

JURIES, JUDGES, AND PUNITIVE DAMAGES: EMPIRICAL ANALYSES USING THE CIVIL JUSTICE SURVEY OF STATE COURTS 1992, 1996, AND 2001 DATA

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Abstract

We analyze thousands of trials from a substantial fraction of the nation's most populous counties. Evidence across ten years and three major datasets suggests that: (1) juries and judges award punitive damages in approximately the same ratio to compensatory damages, (2) the level of punitive damages awards has not increased, and (3) juries' and judges' tendencies to award punitive damages differ in bodily injury and no-bodily-injury cases. Jury trials are associated with a greater rate of punitive damages awards in financial injury cases. Judge trials are associated with a greater rate of punitive damages awards in bodily injury cases.

I. Introduction

Concerns about punitive damages—especially juries' role—persist and continue to inform legal reform debates. Recent Supreme Court opinions reflect judicial discomfort with significant punitive damage awards.¹ Some commentators suggest that greater reliance on judges and a corresponding diminution in reliance on juries to award and set punitive damage levels will improve civil justice.² Other commentators, however, either regard the reliance on the jury as a strength of the American justice system or question calls for reducing jurors' power absent evidence of judges' comparative superiority.³ The growing empirical dimension of these debates advances

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¹ See, e.g., *State Farm Mutual Automobile Insurance Co. v. Campbell*, 538 U.S. 408, 417 (2003) (noting that punitive damages can pose an “acute danger of arbitrary deprivation of property”), quoting *Honda Motor Co. v. Oberg*, 512 U.S. 415, 432 (1994); *BMW of N. Am., Inc. v. Gore*, 517 U.S. 559, 585-86 (1996) (finding that punitive damages were constitutionally excessive).

² Joni Hersch & W. Kip Viscusi, *Punitive Damages: How Judges and Juries Perform*, 33 *J. Legal Stud.* 1, 2 (2004) (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).

³ E.g., Theodore Eisenberg et al., *Juries, Judges, and Punitive Damages: An Empirical Study*, 87 *Cornell L. Rev.* 743 (2002) (finding no substantial evidence suggesting that jurors and judges differ in the rate of

our understanding about axioms critical to reform suggestions. 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.⁴

This study joins the scholarly and policy debates about judge and jury differences in relation to punitive damages by analyzing a new data set. A newly-released data cohort, combined with prior cohorts, permit unprecedented analyses of judge and jury punitive damages behavior over time. Oriented around potential judge-jury differences, our study explores two broad issues: the relation between compensatory and punitive damages and the rates at which judges and juries award punitive damages. Our findings reveal that judges and juries perform similarly in some punitive damages tasks and differently in others. Some of these findings comport with our previous findings; other findings surprise and provide more texture to analytical comparisons between judges and juries.

With respect to the relation between the size of punitive and compensatory awards, one aspect critical to recent Supreme Court decisions,⁵ we find no substantial evidence that judges and juries behave differently in any meaningful and systematic manner. Indeed, we find no serious disagreement in the literature on this. Conditional on the existence of a punitive award, virtually all data sets reveal a strikingly strong association between the size of the punitive award and the size of the compensatory award. With respect to the decision to award punitive damages, more refined analyses of case types reveal that judges are more likely to award punitive damages to successful plaintiffs in cases involving bodily injury (other than motor vehicle case). Conversely, juries are more likely to award punitive damages in cases where successful plaintiffs did not suffer bodily injury.

Caution prompts us to cast our findings in the negative. The stream of cases that wind up in front of judges and juries differs and these differences preclude bolder and more robust assertions about differences between judges and juries behavior. Simply put, because the data do not permit judge-jury comparisons with identical case streams (or a more perfectly controlled research design), we cannot be certain how judges and jurors would have behaved had they decided identical cases. Even our negative findings make clear, however, that assessments of judge-jury differences in the world of punitive damages require continued careful analyses and benefit greatly from more and better data. Data reveal a more nuanced and complex picture of judge and jury behavior than does conventional wisdom which typically rests precariously upon unstudied assumptions and axioms.

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).

⁴ See, e.g., Hersch & Viscusi, *supra* note 2, at 30 (identifying sources of disagreement with the Eisenberg et al. study).

⁵ See, e.g., *State Farm Mutual Automobile Insurance Co. v. Campbell*, 538 U.S. 408, 425 (2003) (“[I]n practice, few awards exceeding a single-digit ratio between punitive and compensatory damages, to a significant degree, will satisfy due process.”).

The issues we address in this Article transcend the standard debates about optimizing rules of civil adjudication. Public debates about tort reform endure and frequently focus on punitive damages and their role in the torts “crisis” (real or perceived).⁶ Presidential candidates’ promises to do something can involve changes in punitive damages.⁷ Parallel debates continue to simmer within the legal academy. Articles focusing on punitive damages reform increasingly appear in leading student- and faculty-edited law journals.⁸

Part II describes the data, which comprise trial outcomes punitive damages decisions from three consistent data sets spanning 1991 through 2001. Part III presents descriptive results with particular emphasis on the relation between compensatory and punitive damages. We find that a case’s compensatory award persists as a strong predictor of the case’s punitive award. This relation holds over time and applies to juries and judges. This part also explores possible case types where differences emerge between how juries and judges award punitive damages. Part IV reports regression results that confirm the core results of part III. Part V considers the influence of selection effects on our results. Part VI concludes.

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 disposed of by trial in fiscal year 1991-1992 and then calendar years 1996 and 2001. The three separate datasets cover state courts of general jurisdiction in a random sample of 46 of the 75 most populous counties in the United States.⁹ The 75 counties sampled include

⁶ E.g., authorities cited in note 1 *supra* and note 8 *infra*.

⁷ E.g., <http://www.cnn.com/2003/ALLPOLITICS/01/16/bush.malpractice/> (last visited Jan. 30, 2005).

⁸ Examples of leading student-edited journals that have recently published punitive damages articles include the University of Chicago Law Review (Mogin, *supra* note 1); Columbia Law Review (Schkade et al., *supra* note 1); Cornell Law Review (Eisenberg et al., *supra* note 2); Harvard Law Review (A. Mitchell Polinsky & Steven Shavell, Punitive Damages: An Economic Analysis, 111 Harv. L. Rev. 869 (1988)); and Yale Law Journal (Catherine M. Sharkey, Punitive Damages as Societal Damages, 113 Yale L.J. 347 (2003)). Examples of leading faculty-edited journal entries include American Law & Economic Review (W. Kip Viscusi, How Do Judges Think About Risk?, 1 Amer. L. & Econ. Rev. 26 (1999)); Journal of Legal Studies (Hersch & Viscusi, *supra* note 2; Theodore Eisenberg et al., The Predictability of Punitive Damages, 26 J. Legal Stud. 623 (1997)); Journal of Law & Economics (Jonathan M. Karpoff & John R. Lott, Jr., On the Determinants and Importance of Punitive Damage Awards, 42 J. Law & Econ. 527 (1999)); Journal of Risk & Uncertainty (Daniel Kahneman et al., Shared Outrage and Erratic Awards: The Psychology of Punitive Damages, 16 J. Risk & Uncertainty 49 (1998)); Law and Human Behavior (Jennifer Robbenolt, Decision Making: The Decisions of Citizens and Trial Court Judges, 26 Law & Hum. Behav. 315 (2002)); and Supreme Court Economic Review (Theodore 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)).

⁹ The 2001 data included 46 counties; the 1991-92 and 1996 data included 45. One county included in the 1991-1992 and 1996 study, Norfolk, Massachusetts, fell out the nation’s 75 most populous in the 2000 census and was replaced by Mecklenburg County, North Carolina, and El Paso County, Texas. Two Maryland counties declined to participate in the 1991-92 study, and were replaced with Fairfax County for all three iterations of the Civil Justice Survey.

approximately 33 percent of the 1990 U.S. population; the actual 45 counties contributing data account for approximately 20 percent of the population.¹⁰ The initial dataset (1991-92) includes only jury trials. The two subsequent datasets, 1996 and 2001, include jury and bench trials, thereby allowing direct comparisons between judge and jury trials. The three datasets include all completed trials in all three years in most of the counties. Sampling in the 1992 and 1996 data sets is described in earlier publications. Sampling was used in three counties in the 2001 data set, Cook County, Illinois, Philadelphia County, and Bergen County, New Jersey.

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.¹¹

III. Civil Trials and Punitive Damages¹²

Civil complaints that culminate in a trial on the merits remain comparatively rare events.¹³ Within this small subset of trials that reach a final verdict, those that involve either judges or juries awarding punitive damages are similarly infrequent. Table 1, which presents descriptive information for the sample of 11,640 cases in which the plaintiff prevailed, illustrates that punitive damages were awarded in less than five percent of the cases (N=551). Thus, less than one percent of civil actions formally commenced resulted in the awarding of punitive damages. Consequently, studies of punitive damages—such as ours—are necessarily studies of unusual events.

