreover, to the extent that *Bush v. Gore* generated only modest impact on the public’s perceptions and knowledge of the Court and its decisions, the likelihood that the public was engaged with the Court’s focus on the punitive-compensatory damages ratio (at issue in

⁶⁵We caution that inferences from summary statistics in this area are risky and have been incorrect in the past. Theodore Eisenberg, Michael Heise & Martin T. Wells, Variability in Punitive Damages: Empirically Assessing *Exxon Shipping Co. v. Baker*, 166 J. Institutional & Theoretical Econ. 5 (2010).

⁶⁶Eisenberg et al., Decision, *supra* note 9.

⁶⁷*Id.*

⁶⁸See Herbert M. Kritzer, The Impact of *Bush v. Gore* on Public Perceptions and Knowledge of the Supreme Court, 85 *Judicature* 32, 34 (2001).

⁶⁹531 U.S. 98 (2000).

⁷⁰Kritzer, *supra* note 68, at 33.

State Farm) is far lower. Consequently, that the *State Farm* decision might have impacted judges more than lay jurors should surprise few.

A second possible reason explaining the *State Farm* decision's uneven impact on judges and lay jurors involves judges' professional incentives. Unlike judges, most jurors are not legally trained and participate in the legal system as jurors, if at all, typically no more than once in their lives. Judges, in contrast, are classic "repeat players" who possess professional and reputation interest in not having their legal decisions reversed. Possessing more incentives to "get the law right," judges are more apt to stay current with important Supreme Court decisions, even cases like *State Farm* that deal with such technical nuance as the mathematical relation between punitive and compensatory awards.

To be sure, the degree to which judges fear reversal remains contested in the literature. Scholars note that in the absence of traditional economic "sticks-and-carrots," models of judicial decision making rely on the power of appellate court reversal as a way to ensure lower court compliance.⁷¹ To the extent that appellate reversal performs "sanctioning" work on lower court judges, it follows that trial court judges would, on balance, prefer their decisions affirmed rather than reversed on appeal. As Professor Kim notes, however, the degree to which judges might fear reversal is a function of the probability that they will, in fact, be reversed. For example, although the Supreme Court reverses a majority of the cases it accepts for review,⁷² the Court reviews only a minute fraction of trial and appellate court activity.⁷³ Similarly, the great majority of state court trials are not appealed to conclusion and those that are appealed are usually affirmed.⁷⁴ Consequently, the actual threat posed by reversal is quite low. Indeed, the few empirical studies that have addressed "fear of reversal" as a motivator for lower court judges' adherence to precedent do not supply support for the thesis. Although Kim concludes that while it is plausible that judges might dislike having their decisions reversed, it is doubtful that fear of reversal plays a significant factor.⁷⁵ Of course, even a mere distaste for reversal might supply the requisite motivation for judges in our punitive damages cases (the 2005 cohort) to be mindful of the Court's guidelines in *State Farm*. Such a motivation distinguishes judges and jurors.

To explore whether *State Farm* might have affected judges and juries differently, we focus on the changes over time in the punitive-compensatory relation. We do so separately for each adjudicator as our discussion above suggests that *State Farm* should have affected

⁷¹See, e.g., Pauline T. Kim, Lower Court Discretion, 82 N.Y.U. L. Rev. 383, 396–98 (2007).

