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DIVERSITY JURISDICTION AND OUT-OF-STATE BIAS: EXPERIMENTAL EVIDENCE

Daniel M. Klerman[†] *& Jonathan R. Nash*[‡]

Abstract

Since the founding, U.S. federal courts have had jurisdiction over cases between citizens of different states. This diversity jurisdiction is primarily justified by concern that state courts might be biased against out-of-state litigants. For at least one hundred years, however, this justification for diversity jurisdiction has been questioned by federal judges and distinguished academics, who have doubted whether such a bias continues to exist or ever existed. This paper contains experimental tests of the existence and extent of bias against out-of-state litigants. Analysis suggests some bias against out-of-state defendants, especially when parties' residence is salient (emphasized).

Introduction

First-year law students learn that federal courts have the power to hear "diversity" cases—cases raising state law claims where the plaintiff and defendant are citizens of different states. The most common justification for federal diversity

[†] Edward G. Lewis Chair in Law and History, and Director, Center of Law and Social Science, University of Southern California.

[‡] Robert Howell Hall Professor of Law, Emory University School of Law; Director, Emory Center on Federalism and Intersystemic Governance.

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jurisdiction is concern about potential bias against out-of-state litigants in state courts. While some have offered alternate justifications, fear of bias remains the primary justification for federal diversity jurisdiction.

Is concern over bias against out-of-state residents warranted? Even if out-of-state bias existed at the founding, does it remain a problem today? Limited empirical evidence suggests that some form of out-of-state bias indeed persists,[1] although the evidence is inconsistent. In addition, many questions about the bias, if it exists, remain understudied and largely unanswered. For example, do federal courts do a better job at restraining the bias, and, if so, how? Is the bias greater against corporations than against individuals? If there is bias against corporations, is it based on where the corporation is incorporated, headquartered, has offices or factories, and/or employs many people?

In this Paper, we report the results of experiments designed to detect out-of-state bias. We report results of two experiments in what we expect will be a series. The experimental subjects (potential jurors) are asked to determine damages in a hypothetical automobile accident in which the plaintiff suffered significant injuries, including hard-to-monetize elements such as pain, suffering, and a limp that is likely to be permanent. We told subjects that liability had been admitted and that the only issue was damages. We vary the residence[2] of the defendant so that sometimes the defendant is from the same state as the plaintiff and experimental subject and sometimes not. By comparing damages awarded against in-state and out-of-state defendants, we measure the extent of bias against out-of-state residents.

Our first (base) experiment also varied whether the defendant was an individual or a corporation. This allows us to examine the extent to which out-of-state bias might be more prevalent, or stronger, in one setting as opposed to the other. Experimental materials are in Appendix A1.[3]

Results of our first (base) experiment suggest that there is bias against out-of-state litigants, although it varies by the defendant's state and may vary by the salience of information about the defendant's state. Damages are about fifteen percent higher against an out-of-state New York defendant than against an in-state

[1] See discussion in Section I.

[2] Of course, the legal criterion for diversity jurisdiction is a difference in citizenship, not residence. Nevertheless, we think experimental subjects are likely to be more familiar with the concept of state residence and might be confused by the idea of state citizenship. Since, in most cases, residence and citizenship are identical, we think this simplification is likely to enhance rather than detract from the accuracy of our experimental results.

[3] Whether out-of-state bias is greater against corporations is a distinct question from whether there is a bias against corporations generally (e.g. higher damages when the defendant is a corporation). On the latter, see Valerie P. Hans & M. David Ermann, *Responses to Corporate Versus Individual Wrongdoing*, 13 L. & HUMAN BEHAVIOR 151 (1989).

defendant, and the difference is sometimes statistically significant for both corporations and individuals. When the out-of-state defendant is from California, Florida, or Texas, damages against the out-of-state defendants are usually higher, but the difference is not statistically significant.

Nevertheless, even for defendants from outside New York, there is some evidence of bias. Our base experiment was relatively subtle in the way it presented the defendant's residence, and many experimental subjects simply forgot where the defendant was from. When analysis is restricted to those who remembered the defendant's residence, damages against out-of-state defendants are higher and the difference is at least sometimes statistically significant in all states except Texas. This suggested that salience may be a key factor. When defendant's residence is salient and thus remembered, experimental subjects exhibit bias, but when it is not salient, they do not.