¹⁰ For a summary of the data and methodology, see Bureau of Justice Statistics Bulletin: Civil Justice Survey of State Courts, 2001: Civil Trial Cases and Verdicts in Large Counties, 2001 (April 2004) [hereinafter "BJS, 2001"]; Bureau of Justice Statistics Bulletin: Civil Justice Survey of State Courts, 1996: Civil Trial Cases and Verdicts in Large Counties (1996)[hereinafter "BJS, 1996"]; Bureau of Justice Statistics Bulletin: Civil Justice Survey of State Courts, 1992: Tort Cases in Large Counties 6 (1995)[hereinafter "BJS, 1992"]. See also Hersch & Viscusi, *supra* note 2, at 10-13 (describing 1996 data); Eisenberg et al, *supra* note 3 (describing 1996 data); Michael Heise, *Justice Delayed?: An Empirical Analysis of Civil Case Disposition Time*, 50 Case Western Res. Univ. L. Rev. 813, 822-27 (2000) (describing 1992 data).

¹¹ Eisenberg et al., *Predictability*, *supra* note 8, at 641, n.53 (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); Erik K. Moller et al., *Punitive Damages in Financial Injury Jury Verdicts*, 28 J. Legal Studies 283, 335 (1999) (reporting reasonable levels of confidence in the jury verdict reporters but acknowledging some potential bias). See also Thomas Cohen & Paula L. Hannaford-Agor, XXX, (forthcoming)(finding that on average jury verdict reporter datasets 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).

¹² Unless otherwise noted, the descriptive tables use raw, unweighted data.

¹³ See 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 ten states from 1992-2002).

TABLE 1: Characteristics of Damages Awards

	Jury	Bench	Combined
Total Number of Trials			
w/ Plaintiff win	9,040	2,570	11,610
Number of Trials w/ PD	449	102	551
Percent of Trials w/ PD	4.96	3.95	4.75
<i>PD characteristics:</i>			
Mean (\$)	2,892,445	389,455	2,423,425
Std. Dev.	2.37 (e+07)	2,689,443	2.14 (e+07)
Mean log10(PD)	4.74	4.45	4.69
<i>CD characteristics (if >0):</i>			
Mean (\$)	1,422,850	609,935	1,270,523
Std. Dev.	7,690,783	3,263,665	7,079,885
Mean log10(CD)	4.98	4.74	4.94
<i>Ratio of PD:CD (if CD>0)</i>			
Mean	4.90	1.53	4.27
Std. Dev.	33.32	4.41	30.11
Median	.61	.60	.61
<i>Percent of Cases w/ PD:</i>			
\$1--9,999	23.52	24.75	23.75
\$10,000--99,999	34.7	45.54	36.73
\$100,000--299,999	16.21	21.78	17.25
\$300,000--999,999	13.24	4.95	11.69
\$1,000,000 or more	12.33	2.97	10.58

NOTES: PD=punitive damages; CD=compensatory damages.
SOURCE: Civil Justice Survey of State Courts 1992-2001.

A. Punitive Damages Award Patterns

Although judges and juries awarded punitive damages at roughly similar rates (approximately 4% and 5%, respectively), jury trials dominate our sample of punitive damages cases. Among the 551 cases in which the plaintiff prevailed and punitive damages were awarded juries decided 81.5 percent of the cases, with judges deciding the remaining 18.5 percent. The dominance of jury trials in our punitive damages cases dataset largely reflects civil litigants' general preference for jury trials (77.9% of the civil trials where plaintiffs won were decided by juries). A limitation in the dataset also exerts upward pressure on the percentage of punitive damage awards from jury trials. Although the final two years of data cohorts (1996 and 2001) contain bench and jury trials, the initial data cohort (1991-92) contains punitive damages (177) from only jury trials.

Consistent with conventional wisdom, Table 1 reveals that jury trials involved higher punitive and compensatory award levels than judge trials.¹⁴ Owing to substantial non-random case routing, however, juries and judges saw different streams of cases. For example, plaintiffs demand higher damages in jury trials,¹⁵ and, as Table 2 suggests, jury

¹⁴ Compensatory damages were awarded in almost all cases in which the plaintiff prevailed and punitive damages were awarded. In our dataset of 551 cases in which the plaintiff prevailed and punitive damages were awarded there are 12 instances where the compensatory award was zero.

¹⁵ See, e.g., Kevin M. Clermont & Theodore Eisenberg, Trial By Jury or Judge: Transcending Empiricism, 77 Cornell L. Rev. 1124, 1177 app. B. (1992); Theodore Eisenberg & Kevin M. Clermont, Trial By Judge or Jury: Which is Speedier?, 79 Judicature 176, 180 (1996).

trials involve more tort cases while judges see more contract cases.¹⁶ These differences in the stream of cases juries and judges see likely contributes to damages awards' variation in jury and bench trials.

Much of the angst over punitive damages concerns the largest awards (or “blockbuster awards”¹⁷) that involve hundreds of millions or even billions of dollars. At the high end of the punitive damage spectrum, and as Hersch and Viscusi note,¹⁸ jury trials tended to dominate. As Table 1 illustrates, however, most punitive awards were small. More than twenty-three percent of the punitive awards were for less than \$10,000; sixty percent were for less than \$100,000. On the other end of the distribution, less than eleven percent of the cases involved punitive awards in excess of one million dollars.

The different case streams that judges and juries saw help explain differences in various case characteristics for bench and jury trials. Table 2 illustrates the salience of party status. Although judges saw more cases involving individuals suing other individuals, juries saw more cases involving individuals suing hospitals, corporations, or governments (labeled as “non-indiv”). Notably, cases with individuals as plaintiffs account for 88.5% of the cases where punitive damages were awarded. Even greater variation exists across case types. Intentional tort, fraud, employment, and motor vehicle cases account for more than 55% of the pool of punitive damages cases. At the more general case category level tort and contract cases predominate, though contract cases with punitive awards likely have a tort component since punitive damages generally are not available for contract claims.

Cases involving bodily injury occupy a special place in the popular lore surrounding the American tort system.¹⁹ Due to the sizable presence of motor vehicle torts in general as well as our punitive damages dataset in particular,²⁰ we separate motor vehicle and non-motor vehicle personal injury cases. Consistent with the general overall distribution of jury and bench trials that awarded punitive damages,²¹ Table 2 shows that 82% of the non-motor vehicle-related injury cases and 78% of the non-injury cases went to a jury. Less consistent with the overall case trial mode distribution is that 95% of motor vehicle injury cases went to a jury.

¹⁶ See, e.g., Clermont & Eisenberg, *supra* note 15, at 1141 tbl.4; Eisenberg et al., *Litigation Outcomes in State and Federal Courts: A Statistical Portrait*, 19 *Seattle U. L. Rev.* 433, 443 tbl.4.

¹⁷ Hersch & Viscusi, *supra* note 2, at 4-10 tbl.1.

¹⁸ *Id.* at 13-15 tbl.2 & fig.2 (reporting 1996 data).

¹⁹ See, e.g., Dan B. Dobbs, *The Law of Torts* 9 (2000) (“Many people think of personal injury cases when they think of tort law.”). Also, as shown below, cases involving bodily injury correspond with markedly different propensities to award punitive damages by judges and juries. See Part III.B.

²⁰ Of the 199 cases that involved bodily injuries, 60 (30.2%) involved motor vehicle accidents.

²¹ As Table 1 shows, of the 551 cases that awarded punitive damages, 81.5% were jury and 18.5% were bench trials.

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

	<i>Jury</i>	<i>Bench</i>	<i>Proportion of total cases (%)</i>
<i>Party status:</i> ²²			
Indiv v. indiv	135	47	35.0
Indiv v. non-indiv	246	32	53.5
Non-indiv v. non-indiv	49	11	11.5
<i>Case category:</i>			
Torts	233	44	50.3
Contract	208	56	47.9
Property	8	2	1.8
<i>Selected case types:</i>			
Motor vehicle accident	57	3	11.0
Premises liability	18	7	4.6
Product liability (incl. asbestos)	8	1	1.6
Intentional tort	70	25	17.3
Medical and prof. malpractice	26	3	5.3
Fraud	51	30	14.8
Employment discrim. or dispute	65	5	12.8
Rental/lease agreement	8	1	1.6
<i>Selected case characteristics:</i>			
Bodily injury (motor vehicle)	57	3	11.2
Bodily injury (non-motor vehicle)	114	25	25.9
No bodily injury	266	72	62.9
<i>States:</i>			
Arizona	25	5	5.4
California	121	38	28.9
Connecticut	3	5	1.5
Florida	20	0	3.6
Georgia	24	0	4.4
Hawaii	5	1	1.1
Illinois	14	3	3.1
Indiana	3	1	0.7
Kentucky	18	2	3.6
Massachusetts	8	1	1.6
Michigan	2	0	0.4
Minnesota	6	1	1.3
Missouri	11	6	3.1
North Carolina	3	0	0.5
New Jersey	17	7	4.4
New York	10	1	2.0
Ohio	27	5	5.8
Pennsylvania	14	1	2.7
Texas	93	18	20.2
Virginia	18	3	3.8
Washington	3	1	0.7
Wisconsin	4	3	1.3

NOTE: Total cases N=551.