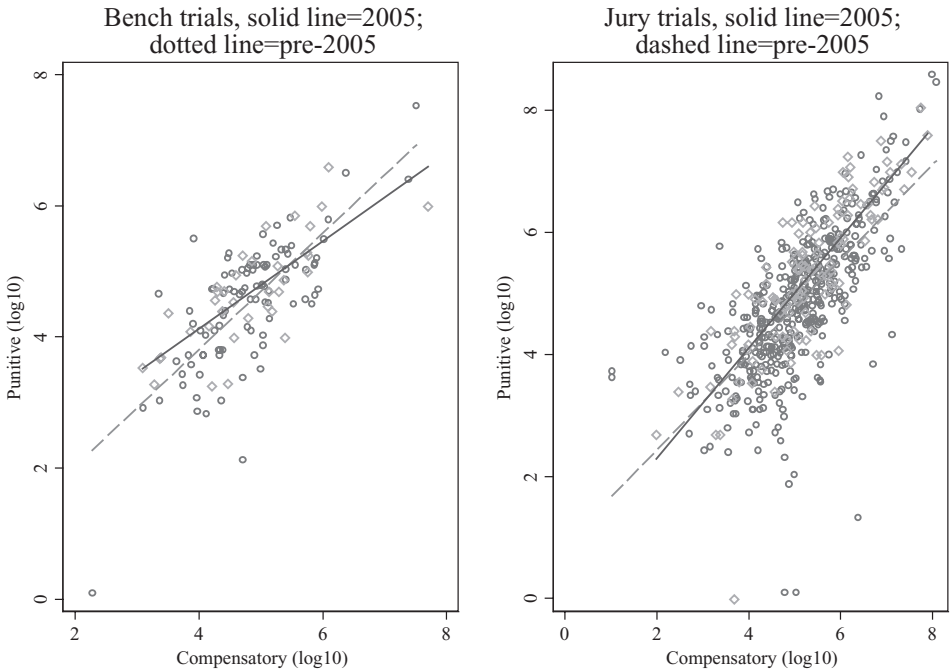
⁷²See Lee Epstein et al., The Supreme Court Compendium: Data, Decisions, and Developments 244, tbls. 3–6 (4th ed. 2007).

⁷³Id. at 74, tbls. 2–6.

⁷⁴Theodore Eisenberg & Michael Heise, Plaintiphobia in State Courts? An Empirical Study of State Trial Courts on Appeal, 38 J. Legal Stud. 121 (2009).

⁷⁵See Kim, *supra* note 71, at 403–04.

Figure 8: Bench and jury punitive-compensatory relation, before and after *State Farm*.



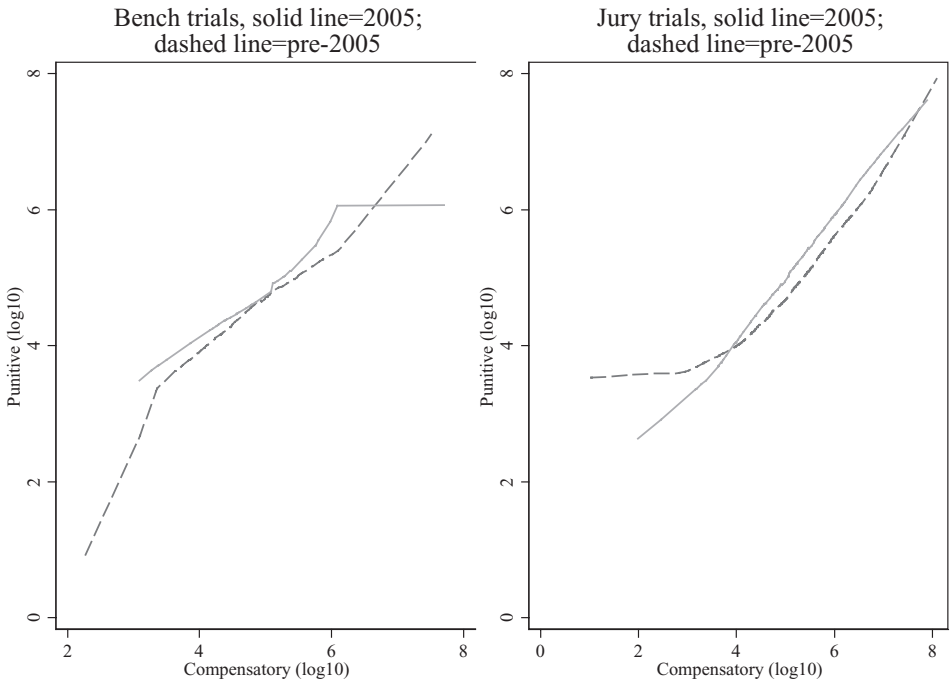
NOTE: The figure shows the punitive-compensatory relation separately for bench trials (left panel) and jury trials (right panel). Within each panel, the data for pre-2005 trials are indicated by a dashed line and by hollow circles, and the data for 2005 trials are indicated by a solid line and by hollow diamonds. The lines are the best-fitting regression lines.