In a second experiment, we tested the importance of salience by manipulating the manner and frequency with which the defendant's residence is mentioned to see if bias is more common when salience is high. Our experiments bear out the hypothesis that bias varies with salience. When information on the defendant's residence was emphasized, damages were thirty percent higher, and the difference was sometimes statistically significant.

Results from the experiment relating to salience may help explain how federal courts can reduce bias even though jurors in federal and state court are drawn from the same local population. There is some evidence that federal judges are more likely to forbid lawyers from emphasizing or even mentioning the out-of-state litigant's residence. Thus, even when jurors are biased, federal courts can reduce or eliminate the bias by making the out-of-state litigant's residence less salient. In contrast, state court judges are less likely to control lawyer arguments that highlight the out-of-state litigant's residence, thus making it more likely that juror bias will affect the verdict. That is, lawyers know that jurors are biased against out-of-state litigants. When they can, they emphasize and make that fact salient. Federal courts reduce the effect of juror bias by forbidding lawyer arguments that make the parties' residence salient. State courts, in contrast, seem to take a more hands-off approach and thus allow lawyer arguments that make a party's residence more salient, thus triggering juror bias.

Bias against out-of-state parties could come from jurors, judges, or both. This paper focuses on the possibility of juror bias. Some prior work focused on (and found) bias among judges.[4]

[4] *See* Daniel Klerman, *Bias in Choice of Law: New Empirical and Experimental Evidence* (forthcoming 2023) (finding that state (but not federal judges) were 15-20 percentage points more likely to choose law that favored an in-state parties); Andrew J. Wistrich,

Our experiment was preregistered. Our original preregistration focused on whether damages against out-of-state defendants would be higher and stated that we would analyze individual and corporate defendants separately. Before we performed the second experiment about salience, we amended our preregistration to indicate that we were also testing whether salience (emphasis on the parties' residence) would affect bias against out-of-state residents.

The Paper proceeds as follows. Part I describes federal diversity jurisdiction and the consensus (and debate) over its out-of-state bias justification. Part II sets out our first (base) experiment. Part III discusses the results of the first experiment. Part IV explains and discusses the second experiment relating to salience. Part V discusses some additional planned experiments and analyses.

I. Federal Diversity Jurisdiction and Out-of-State Bias

Article III of the U.S. Constitution vests the federal judicial power in the federal judiciary.[5] Among other heads of federal jurisdiction conveyed under Article III as part of the federal judicial power is the so-called constitutional federal diversity jurisdiction: The Constitution authorizes federal courts to hear "controversies . . . between a state and citizens of another state, controversies "between citizens of the same state claiming lands under grants of different states," controversies "between a state, or the citizens thereof, and foreign states, citizens or subjects," and—most importantly for our purposes—controversies "between citizens of different states."[6]

While the debates at the constitutional convention offer little insight into the justification for federal diversity jurisdiction,[7] they do reference the notion that opening the federal courts to litigants of diverse citizenship is necessary to avoid bias against out-of-state litigants by state courts.[8] This justification for diversity

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Jeffrey J. Rachlinski, & Chris Guthrie, *Heart Versus Head: Do Judges Follow the Law or Follow Their Feelings,* 93 TEX. L. REV. 855, 893-98 (2015) (state court judges awarded higher damages against out-of-state polluter);

[5] U.S. CONST,, art. III, § 1.

[6] *Id.*, § 2.

[7] *See, e.g.*, 13E CHARLES ALAN WRIGHT ET AL., FEDERAL PRACTICE & PROCEDURE § 3601 ("Neither the debates of the Constitutional Convention nor the records of the First Congress shed any substantial light on why diversity jurisdiction was granted to the federal courts by the Constitution or why the First Congress exercised its option to vest that jurisdiction in the federal courts."); Henry J. Friendly, *The Historic Basis of Diversity Jurisdiction*, 41 HARV. L. REV. 483, 484 (1928). *See generally* John P. Frank, *Historical Bases of the Federal Judicial System*, 13 LAW & CONTEMP. PROBS. 3, 3 (1948) ("Discussion in the country during the period of ratification usually found livelier topics than courts or judges. Indeed, except for a vigorous attack on the lack of a requirement for a civil jury and less ardent attacks on diversity, the judiciary clauses were almost immune from strenuous criticism or discussion."). For a comprehensive examination of the Clause's history from constitutional drafting through early Supreme Court cases, see Friendly, *supra*, at 484-510.