SOURCE: Civil Justice Survey of State Courts 1992-2001.

²² Every case, regardless of the number of potentially plaintiff or defendant types, is assigned one (of four) plaintiff or defendant type (individual, hospital, corporation, or government). For those cases that involve multiple plaintiff or defendant types, cases are assigned based on a hierarchy. BUREAU OF JUSTICE STATISTICS, U.S. DEP'T OF JUSTICE, BULLETIN NO. NCJ-202803, CIVIL TRIAL CASES AND VERDICTS IN LARGE COUNTIES, 2001, at 3 (April 2004) (tbl. 3 n.1).

1. The Relation Between Compensatory and Punitive Damages

One of our principal lines of inquiry involves the relation between compensatory and punitive damages. Figures 1 and 2 permit visual inspections of both trial modes for the three data cohorts.²³ The scatterplots reveal a consistent and shared pattern in the ratio of logged punitive and compensatory damage awards for judge and jury trials. Equally important is that this general pattern persists over time.

Figure 1 is a scatterplot of punitive (log) and compensatory damages (log) with jury and bench trials from all three datasets separately marked by “J” and “B,” respectively. We use logarithmic scales because, as is often the case with award amounts, linear scales fail to reflect the relation between the variables.²⁴ Figure 1 also includes the best-fitting regression lines for bench and jury trials.²⁵ Notably, the two regression lines, which best describe the relation between the compensatory and punitive damages award levels, are similar in terms of their slope and intercept. The overall patterns displayed in Figure 1 are also consistent with those in previous studies.²⁶ Moreover, the greater visual dispersion around the jury trial regression line in Figure 1 is confirmed by the lower r-squared value for a regression of compensatory damages (log) on punitive damages (log).²⁷

²³ Recall in our description of our data the anomaly that in 1992 data were gathered only from jury trials. The two subsequent data cohorts include data on both judge and jury trials. See *infra* Sub-Part II.

²⁴ Also, the raw punitive and compensatory award damages do not distribute normally and, therefore, frustrate critical regression assumptions. For a discussion of the need for logarithmic scales in punitive damage awards, see, for example, Hersch & Viscusi, *supra* note 2, at 4, 16 (noting that log transformations may reduce the spread of punitive damages); Eisenberg et al., *Juries, Judges*, *supra* note 3, at 753 n.37.

²⁵ Simple regression models of punitive damages (log) as the dependent variable and compensatory damages (log) as the explanatory variable, run separately for judge and jury trials and using weighted data, yield the following results:

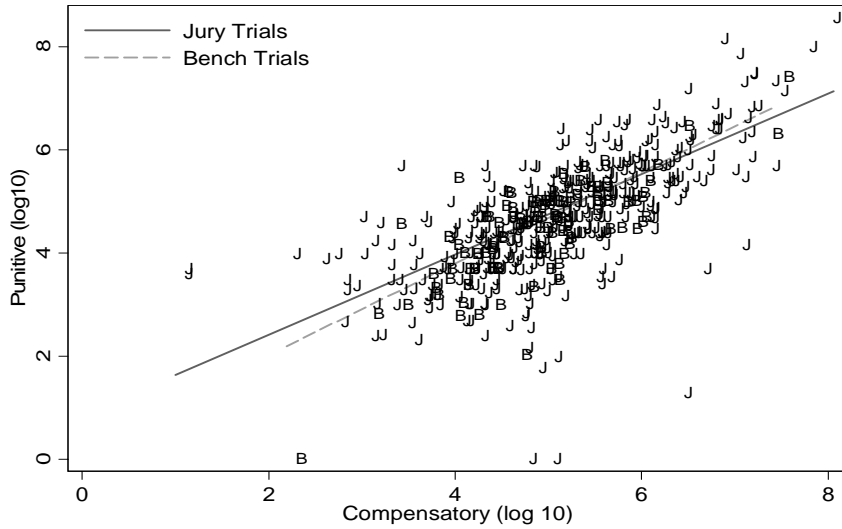
<i>Trial Mode:</i>	Compensatory (log) coefficient	SE	Intercept	r-squared	N
Bench	0.876**	0.105	0.298	.559	101
Jury	0.806**	0.050	0.746**	.500	438

** p<.01

²⁶ See, e.g., Eisenberg et al., *Predictability*, *supra* note 8, at 638 fig.3 (1991-92 data); Eisenberg et al., *Juries, Judges*, *supra* note 3, at 754 fig.1 (1996 data); Moller, *supra* note 11, at 300 n.52.

²⁷ See *supra* note 25.

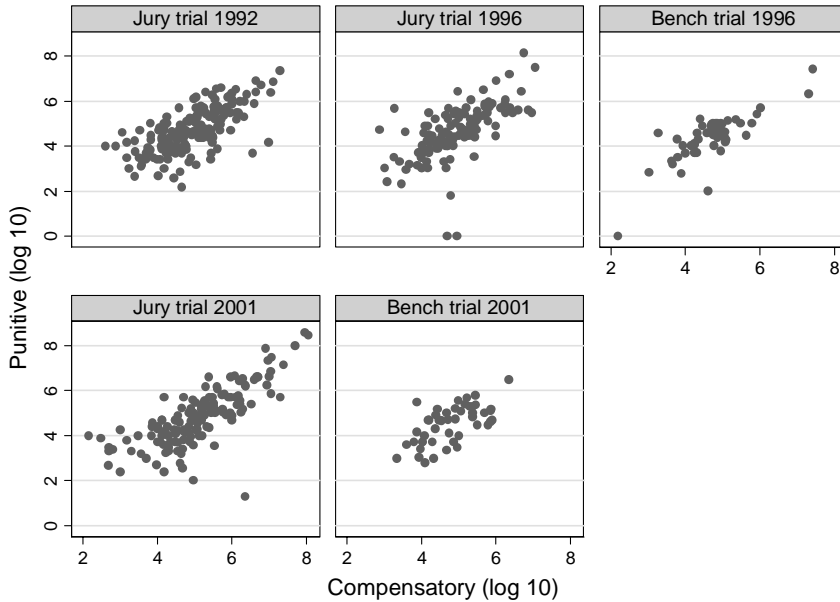
FIGURE 1. Combined Punitive and Compensatory (logs) Damages



SOURCE: Civil Justice Survey of State Courts 1992-2001.

Figure 2 explores the relation between compensatory and punitive damages in greater detail. It shows scatterplots for each of the data cohort years by trial mode. These more refined plots allow us to assess whether the general pattern that emerges in Figure 2 is robust to both time and trial mode. Notably, the strong positive relation between compensatory and punitive damages endures over time and between trial modes.

FIGURE 2. PUNITIVE AND COMPENSATORY AWARDS (LOGS) BY TRIAL MODE AND YEAR



SOURCE: Civil Justice Survey of State Courts 1992-2001.

2. The Punitive-Compensatory Ratio

Additional insight is generated by describing the punitive compensatory relation with a single number for each case. A punitive-compensatory award ratio is described by some scholars as a “widely cited barometer of whether a punitive damages award is out of line.”²⁸ Moreover, Supreme Court consideration of punitive damages limits involves such a ratio.²⁹ We constructed our compensatory-punitive damage award level (log) ratio by dividing the punitive award (log) by the compensatory award (log).

Table 3 summarizes various punitive and compensatory damages ratios by trial mode to facilitate comparisons. The ratio means, medians, and standard deviations do not differ significantly between bench and jury trials. A test of the entire distributions precludes the rejection of the hypothesis that they are the same ($p=.429$).³⁰ The 95 percent confidence intervals for the means of the ratios are narrow for both judge and jury trials. For judge trials the intervals range from 0.906 to 0.971. For jury trials, the interval ranges from 0.945 to 0.994. This slightly narrower interval range for jury trials likely is attributable to the greater number of jury trials. The untransformed median ratios of punitive and compensatory awards for jury trials is lower than in judge trials, though the untransformed median bench and jury trial ratios do not significantly differ.³¹

TABLE 3. PUNITIVE-COMPENSATORY AWARD RATIO BY TRIAL MODE

Trial Mode:	Mean Ratio	Median Ratio	SD	Untransformed Median Ratio	(N)
Bench Trial	0.938	0.955	.165	0.702	101
Jury Trial	0.970	0.959	.259	0.625	438
Significance of Bench-Jury Trial Difference	.249	.426	.249	.498	

NOTES: 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 is based on an f-test.