SOURCE: Civil Justice Survey of State Courts 1992–2005.

bench trials more than jury trials. Figure 8’s left panel shows bench trials, with the scatterplots and best-fitting linear regression lines displayed for 2005 trials and pre-2005 trials. The evidence of a *State Farm* effect is mixed at best. For a large range of compensatory awards, up to over \$100,000 (10^5 , shown as “5” on the x-axis), the 2005 trials (the solid line) show a higher punitive award per unit of compensatory damages than the pre-2005 trials. For compensatory awards somewhat below about \$1 million, the two time period lines cross. Regression models confirm the absence of a significant effect of a dummy variable for 2005 trials or an interaction term between this dummy variable and the compensatory award.

Figure 8’s right panel shows jury trials, with the scatterplots and best-fitting linear regression lines again displayed for 2005 trials and pre-2005 trials. The evidence of a *State Farm* effect is stronger. For most of the range of compensatory awards, starting at less than \$10,000 (10^4 , shown as “4” on the x-axis), the 2005 trials (the solid line) show a higher punitive award per unit of compensatory damages than the pre-2005 trials. Regression models, both ordinary least squares models and multilevel models with locale and state as levels, confirm a highly significant effect ($p = 0.001$) of a dummy variable for 2005 trials.

Figure 9: Bench and jury punitive-compensatory relation, lowess smoothed, before and after *State Farm*.



NOTE: The figure shows the lowess smoothed punitive-compensatory relation separately for bench trials (left panel) and jury trials (right panel). Within each panel, the data for pre-2005 trials are indicated by a dashed line and the data for 2005 trials are indicated by a solid line.

SOURCE: Civil Justice Survey of State Courts 1992–2005.

To further explore this preliminary possible *State Farm* effect, we employ lowess (locally weighted scatterplot smoothing) models that avoid any assumed global functional form for the relation between punitive and compensatory damages. Figure 9 reports the results, with the left panel again showing bench trial results and the right panel again showing jury trial results. For both adjudicator types, for most of the range of compensatory awards, the 2005 trials (the solid lines) tend to show higher punitive awards per unit of compensatory damages than the pre-2005 trials. This result, consistent with the logged ratios in Table 1, is the opposite of the expected *State Farm* effect.

Combining the judge-jury results represented in Figures 8 and 9 suggests that the punitive-compensatory relation for juries changed more in the 2005 data from prior years than did the relation for judges. This is the opposite of what theorizing about *State Farm*'s possible differential impact on judges and juries would forecast. The Civil Justice Survey data thus provide no evidence that *State Farm* is the likely explanation for the shifting relation between judges and juries that we report in Tables 4 and 5.

C. Possible Judge-Jury Differences in Personal Injury Cases

Prior research has suggested a judge-jury difference in the decision to award punitive damages based on whether cases involved personal injury. Judges award punitive damages at a higher rate in personal injury cases and juries award them at a higher rate in nonpersonal-injury cases.⁷⁶ If a similar difference exists with respect to the relation between punitive and compensatory damages, a change in the makeup of cases may explain the 2005 judge-jury difference. A shift in the proportion of personal injury and non-personal-injury cases flowing to juries and judges could lead to newly observed judge-jury difference in 2005. Such a difference would not be a consequence of a change in adjudicator behavior, but of the makeup of the flow of cases to the two kinds of adjudicators.