[8] For example, James Madison explained:

jurisdiction is featured in the Federalist Papers,[9] and is often recited (if sometimes doubted) today.[10] While scholars occasionally identify other justifications for diversity jurisdiction,[11] the fact is that concern over bias—or at least concern over

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> As to its cognizance of disputes between citizens of different states, . . . [i]t may happen that a strong prejudice may arise in some states, against the citizens of others, who may have claims against them. We know what tardy, and even defective administration of justice, has happened in some states. A citizen of another state might not chance to get justice in a state court, and at all events he might think himself injured.

Reprinted in 3 ELLIOT, DEBATES ON THE FEDERAL CONSTITUTION 486 (1836).

For elucidation of the scant history of diversity from the drafting of the Constitution ratification debates, and early Congresses, see Friendly, *supra* note 5, at 484-504.

[9] *See* THE FEDERALIST NO. 80 (Hamilton). Alexander Hamilton elucidated:

> It may be esteemed the basis of the union, that "the citizens of each state shall be entitled to all the privileges and immunities of citizens of the several states." And if it be a just principle that every government ought *to possess the means of executing its own provisions by its own authority*, it will follow, that in order to the inviolable maintenance of that equality of privileges and immunities to which the citizens of the union will be entitled, the national judiciary ought to preside in all cases to which one state or its citizens are opposed to another state or its citizens. To secure the full effect of so fundamental a provision against all evasion and subterfuge, it is necessary that its construction should be committed to that tribunal, which, having no local attachments, will be likely to be impartial between the different states and their citizens, and which, owing its official existence to the union, will never be likely to feel any bias inauspicious to the principles on which it is founded.

Id.

Other contemporaneous commentators offer similar justifications. For example, at the Pennsylvania ratification convention, James Wilson (later a United States Supreme Court Justice) argued that diversity jurisdiction was necessary to give out-of-state litigants access to a forum where "where the unequal and partial laws of a particular state would have had no force." 2 THE DEBATES IN THE SEVERAL STATE CONVENTIONS ON THE ADOPTION OF THE FEDERAL CONSTITUTION 495 (J. Elliot ed. 1901); *see id.* at 491-92 (elaborating on the point and highlighting the value of "a just and impartial tribunal" for "foreigners as well as ourselves").

[10] *See, e.g.*, Exxon Mobil Corp. v. Allapattah Servs., Inc., 545 U.S. 546, 553-54 (2005) ("the purpose of the diversity requirement . . . is to provide a federal forum for important disputes where state courts might favor, or be perceived as favoring, home-state litigants"); WRIGHT ET AL., *supra* note 5, § 3601 (identifying as "the traditional explanation, and the one most often cited by federal judges and legal scholars, of the purpose of the constitutional provision for diversity of citizenship jurisdiction and its immediate congressional implementation" "the fear that state courts would be prejudiced against out-of-state litigants, particularly when opposed by an in-stater" (footnotes omitted)).

[11] Scott Dodson has argued that diversity jurisdiction in interpleader cases is justified by the benefits of getting all potential claimants into a single court and thus preventing a multiplicity of suits with potentially conflicting outcome. That is, even if there were no bias against out-of-state parties, federal jurisdiction based on diversity is justified in some cases. Dodson points to cases relating to mass torts, class actions, and multidistrict litigation as areas where diversity jurisdiction facilitates aggregation and is thus justified, even if there is no bias against out of state parties. *See* Scott Dodson, *Beyond Bias in Diversity Jurisdiction*, 69 DUKE L.J. 267, 301-08 (2019); *see also* Richard D. Freer, *The Political Reality of Diversity Jurisdiction*. 94 S. CAL. L REV. 1083 (2021).