SOURCE: Civil Justice Survey of State Courts 1992-2001.

Sample size is not the likely explanation for the absence of statistically significant differences between bench and jury trials in their respective ratios of punitive and compensatory awards. Perfectly designed and executed studies may nevertheless fail to uncover socially important differences because the statistical procedures lacked the

²⁸ Hersch & Viscusi, *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 then report, a significant relation between punitive and compensatory awards.

²⁹ *State Farm v. Campbell*, *supra* note 1 (noting that to satisfy due process concerns, the punitive and compensatory damages ratio will typically not exceed a single digit).

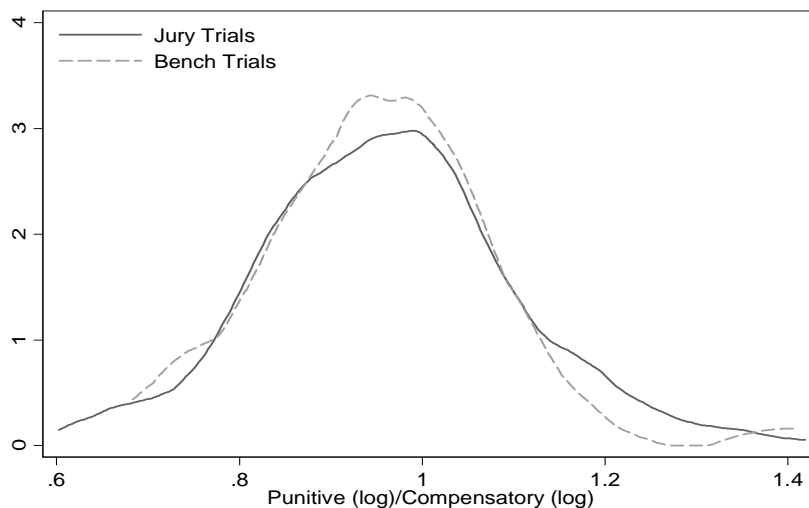
³⁰ This test is based on the Kolmogorov-Smirnov test.

³¹ A Kolmogorov-Smirnov test of the entire untransformed ratio distributions yields $p=.213$.

power to detect the effect flowing from a small sample size.³² A power calculation shows that to be 80 percent confident of detecting a ten percent difference in the ratios' means, at a 0.05 significance level, requires 148 jury and 34 judge trials.³³ Our sample size exceeds these requirements.

Figure 3 presents kernel density estimates³⁴ of the distributions of the compensatory-punitive damages award level ratios for jury and bench trials. Visual inspection reveals some differences in the shape of the distributions for bench and jury trials. Specifically, the distribution of the jury trial compensatory-punitive damages award level ratios is more “spread” than the bench trial distribution. More striking, however, is the substantial similarity between the distributions and that the differences in the bench and jury trial distributions do not achieve statistical significance.

FIGURE 3. Kernel Density Estimates



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.

SOURCE: Civil Justice Survey of State Courts 1992-2001.

3. Award Levels Over Time

Figure 4 presents a slightly different vantage point on the punitive-compensatory ratio and reinforces the pattern displayed in Figure 3. Specifically, the box plots in Figure 4 suggest minimal, though observable, variation in the dispersion of the punitive and compensatory damage ratio over the years and between trial modes. Although the outside values do not appear to suggest any coherent pattern, separation between the 75th and 25th percentiles (the upper and lower borders of the boxes) evidences some discernable variation. To the extent that any trend emerges what is hinted is that in 2001

³² Stanton A. Glantz, *Primer of Biostatistics* 165 (5th ed. 2002).

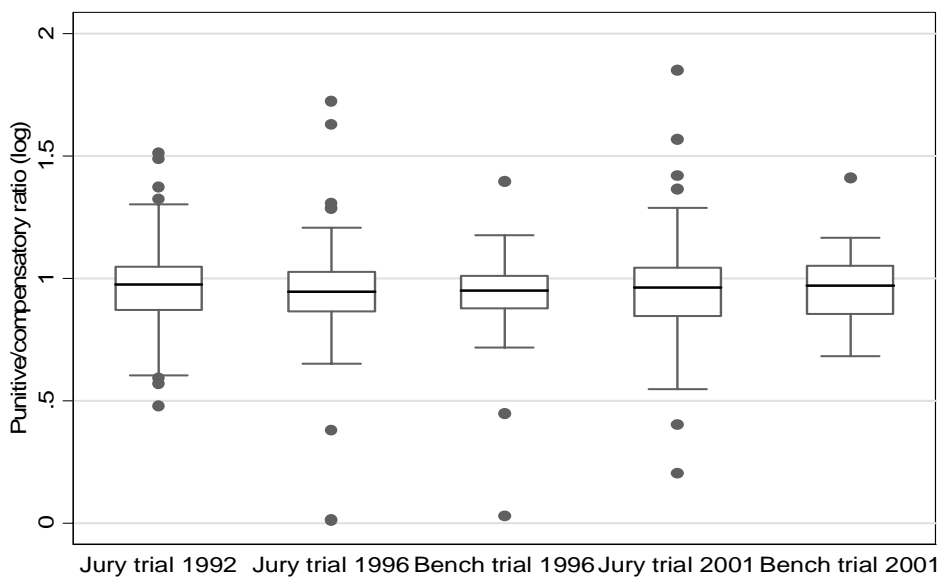
³³ The power calculation employs the standard deviations observed in Table 1 and hypothesizes means that are 0.9 and 1.0.

³⁴ For a discussion of kernel density estimation, see B. W. Silverman, *Density Estimation for Statistics and Data Analysis* (1986).

separation between the 75th and 25th percentiles regained the 1992 value after a slight dip during 1996, especially for judge trials.

Perhaps the most remarkable finding in Figure 4 is the stability in the median punitive-compensatory damages ratios for judges and juries over time. The line dissecting each box denotes the ratio median. If one drew a line connecting the medians the line would be close to straight as the ratio median consistently hovers just below 1.0. What this suggests, of course, is not only that little descriptive difference emerges between judges and juries in terms of their punitive and compensatory damage ratios, but also that judge and jury damage ratios remain stable over time.

FIGURE 4. PUNITIVE-COMPENSATORY AWARD RATIO (LOGS) BY TRIAL MODE AND YEAR



SOURCE: Civil Trial Court Network 1992-2001.

The stability in the ratios over time reflects underlying stability in both of their components over time. No statistically significant variation exists in the inflation-adjusted punitive award level over the three time periods (ANOVA $p=.320$). Similarly, no statistically significant variation exists in the inflation-adjusted compensatory award level over the three time periods in punitive damages cases (ANOVA $p=.581$). Median award levels also have not significantly increased over the three time periods (Kruskal-Wallis $p=.517$ for punitive awards; Kruskal-Wallis $p=.460$ for compensatory awards). The absence of noticeable increase in award levels is consistent with The Bureau of Justice Statistics report that, across all cases in the Civil Justice Survey data, the median jury trial award decreased from a median of \$65,000 in 1992 to \$37,000 in 2001. It is also consistent with the absence of evidence of an increase in recoveries in class actions from 1993 through 2002.³⁵

³⁵ Theodore Eisenberg and Geoffrey P. Miller, Attorney Fees in Class Action Settlements: An Empirical Study, 1 J. Empirical Legal Stud. 27 (2004).