To explore this possibility, we reran all the models reported in Tables 4 and 5 with the addition of a personal injury dummy variable equal to 1 for cases in which bodily injury was claimed. The variable was not statistically significant in any of the models. In addition, the coefficients on the variables previously included in the models did not materially change. We thus found no evidence that personal injury cases, or the changing mix of cases flowing to juries and judges, explains the 2005 judge-jury difference.

D. The Effect of the 2005 Data Including a Variable Identifying Cases in Which Punitive Damages Were Sought

Another possibility is that the judge-jury difference that emerged in 2005 is attributable to the 2005 Civil Justice Survey's inclusion of a variable signaling whether punitive damages were requested. A judge-jury difference may lurk in the prior data sets but can be detected only with a punitives-requested variable such as that included in 2005. Obviously, because such a variable was not added until the 2005 data set, we are precluded from fully investigating this possibility.

However, we performed alternative analyses of the 2005 data in which the 2005 data were treated consistently with the earlier Civil Justice Surveys. We did so by not limiting the 2005 punitive damages cases to those in which punitive damages were requested. As reported above, a small subset of cases yielded punitive awards in cases in which the files inspected did not report evidence of punitives being requested.⁷⁷ We believe these cases may have involved statutory doubling or trebling of damages that were interpreted as punitive in nature. Those alternative analyses did not yield results materially different from those reported in Tables 4 and 5,⁷⁸ so we do not believe that the 2005 judge-jury effect is attributable to the availability of the new punitives-requested variable in 2005.

⁷⁶E.g., Eisenberg et al., *Decision*, *supra* note 9.

⁷⁷See note 24 *supra*.

⁷⁸See text note accompanying Tables 4 and 5 *supra*.

E. The Effect of the 2005 Data Including 110 Smaller Counties Not in the Prior Civil Justice Surveys

Finally, the 2005 judge-jury difference may be attributable to the 2005 Civil Justice Survey's inclusion of 110 smaller counties not included in earlier Civil Justice Surveys. In another article, we show that the smaller counties noticeably differed from the larger, original Civil Justice Survey counties with respect to whether punitive damages were awarded.⁷⁹ So heterogenous results across large and small counties may explain the new judge-jury difference.

To assess this possibility, we performed alternative analyses of the 2005 data in which the 2005 data were limited to the large counties in the prior Civil Justice Surveys. Those alternative analyses did not yield results materially different from those reported in Tables 4 and 5,⁸⁰ so we have no evidence that the 2005 judge-jury effect is attributable to the additional counties included for the first time in the 2005 data.

VI. CONCLUSION

The addition of the 2005 Civil Justice Survey data cohort to its three prior cohorts provides the most systematic and comprehensive view to date of punitive damages in state courts. Findings provide further support for the underlying relation between compensatory and punitive damages and uncover additional wrinkles about the punitive-compensatory relation. Moreover, results from the 2005 data point to a jury-trial effect. Absent other evidence of the source of new judge-jury differences, we attribute the emerging difference to selection effects resulting from litigants' strategic decisions about whether to pursue bench or jury trials. A leading possible explanation for the new difference, the expected asymmetrical influence of the Supreme Court's 2003 *State Farm* decision on judges and lay jurors, finds no support in our analysis. Nor do explanations based on previously reported judge-jury differences in personal injury cases involving punitive damages or on the different makeup of the 2005 sample find support. The findings reveal a more nuanced and complex picture of judicial and juror behavior in the punitive damages context than that previously reported.

⁷⁹Eisenberg et al., Decision, *supra* note 9.

⁸⁰See text note accompanying Tables 4 and 5 *supra*.