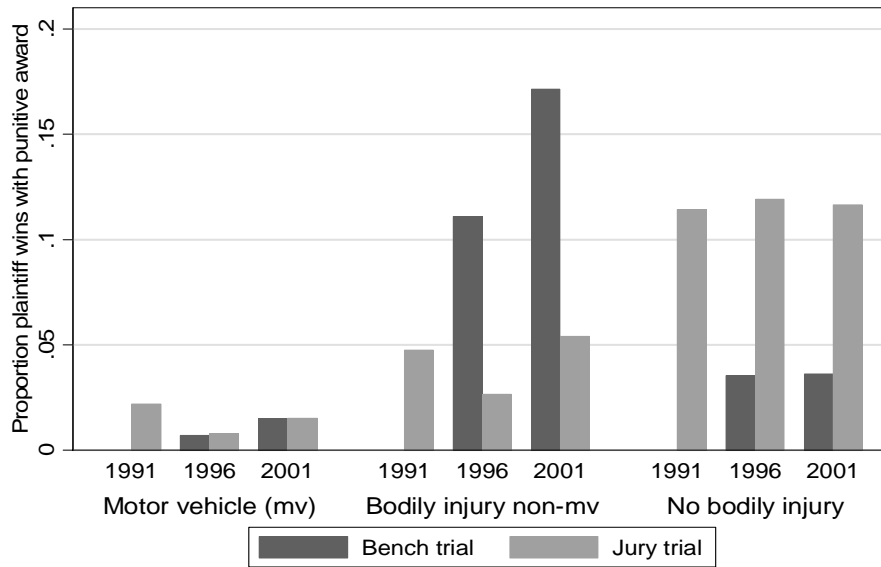
B. The Decision to Award Punitive Damages

Punitive damage award rates are of interest independent of award levels. As Table 1 indicates, even in trials won by plaintiffs, awards of punitive damages are rare. Prior results indicate that judges and juries award punitive damages at similar rates.³⁶ The cumulative Civil Justice Survey data for 1996 and 2001, which now provide two years of judge trial and jury trial data, permit more refined analysis. We present here the first analysis of these data that explore cases involving bodily injury separately from cases that do not.

As Figure 5 illustrates, punitive award rates for judges and juries are similar for motor vehicle cases but differ for other aggregated case types. Judge and jury propensity to award punitive damages in motor vehicle cases was similar, and low. Punitive awards occurred in not more than 2.2% of successful plaintiff trials in all years for both adjudicators. But, after separating out motor vehicle cases, judges and juries awarded punitive damages at quite different rates in bodily injury and no-bodily-injury cases. Specifically, judges were far more likely than juries to award punitive damages in cases where bodily injury existed outside of the motor vehicle setting. In 1996 and 2001 combined, in cases won at trial by plaintiffs, juries awarded punitive damages in 102 of 4,591 (2.2%) bodily injury cases and judges awarded punitive damages in 28 of 460 (6.1%) bodily injury cases. For the same years, juries awarded punitive damages in 170 of 1,464 (11.6%) no-bodily-injury cases and judges awarded punitive damages in 74 of 2,110 (3.5%) of no-bodily injury cases. Both differences are highly statistically significant ($p < .001$). Figure 5 indicates that these differences are consistent across the two time periods that include both judge and jury trials.

³⁶ Eisenberg et al., *Juries, Judges*, supra note 3. Hersch & Viscusi report judge-jury differences in the decision to award punitive damages. But in the only analysis in which they account for the sample design, the jury trial dummy variable was not statistically significant. Hersch & Viscusi, supra note 2, at 31 tbl. 8 (showing statistically insignificant jury effect when sampling weights (that is the study design) are taken into account). Hersch and Viscusi incorrectly assert that difference in results between them and Eisenberg et al. are attributable to induced multicollinearity by Eisenberg et al. Hersch & Viscusi, supra note 2, at 3, 34. The results in the models reported in Eisenberg et al. did not depend on the inclusion of the interaction term that Hersch and Viscusi assert induced multicollinearity. Hersch and Viscusi may have inaccurately replicated the models or otherwise differed in the models they assessed. In any event, it now appears that any jury effect is completely attributable to juries' increased rate of punitive damages awards in no-bodily-injury cases. Juries have a lower rate of punitive awards in bodily injury cases. See Figure 5. This new finding should probably be the focus of at least part of the future discussion about juries, judges, and punitive damages. To claim that judge and jury rates of punitive awards are the same or different now appears to be an oversimplification.

FIGURE 5. PUNITIVE AWARD RATE, BY TRIAL MODE AND CASE TYPE



SOURCE: Civil Justice Survey of State Courts 1992-2001.

So judge-jury similarity in punitive award levels is not fully mirrored in the decision to award punitive damages. We explore this topic in greater detail in regression analyses reported in Part IV.

IV. Regression Models of Punitive Damages

Without accounting for selection, discussed in part V, our results indicate that juries and judges are similar in assessing the relation between punitive and compensatory damages, but differ in the decision to award punitive damages. This part explores whether these results survive in regression models that simultaneously account for more than one factor. We first consider the degree to which compensatory awards can explain punitive awards, conditional on a punitive award having been given.³⁷ We then consider models of the decision to award punitive damages, with a particular focus on Figure 5's difference between judges and juries across case types.

A. Modeling the Level of Punitive Damages Awards

Tables 4 and 5 report results from two distinct though related models. They show that a case's compensatory award remains the most powerful predictor of punitive awards and punitive-compensatory ratio. We analyze the 539 cases where the plaintiff prevailed

³⁷ For a sampling of opinion, compare Eisenberg et al., *Predictability*, supra note 8 (discussing the relation between compensatory and punitive damages), with A. Mitchell Polinsky, *Are Punitive Damages Really Insignificant, Predictable, and Rational? A Comment on Eisenberg et al.*, 26 *J. Legal Stud.* 663 (1997) (same). See also W. Kip Viscusi, *The Blockbuster Punitive Damages Awards*, 53 *Emory L.J.* 1405, 1414 tbl.4 (2004) (finding no statistically significant relation between untransformed compensatory and punitive damages but finding a significant relation when the damages are logarithmically transformed for a blockbuster awards sub-sample).

and won a non-zero compensatory award.³⁸ For both tables, Column A, the most parsimonious model, involves a single independent variable—compensatory damages award. In column B we generate a slightly modified model by including a dummy variable signaling the independent influence of a jury (versus a bench) trial to test whether trial mode exerts any influence. Results from yet another model variation that includes an interaction term are presented in Column C.³⁹ The importance of compensatory damages for predicting punitive damages emerges from a comparison among the three columns and between the two separate tables. Notably, compensatory damages’ coefficients achieve statistical significance in all three variants for both models.

TABLE 4. REGRESSION MODELS OF PUNITIVE DAMAGES (LOG) LEVELS

	(A)	(B)	(C)
Compensatory damages (log)	0.819*** (.046)	0.814*** (.046)	0.783*** (.075)
Jury trial dummy (1=yes)	---	-0.037 (.025)	-0.149 (.193)
Jury trial x log of compensatory	---	---	0.023 (.039)
Constant	0.662** (.231)	0.741** (.236)	0.895* (.377)
Model significance	.000	.000	.000
r-squared	.511	.512	.532
N	539	539	539

NOTES: ***p<.001. Robust standard errors in parentheses.
SOURCE: Civil Justice Survey of State Courts 1992-2001.

Table 4 presents results from our models of punitive damages award levels. In all three models only the compensatory damages coefficient achieves statistical significance. This finding is consistent with our prior findings from the 1991-92 data as well as the 1996 data.⁴⁰ Moreover, results in Column A demonstrate that this single variable, compensatory damages, explains .511 of the variance of punitive damage award levels. The additional independent variables in the alternative models (Columns B and C) add little explanatory power and none of the additional variables achieve statistical significance. Finally, if one assumes that the compensatory award is a rational proxy for harm caused by the defendant, and evidence supports the reasonableness of such an assumption,⁴¹ the compensatory award variable serves something like a control for differences across judge and jury cases.

³⁸ We exclude from our analyses the 12 cases where punitive damages were awarded even though no compensatory damages were awarded. See supra note 14 and, for a general discussion, see Eisenberg et al., Predictability, supra note 8, at 629-30.

³⁹ We include alternative results for both Column B and C in response to multicollinearity concerns raised by Hersch & Viscusi, supra note 2, 33-34. The results illustrate that, as it bears on the influence of compensatory damages, the inclusion or exclusion of either a jury trial dummy variable or the interaction variable (or both) makes little difference.

⁴⁰ Eisenberg et al., Predictability, supra note 8, at 648 tbl.5 (1991-92 data); Eisenberg et al., Juries, Judges, supra note 3, at 772-74 tbl.5 (1996 data).

⁴¹ See, e.g., Deborah Jones Merritt & Kathryn Ann Barry, Is the Tort System in Crisis? New Empirical Evidence, 60 Ohio St. L.J. 315, 364-65 (1999); Frank A. Sloan & Chee Ruey Hsieh, Variability in Medical

Table 5 presents results from our models of the ratio of the punitive and compensatory awards (log). This dependent variable permits us to consider whether judges and juries systematically differ in the amount of punitive damages they award per unit of compensatory damages. The overall picture that emerges closely resembles the picture from Table 4. Specifically, the compensatory award is the single largest predictor of variation in punitive-compensatory awards (log) ratio. Moreover, compensatory damages' significance persists across all three models.

TABLE 5. REGRESSION MODELS OF PUNITIVE-COMPENSATORY RATIOS

	(A)	(B)	(C)
Compensatory damages (log)	-0.064*	-0.066**	-0.102**
	(.025)	(.025)	(.038)
Jury trial dummy (1=yes)	---	-0.017*	-0.144
		(.007)	(.078)
Jury trial x log of compensatory	---	---	0.027
			(.015)
Constant	1.284***	1.319***	1.493***
	(.129)	(.136)	(.202)
Model significance	.010	.018	.041
r-squared	.075	.081	.093
N	539	539	539

NOTES: *p<.05; **p<.01. Robust standard errors in parentheses.
SOURCE: Civil Justice Survey of State Courts 1992-2001.

Results in Tables 4 and 5 differ, however, in two slight ways. First, as a predictor of variance in the dependent variable, our punitive-compensatory awards (log) ratio model is weaker than our punitive damages awards model.⁴² Second, in one of the variants of our punitive-compensatory awards ratio models (Column B), trial mode achieves significance. Table 5 suggests that jury trials have a lower ratio of punitive to compensatory awards.⁴³ The independent influence of trial mode, however, was neither particularly strong nor robust as it did not achieve significance in our third model (Column C). The appendix reports similar models with explanatory variables added for party status and case type. The results do not materially differ from those in our simpler models.

The assertion that punitive damages are absurd often proxies for an assertion that they bear no meaningful relation to compensatory damages. Tables 4 and 5, however, as well as earlier figures, imply the contrary. How good are the models of punitive damages at explaining award levels? One logical point of reference are compensatory damages models in other studies. Comparisons to models from other studies should be viewed cautiously due to different methodologies, differences in independent variables used, and

Malpractice Payments: Is the Compensation System Fair?, 24 L. & Soc. Rev. 997, 1025 (1990); Neil Vidmar, The Performance of the American Civil Jury: An Empirical Perspective, 40 Ariz. L. Rev. 849, 868-70 (1998).

⁴² For the narrow purposes of this discussion we construe the models' strength for this purpose solely as a function of the r-squared statistic.

⁴³ Because our ratio was constructed by dividing the punitive award (log) by the compensatory award (log), a reduced ratio in this context can be achieved by juries awarding either smaller punitive or larger compensatory damages.

different classes of cases examined. These cautions aside, however, comparisons between punitive damages models and compensatory damages models provide some basis for assessing the efficacy of the punitive damages models. Results in Table 4 illustrate that models that include compensatory damages explain just over one-half of the variance in punitive damages award levels. Notably, compensatory damages models do not regularly achieve this level of explanatory power.⁴⁴ Ironically, in at least one respect, therefore, punitive damage levels may be more explainable than compensatory award levels.

B. Modeling the Decision to Award Punitive Damages

As explored in earlier punitive damages research,⁴⁵ juries and judges process different patterns of cases. For example, punitive damages tend to be awarded in intentional tort and fraud cases. About 60 percent of plaintiff trial wins in the data's fraud cases are jury trials; about 80 percent of plaintiff trial wins in intentional tort cases are jury trials. For products liability cases, over 90 percent of trial wins are jury trials. Differential case routing across categories may mask a judge-jury difference, rendering similar observed, aggregate rates of awarding punitive damages misleading. More detailed analysis should help account for the makeup of cases by subject area and other factors.

Models of the decision to award punitive damages, reported in earlier work,⁴⁶ indicate that the decision should be linked to the nature of the defendant's behavior. The best available proxy for such behavior is the type of case. On average, for example, one expects defendant behavior to have been worse in an intentional tort case than in a case involving mere negligence. Prior empirical work confirms this pattern.⁴⁷ Therefore, in modeling the decision to award punitive damages, we include dummy variables for case categories and expect case categories involving intentional misbehavior to have the highest punitive award rates. A second factor that likely influences the punitive award is the level of the compensatory award. Other things being equal, behavior that causes more harm is worse than behavior that causes less harm, and might be expected to be punished more severely. We approximate the degree of harm caused by using the compensatory damages award in each case.

Evidence exists that jurors react differently to corporate and individual defendants.⁴⁸ We include in the models three litigant pairs: actions by individuals only

⁴⁴ For a sampling of studies modeling compensatory damages see, for example, James S. Kakalik et al., *Variation in Asbestos Litigation Compensation and Expenses*, 56 (RAND, 1984) (model of compensatory awards (log) paid to asbestos case plaintiffs generates an adjusted r-squared of .34); Sloan & Hsieh, *supra* note 41, at 1020-23 (models of medical malpractice award levels achieve adjusted r-squareds ranging from .22 to .51; models limited to jury trials did not exceed .47). For a model of punitive damage award levels as a function of compensatory damages with even greater explanatory power than what we report, see Schmit et al., *Punitive Damages: Punishment or Further Compensation?*, 55 *J. Risk Insurance* 453 (1988).

⁴⁵ Eisenberg et al., *Juries, Judges*, *supra* note 3.

⁴⁶ Eisenberg et al., *supra* note 8, at 644-47.

⁴⁷ *Id.* at 645.

⁴⁸ Valerie P. Hans & Williams S. Lofquist, *Jurors' Judgments of Business Liability in Tort Cases: Implications for the Litigation Explosion Debate*, 26 *L. & Soc'y Rev.* 85 (1992); Robert J. MacCoun, *Differential Treatment of Corporate Defendants by Juries: An Examination of the "Deep-Pockets" Hypothesis*, 30 *L. & Soc'y Rev.* 121, 140 (1996). But this difference does not necessarily translate into

vs. individuals only, actions by individuals only vs. non-individuals, and actions by non-individual vs. non-individuals. The individuals vs. individuals pairing serves as the reference category.

To account for locale in the models that follow, we use statistical models that account for the clustering of the data at the county level. To account for the sample design, we use the BJS designated strata and weight the data in accordance with BJS-provided weights. In some models, we report unweighted results. Since punitive damages law is a state-level factor, we include dummy variables for the states that have more than one county in the data.⁴⁹ Figure 5 indicates that punitive damages award rates vary materially across adjudicator in bodily injury and non-bodily injury cases. We therefore model these classes of cases separately.

Table 6 reports the results. It indicates that, in no-bodily-injury cases, juries award punitive damages more frequently than judges. In bodily injury cases, however, the effect is in the opposite direction. The sign on the jury dummy variable is always negative and sometimes statistically significant, depending on whether Harris County, Texas is included. In the models that most fully account for the full sample and study design, models (1) and (2), the jury dummy variable points most strongly in opposite directions in the bodily injury and no-bodily-injury cases.

Table 6 also shows that the size of the compensatory award relates differently to the existence of a punitive award depending on the bodily injury status of the case. In non-bodily-injury cases, the coefficient is substantial and highly significant in all models, as one expects. Greater harm is associated with an increased likelihood of a punitive award. In bodily injury cases, however, the compensatory award coefficient is small and insignificant. Greater harm plays little role in explaining whether a punitive award was given. This stronger relation in no-bodily-injury cases between the compensatory award and whether punitive damages are awarded persists in both judge and jury trials.

In all relevant models, intentional torts, fraud, and employment cases are associated with increased frequency of punitive awards. Neither products liability nor medical malpractice cases are associated with high rates of punitive awards. These case-category findings echo findings in virtually all other studies of punitive damages.

The negative signs on the litigant pair dummy variables indicate that punitive damages are most likely in cases involving individuals suing individuals.

hostility to corporations. Lempert, *supra* note 3, at 455. Jurors may react especially negatively to misbehavior by insurance companies. Valerie P. Hans & Nicole Vadino, Whipped by Whiplash? The Challenges of Jury Communication in Lawsuits Involving Connective Tissue Injury, 67 *Tenn. L. Rev.* 569, 580-82 (2000); Eisenberg & Wells, Predictability on Appeal, *supra* note 8, at 67 (punitive/compensatory damages ratios are highest in insurer misbehavior cases). But juries generally are skeptical about plaintiffs' claims. Hans & Vadino, *supra* note 48, at 572-77.

⁴⁹ To save space we do not report results for the state dummy variables in Table 6.