APPENDIX

Table A1: Full Multilevel Regression Models of Punitive Damages (Log) Levels (All Cases)

<i>Independent Variables</i>	<i>A</i>	<i>B</i>	<i>C</i>
Compensatory damages (log)	0.808** (0.031)	0.802** (0.031)	0.830** (0.081)
Jury trial dummy (1 = yes)	—	0.132 (0.077)	0.287 (0.429)
Jury trial × log of compensatory	—	—	-0.032 (0.088)
Selected Case Types			
Auto	0.169 (0.785)	0.139 (0.784)	0.137 (0.784)
Premises liability	-0.259 (0.185)	-0.236 (0.186)	-0.243 (0.187)
Product liability (incl. asbestos)	0.155 (0.315)	0.145 (0.314)	0.146 (0.315)
Intentional tort	-0.200 (0.111)	-0.187 (0.111)	-0.189 (0.111)
Medical and prof. malpractice	-0.296 (0.153)	-0.300 (0.153)	-0.298 (0.153)
Fraud	-0.097 (0.090)	-0.080 (0.091)	-0.083 (0.091)
Employment discrim. or dispute	-0.066 (0.111)	-0.077 (0.112)	-0.075 (0.112)
Rental/lease agreement	0.032 (0.209)	0.019 (0.209)	0.021 (0.209)
Selected Case Characteristics			
Bodily injury (nonauto)	0.628 (0.795)	0.603 (0.794)	0.607 (0.795)
No bodily injury	0.457 (0.789)	0.445 (0.787)	0.447 (0.788)
Constant	0.371 (0.805)	0.307 (0.804)	0.173 (0.882)
<i>N</i>	708	708	708
Number of states	25	25	25
Number of counties	64	64	64
Prob. > chi-square	0.000	0.000	0.000

NOTE: * $p < 0.05$; ** $p < 0.01$. Standard errors in parentheses. Multilevel models are used with random intercepts for locale and state.

SOURCE: Civil Justice Survey of State Courts 1992–2005.

Table A2: Full Multilevel Regression Models of Punitive Damages (Log) Levels (2005 Cases, Punitive Damages Requested)

<i>Independent Variables</i>	<i>A</i>	<i>B</i>	<i>C</i>
Compensatory damages (log)	0.853** (0.060)	0.826** (0.060)	0.687** (0.060)
Jury trial dummy (1 = yes)	—	0.333* (0.142)	-0.472 (0.829)
Jury trial × log of compensatory	—	—	0.162 (0.165)
Selected Case Types			
Auto	-0.007 (0.669)	-0.142 (0.660)	-0.136 (0.660)
Premises liability	-0.156 (0.534)	-0.101 (0.525)	-0.026 (0.531)
Product liability (incl. asbestos)	-0.098 (0.709)	-0.198 (0.697)	-0.228 (0.698)
Intentional tort	-0.179 (0.253)	-0.202 (0.249)	-0.171 (0.251)
Medical and prof. malpractice	0.399 (0.368)	0.315 (0.364)	0.295 (0.364)
Fraud	-0.032 (0.156)	-0.070 (0.155)	-0.083 (0.155)
Employment discrim. or dispute	-0.031 (0.199)	-0.094 (0.197)	-0.109 (0.198)
Rental/lease agreement	0.784 (0.357)	0.802 (0.351)	0.730 (0.358)
Selected Case Characteristics			
Bodily injury (nonauto)	0.106 (0.736)	0.040 (0.723)	-0.007 (0.725)
No bodily injury	0.174 (0.699)	0.098 (0.688)	0.053 (0.689)
Constant	0.576 (0.779)	0.524 (0.766)	1.249 (1.062)
<i>N</i>	149	149	149
Number of states	20	20	20
Number of counties	47	47	47
Prob. > chi-square	0.000	0.000	0.000

NOTE: * $p < 0.05$; ** $p < 0.01$. Standard errors in parentheses. Multilevel models are used with random intercepts for locale and state.

SOURCE: Civil Justice Survey of State Courts 2005.