TABLE 6: Logistic Regression Models of Whether Punitive Damages Were Awarded: Bodily Injury and No-Bodily-Injury Cases

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	<i>Account for sample design</i>		<i>Account for sample design; Harris County excluded</i>		<i>Ignore weighting</i>		<i>Ignore weighting; Harris County excluded</i>	
	Bodily injury	No-bodily-injury	Bodily injury	No-bodily-injury	Bodily injury	No-bodily-injury	Bodily injury	No-bodily-injury
Jury trial dummy (1=yes)	-0.804* (2.10)	0.898** (4.66)	-0.423 (0.93)	1.017** (6.09)	-0.733 (1.92)	0.881** (4.93)	-0.503 (1.09)	0.968** (5.90)
Compensatory damages (log)	0.240 (1.16)	0.434** (3.98)	0.063 (0.37)	0.419** (3.62)	0.151 (0.84)	0.441** (3.77)	0.050 (0.30)	0.428** (3.53)
2001 dummy	0.556 (1.54)	0.122 (0.79)	0.896** (2.72)	0.225 (1.62)	0.665 (1.88)	0.140 (0.95)	0.938** (2.86)	0.216 (1.54)
<i>Party status:</i>								
Indiv v. non-indiv	-0.086 (0.22)	-0.596* (2.40)	-0.427 (1.41)	-0.650* (2.40)	-0.259 (0.75)	-0.595* (2.40)	-0.473 (1.53)	-0.614* (2.30)
Non-indiv v. non-indiv	-0.434 (0.51)	-1.103** (4.47)	-0.143 (0.15)	-1.020** (3.91)	-0.669 (0.81)	-1.061** (4.55)	-0.430 (0.48)	-0.995** (4.09)
<i>Selected case types:</i>								
Products liability (incl. asbestos)	0.275 (0.47)		0.144 (0.21)		0.210 (0.33)		0.302 (0.44)	
Premises liability	-0.491 (1.08)		-0.674 (1.46)		-0.635 (1.40)		-0.688 (1.44)	
Intentional tort	2.534** (4.25)	2.254** (8.28)	2.194** (4.48)	2.324** (7.87)	2.346** (4.41)	2.164** (7.33)	2.209** (4.30)	2.238** (7.32)
Medical and prof. malpractice	-0.311 (0.51)	-0.191 (0.33)	-0.528 (0.84)	-0.099 (0.17)	-0.480 (0.79)	-0.130 (0.23)	-0.484 (0.75)	-0.071 (0.13)
Employment discrim. or dispute	4.863** (2.82)	0.758** (3.60)	4.962* (2.63)	0.808** (3.71)	4.235* (2.30)	0.788** (3.67)	4.353* (2.18)	0.804** (3.61)
Fraud		0.920** (4.78)		1.029** (5.59)		0.962** (5.06)		1.047** (5.53)
Rental/lease agreement		-0.360 (0.71)		-0.277 (0.55)		-0.349 (0.70)		-0.286 (0.57)
Constant	-4.960** (3.88)	-4.734** (8.42)	-4.246** (3.53)	-4.849** (8.06)	-4.344** (3.81)	-4.806** (7.99)	-4.069** (3.41)	-4.888** (7.74)
N	1742	3174	1651	3007	1742	3174	1651	3007

NOTES: Absolute value of t statistics in parentheses. * p< .05; ** p< .01. Dependent variable is punitive damages awarded. Cases are those won at trial by plaintiffs in 1996 or 2001. Reference category for litigant pairs is individual vs. individual; reference category for case types is the aggregate of all case types not represented by dummy variables. State dummy variables for those states with more than one county in the data are in the models but not reported.

SOURCE: Civil Justice Survey of State Courts 1996, 2001.

V. Discussion

Both core results from part III survive in part IV's regression analyses. Juries and judges award about the same amount of punitive damages per dollar of compensatory damages. The simplest explanation of this similarity is that judges and juries behave similarly. This part suggests that this simple explanation likely survives selection effects considerations, as best we can model them. But the simple explanation seems less satisfactory in explaining juries and judges facially different treatment of bodily injury cases and no-bodily-injury cases. Here selection effects seem a likely part of the explanation. An additional new result is the absence of evidence that compensatory awards influence the decision to award punitive damages in bodily injury cases. This part also discusses that result.

A. Selection Effect Considerations

Interpreting our results requires considering the nonrandom routing of cases between judges and juries. Table 1 suggests that large stakes cases tend to be adjudicated by juries. Analysis of the 1996 Civil Justice Survey data suggested that one expects juries to see a sample of cases that is biased in favor of strong candidates for punitive awards.⁵⁰ A study in which the higher-stakes, more punitive-damages-prone cases are in fact being routed to judges should be regarded as more remarkable than any of our findings.

1. Selection Attributable to Case Routing Between Judge and Jury

If plaintiffs select juries for cases with high probabilities of punitive awards, our results may overstate the juries' propensity to award punitive damages and could be interpreted as precluding rejection of the hypothesis that judges are more likely than juries to award punitive damages. If judges saw the same group of high punitive probability cases that juries likely see, analysis might reveal a greater tendency by judges to award punitive damages, and to award higher punitive damages.

Another possible routing effect relates to the perceived greater reliability of judges compared to juries. Plaintiffs may regard judges as more reliable, and thereby opt for trial before judges in their strongest cases on the merits.⁵¹ Similarly, the plaintiff with a strong punitive damages case may opt for a judge trial to avoid the less reliable jury because the jury might refuse to grant a punitive award in a case that merits an award. If such routing occurs, then one might observe judges awarding punitive damages at a greater rate than juries across all cases and defendants opting for jury trials when the case for punitive damages is strongest. But perceptions that juries are more likely to award punitive damages, and more likely to award more in punitive damages, are widespread. Indeed, until the 1996 Civil Justice Survey data were gathered and first analyzed, the surprisingly prominent role of judges in the punitive damages area was largely unknown. Systematically seeking the reliable judge to obtain a punitive damages award, when judges are not perceived as even awarding punitive damages, seems an unlikely effect. But, as before, this explanation cannot be eliminated based on our data and could mask real judge-jury differences.

2. Selection Attributable to Case Settlement

As noted in analyzing the CTCN 1996 data, since juries are believed to be more unpredictable than judges, especially in high-award cases, defendants may choose to settle cases that have high probabilities of large punitive awards.⁵² Trials in cases in which jurors' propensity to award punitive damages is strongest may never be observed.

⁵⁰ Eisenberg et al., *Juries, Judges*, supra note 3.

⁵¹ *Id.*

⁵² Eisenberg et al., *Juries, Judges*, supra note 3

Juries are viewed as so much wilder than judges that they only rarely get to act in those cases in which their behavior would be expected to be wildest.⁵³

The most important empirical development on this front is a study of the effect of punitive award requests on settlement in Georgia tort cases.⁵⁴ Eaton et al. assessed the impact of punitive damages claims on the processing of tort cases. They found little impact on case processing.

The results show that contrary to the expectation of many critics (e.g., Polinsky, 1997; Priest, 1996) the decision to seek punitive damages has no statistically significant impact on most phases of the litigation process. Specifically, we found that the decision to seek punitive damages had no effect on (1) whether a case filed in any given year was disposed or pending; (2) whether a case that was disposed was done so by trial or by some other procedure, including settlement; (3) whether a case that was disposed by means other than a trial was more likely to have been settled; and (4) whether a case that was disposed by means other than a trial was more likely to have been disposed by a voluntary dismissal without prejudice so that it could be re-filed.⁵⁵

The authors noted the consistency of their findings with those of three other articles.⁵⁶ In addition, analysis of the 1996 CTCN data concluded that little evidence existed to support the belief that the threat of punitive damages casted a detectable long shadow.

So we doubt that case selection and the settlement process explains our core punitive damages filings. For award levels the finding of judge-jury similarity may present no analytic difficulty. Judges and juries tend to award similar amounts of punitive damages per compensatory dollar awarded. For the decision to award, however, while the overall punitive award rates are not substantially different, significant difference does exist in subclasses of cases—notably bodily injury and non-bodily-injury cases.

3. The Bodily Injury Finding

⁵³ E.g., David Segal, Tag-Team Lawyers Make Businesses Blink; HMOs Latest to Grapple With Threat of Investor-Scaring Mega-Verdicts, Wash. Post, Nov. 12, 1999, at A1, 1999 WL 23314332. Studies funded by industry or tort reform groups, which find evidence that punitive damages often are requested, conclude that such the frequency of such requests pose a serious problem. J. Clark Kelso & Kari C. Kelso, An Analysis of Punitive Damages in California Courts, 1991-2000, at 5 n.3 (unpublished manuscript); John H. Sullivan, New State Data Confirms [sic] Runaway Abuse of Punitive Damages (1997), available at <http://www.cjac.org/research/punitivedamages.pdf>. A study that followed up the tallying of claims for punitive damages by studying whether awards were in fact obtained suggests the need for caution in interpreting the effect of punitive damages claiming rates. Eaton et al. found that 3,763 of 25,560 (14.7%) tort cases in Georgia states court involved claims for punitive damages. These 3,763 cases yielded 15 punitive damages awards, with the awards being disproportionately made by judges, not juries. Eaton et al., *supra* note , at 1094. Sullivan, *supra*, for example, reports high rates of claims for punitive damages but does not report the resulting yield in actual punitive awards.