Table A3: Full Multilevel Regression Models of Punitive-Compensatory Ratios (All Cases)

<i>Independent Variables</i>	<i>A</i>	<i>B</i>	<i>C</i>
Compensatory damages (log)	-0.061** (0.008)	-0.063** (0.008)	-0.010 (0.022)
Jury trial dummy (1 = yes)	—	0.053* (0.021)	0.352** (0.021)
Jury trial × log of compensatory	—	—	-0.062** (0.024)
Selected Case Types			
Auto	0.017 (0.215)	0.006 (0.214)	0.004 (0.213)
Premises liability	-0.013 (0.051)	-0.003 (0.051)	-0.017 (0.051)
Product liability (incl. asbestos)	0.151 (0.086)	0.146 (0.086)	0.148 (0.086)
Intentional tort	0.013 (0.030)	0.018 (0.030)	0.014 (0.030)
Medical and prof. malpractice	-0.013 (0.042)	-0.015 (0.042)	-0.012 (0.042)
Fraud	-0.024 (0.025)	-0.017 (0.025)	-0.022 (0.025)
Employment discrim. or dispute	-0.015 (0.031)	-0.019 (0.030)	-0.015 (0.030)
Rental/lease agreement	-0.011 (0.057)	-0.016 (0.057)	-0.013 (0.057)
Selected Case Characteristics			
Bodily injury (nonauto)	0.071 (0.218)	0.063 (0.217)	0.070 (0.216)
No bodily injury	0.088 (0.216)	0.085 (0.215)	0.088 (0.214)
Constant	1.206** (0.220)	1.178** (0.220)	0.921** (0.240)
<i>N</i>	708	708	708
Number of states	25	25	25
Number of counties	64	64	64
Prob. > chi-square	0.000	0.000	0.000

NOTE: * $p < 0.05$; ** $p < 0.01$. Standard errors in parentheses. Multilevel models are used with random intercepts for locale and state.

SOURCE: Civil Justice Survey of State Courts 1992–2005.

Table A4: Full Multilevel Regression Models of Punitive-Compensatory Ratios (2005 Cases, Punitive Damages Requested)

<i>Independent Variables</i>	<i>A</i>	<i>B</i>	<i>C</i>
Compensatory damages (log)	-0.035** (0.013)	-0.040** (0.013)	-0.050 (0.034)
Jury trial dummy (1 = yes)	—	0.066* (0.032)	0.013 (0.184)
Jury trial × log of compensatory	—	—	0.011 (0.037)
Selected Case Types			
Auto	-0.007 (0.147)	-0.034 (0.146)	-0.034 (0.146)
Premises liability	-0.034 (0.118)	-0.023 (0.116)	-0.017 (0.118)
Product liability (incl. asbestos)	-0.002 (0.156)	-0.022 (0.154)	-0.024 (0.155)
Intentional tort	-0.041 (0.056)	-0.046 (0.055)	-0.044 (0.056)
Medical and prof. malpractice	0.084 (0.081)	0.067 (0.081)	0.066 (0.081)
Fraud	-0.004 (0.034)	-0.011 (0.034)	-0.012 (0.034)
Employment discrim. or dispute	-0.007 (0.044)	-0.020 (0.044)	-0.021 (0.044)
Rental/lease agreement	0.193 (0.079)	0.196 (0.078)	0.191 (0.080)
Selected Case Characteristics			
Bodily injury (nonauto)	0.006 (0.162)	-0.007 (0.160)	-0.010 (0.161)
No bodily injury	0.016 (0.154)	0.001 (0.152)	0.002 (0.153)
Constant	1.171** (0.172)	1.161** (0.170)	1.209** (0.236)
<i>N</i>	149	149	149
Number of states	20	20	20
Number of counties	47	47	47
Prob. > chi-square	0.039	0.013	0.021

NOTE: * $p < 0.05$; ** $p < 0.01$. Standard errors in parentheses. Multilevel models are used with random intercepts for locale and state.

SOURCE: Civil Justice Survey of State Courts 2005.