⁵⁴ Thomas A. Eaton, David B. Mustard, and Susette M. Talarico, The Effects of Seeking Punitive Damages on the Processing of Tort Claims, J. Legal Stud. __ (forthcoming).

⁵⁵ *Id.*

⁵⁶ *Id.*

A facial explanation of judge-jury similarity is less plausible in explaining Figure 5 and Table 6's finding that juries award punitive damages less often than judges in bodily injury cases and more often in no-bodily-injury cases. Since, unlike the punitive-compensatory relation results, the core finding is of difference, not similarity, something must help explain the difference. One explanation is that judges are in fact more prone to award punitive damages in bodily injury cases and less prone to do so in financial injury cases. But that explanation seems counterintuitive. Whatever their approach to financial injury cases, conventional wisdom is that juries, not judges should be the relative pushovers for injured plaintiffs.

Another possible explanation for the difference in judge versus jury behavior based on the presence or absence of bodily injury may be in the types of cases that are collapsed into the non-bodily-injury category. These include: fraud, defamation, professional malpractice, employment discrimination, conversion, rental/lease, tortious interference, partnership disputes, etc. One of the characteristics that these case types often have in common (compared to bodily injury cases) is the presence of a pre-existing relationship of implied trust – fiduciary, employment, or contractual – between the plaintiff and defendant that is less likely to occur in most bodily injury cases (auto tort, premises liability, product liability). It may be that juries, more than judges, perceive the violation of this pre-existing relationship as egregious, and thus more deserving of punishment for the defendant, than cases that do not involve a pre-existing relationship. We do not have evidence that juries and judges in fact respond differently to breaches of trust but this explanation is worth exploring.

The type of evidence presented in bodily injury versus non-bodily injury cases may also affect judges and juries differently. Absent egregious circumstances, in many cases, it may not be that easy for juries to distinguish evidence of mere negligence from willful or malicious conduct in cases involving bodily injury. In non-bodily injury cases, the evidence of willful or malicious conduct (rather than accident) may be more straightforward. Judges' repeated observations of trials, experience that most jurors lack, may enable them to more confidently rank misbehavior in bodily injury cases. But it is not clear that judges would react less negatively than jurors to evidence of willful or malicious conduct.

Here, then, no readily available explanation seems fully satisfactory and selection may well be at work. If juries are perceived as more likely to award punitive damages than judges in bodily injury cases, perhaps less punitives-worthy cases are routed to juries. When juries turn out to behave similarly to judges, one would observe those less punitive-damages-worthy cases resulting in relatively fewer punitive awards by juries.⁵⁷ This does not explain juries observed higher frequency of punitive awards in financial injury cases. Perhaps the stereotypical view of juries is correct here and less case routing goes on to obliterate that tendency by the time of observed outcomes.

B. The Relation Between the Compensatory Award and the Decision to Award Punitive Damages

⁵⁷ Cf. Clermont & Eisenberg, *supra* note 15 (explaining different win rates before judges and juries on the basis of case routing).

Table 6 indicates that, in no-bodily-injury cases, the magnitude of the compensatory award is positively and statistically significantly associated with the existence of an award of punitive damages. This is as expected. As the harm, as represented by the compensatory award, increases, the likelihood of imposing a punitive award should be expected to increase. Perhaps more interesting is the absence of evidence that compensatory awards influence the decision to award punitive damages in bodily injury cases. It may be that physical harm to the victim, regardless of the level of monetary harm, is a sufficient proxy for serious harm, that the amount of compensatory damages no longer influences the decision to award punitive damages. Misbehavior resulting in physical harm is per se sufficient to support a punitive award. Only the quality of the behavior matters at that point, not the level of the monetary harm.

VI. Conclusion

We report evidence across ten years and three major datasets that: (1) juries and judges award punitive damages in approximately the same ratio to compensatory damages, (2) little evidence of increasing levels of punitive awards exists, and (3) juries' and judges' tendencies to award punitive damages differs in bodily injury and no-bodily injury cases. The similarity in punitive-compensatory ratios probably suggests that juries and judges behave similarly with respect to award amounts. The differences in punitive award rates more likely are a function of case selection than of jurors' relative harshness in bodily injury cases.

APPENDIX TABLE 1. FULL REGRESSION MODELS OF PUNITIVE DAMAGES (LOG) LEVELS

	(A)	(B)	(C)
<i>Ind. vars:</i>			
Compensatory damages (log)	0.769*** (.056)	0.769*** (.057)	0.727*** (.103)
Jury trial dummy (1=yes)	---	0.001 (.027)	-0.135 (.247)
Jury trial x log of compensatory	---	---	0.030 (.050)
<i>Party status:</i>			
Indv v. non-indv	0.179* (.081)	0.185* (.082)	0.188* (.083)
Non-indv v. non-indv	-0.037 (.214)	-0.032 (.214)	-0.030 (.214)
<i>Selected case types:</i>			
Premises liability	-0.454* (.207)	-0.464* (.206)	-0.484* (.210)
Product liability (incl. asbestos)	-0.114 (.261)	-0.114 (.260)	-0.109 (.260)
Intentional tort	-0.199 (.101)	-0.202 (.101)	-0.202 (.102)
Medical and prof. malpractice	-0.321* (.146)	-0.320* (.146)	-0.314* (.144)
Fraud	-0.083 (.120)	-0.089 (.126)	-0.095 (.128)
Employment discrim. or dispute	-0.033 (.137)	-0.031 (.136)	-0.028 (.135)
Rental/lease agreement	-0.269* (.123)	-0.268* (.122)	-0.271* (.124)
<i>Selected case characteristics:</i>			
Bodily injury (non-motor vehicle)	0.499** (.115)	0.497** (.116)	0.502*** (.116)
No bodily injury	0.296* (.123)	0.291* (.124)	0.291* (.123)
Constant	0.577* (.285)	0.560 (.296)	0.761 (.491)
Model significance	.000	.000	.000
r-squared	.530	.530	.531
N	499	499	499

NOTES: *p< .05; **p< .01; ***p< .001. Robust standard errors in parentheses. Reference group for party status is individual v. individual; reference group for selected case type is the aggregate of all case types not represented by dummy variables; reference group for the selected case characteristic is no bodily injury. Models account for clustering at the county site level and the stratified sampling pattern. State dummy variables for those states with more than one county in the data are included in the models but not reported. SOURCE: Civil Justice Survey of State Courts 1992-2001.

APPENDIX TABLE 2. FULL REGRESSION MODELS OF PUNITIVE DAMAGES (LOG) RATIOS

	(A)	(B)	(C)
<i>Ind. vars:</i>			
Compensatory damages (log)	-0.071* (.034)	-0.071* (.034)	-0.111 (.056)
Jury trial dummy (1=yes)	---	-0.008 (.010)	-0.148 (.107)
Jury trial x log of compensatory	---	---	0.029 (.021)
<i>Party status:</i>			
Indv v. non-indv	0.042 (.022)	0.037 (.024)	0.041 (.023)
Non-indv v. non-indv	-0.001 (.049)	-0.005 (.051)	-0.002 (.050)
<i>Selected case types:</i>			
Premises liability	-0.072 (.054)	-0.065 (.059)	-0.084 (.053)
Product liability (incl. asbestos)	0.038 (.081)	0.038 (.082)	0.043 (.081)
Intentional tort	-0.004 (.054)	-0.001 (.056)	-0.001 (.057)
Medical and prof. malpractice	-0.037 (.029)	-0.038 (.029)	-0.032 (.028)
Fraud	-0.033 (.035)	-0.028 (.032)	-0.034 (.034)
Employment discrim. or dispute	-0.013 (.026)	-0.015 (.025)	-0.012 (.025)
Rental/lease agreement	-0.082* (.034)	-0.082* (.035)	-0.084* (.038)
<i>Selected case characteristics:</i>			
Bodily injury (non-motor vehicle)	0.066 (.043)	0.068 (.042)	0.072 (.039)
No bodily injury	0.068* (.032)	0.072* (.034)	0.071* (.034)
Constant	1.237*** (.174)	1.250*** (.185)	1.443*** (.284)
Model significance	.000	.000	.000
r-squared	.133	.134	.134
N	499	499	499

NOTES: *p< .05; **p< .01; ***p< .001. Robust standard errors in parentheses. Reference group for party status is individual v. individual; reference group for selected case type is the aggregate of all case types not represented by dummy variables; reference group for the selected case characteristic is no bodily injury. Models account for clustering at the county site level and the stratified sampling pattern. State dummy variables for those states with more than one county in the data are included in the models but not reported. SOURCE: Civil Justice Survey of State Courts 1992-2001.