Diversity jurisdiction has also been credited retroactively with fostering a strong U.S. national economy by making possible during the nineteenth century and into the early twentieth century—by means of access to the federal courts—a uniform system of federal laws governing contracts and torts. For example, Fourth Circuit Judge John Parker expressed

the perception of bias—against out-of-state residents other remains the dominant rationale for diversity jurisdiction. Indeed, much of the debate over diversity jurisdiction reflects views about the existence and extent of bias. Those in favor of eliminating or reduction diversity jurisdiction, generally claim that there is little or no bias, whereas those in favor of retaining or even expanding diversity jurisdiction assert that bias against out of state parties remains significant.[12]

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the following view of diversity jurisdiction at a 1932 address before the Georgia Bar Association:

> No power exercised under the Constitution has . . . had greater influence in welding these United States into a single nation; nothing has done more to foster interstate commerce and communication and the uninterrupted flow of capital for investment into the various parts of the Union; and nothing has been so potent in sustaining the public credit and the sanctity of private contracts….

Hon. John J. Parker, *The Federal Jurisdiction and Recent Attacks Upon It*, 18 A.B.A. J. 433, 437 (1932).

See Friendly, *supra*, note 5, at 28 (describing constitutional diversity jurisdiction as "the product of three factors": (i) [t]he desire to avoid regional prejudice against commercial interests"; (ii) [t]he desire to permit commercial, manufacturing, and speculative interests to litigate their controversies with other classes, before judges who would be firmly tied to their own interests"; and (iii) "[t]he desire to achieve more efficient administration of justice for the classes thus benefited"); Felix Frankfurter, *Distribution of Judicial Power Between United States and State Courts*, 13 Cornell L.Q. 499, 520 (1928) ("Such distrust as there was of local courts derived, not from any fear of their partiality to resident litigants, but of their general inadequacy for the interests of the business community."); Charles J. Cooper & Howard C. Nielson, Jr., *Complete Diversity and the Closing of the Federal Courts*, 37 HARV. J.L. & PUB. POL'Y 295, 296 (2014) ("By ensuring that a neutral federal court . . . was available to adjudicate disputes between parties of diverse state citizenship, the Framers were animated by much the same spirit that resulted in the various substantive constitutional protections against state interference with interstate and foreign commerce."). *See also* Stephen B. Burbank, *The Class Action Fairness Act of 2005 in Historical Context: A Preliminary View*, 156 U. PA. L. REV. 1439, 1460 n.79 (2008) ("[T]he fact that—from the beginning and still today—a plaintiff can (as a matter of subject matter jurisdiction) sue an out-of-state defendant in a federal court in the plaintiff's state is inconsistent with the traditional account. This 'anomaly' may be evidence of the existence of reasons for the constitutional grant other than, or in addition to, the fear of bias.").

[12] *See* WRIGHT ET AL., *supra* note 5, § 3601 ("Those who favor the retention of diversity jurisdiction contend that this prejudice still exists, although perhaps in a diminished form."); Dodson, *supra* note 9, at 288 ("In general, opponents of diversity jurisdiction tend to argue that out-of-state bias does not exist or is too muted to support diversity jurisdiction, while supporters tend to argue that out-of-state bias exists—or the perception of bias exists—and thus demands diversity jurisdiction."); Edward A. Purcell, Jr., *The Class Action Fairness Act in Perspective: The Old and the New in Federal Jurisdictional Reform*, 156 U. PA. L. REV. 1823, 1847 (2008) ("Advocates of preserving or expanding federal jurisdiction stressed the grave dangers of 'bias' and 'local prejudice,' while those who sought to limit or abolish the jurisdiction minimized or denied these dangers."); Kevin R. Johnson, *Why Alienage Jurisdiction? Historical Foundations and Modern Justifications for Federal Jurisdiction Over Disputes Involving Noncitizens*, 21 YALE J. INT'L L. 1, 119 (1996) ("[A]dvocates of diversity jurisdiction argue that bias is a problem and that it

But the extent to which out-of-state bias persists and justifies the continuation of diversity jurisdiction has been largely unexplored. Some scholars highlight how advocates of diversity jurisdiction have over the years touted out-of-state bias as a justification for preserving diversity jurisdiction without actually providing evidence of its existence.[13] A few studies provide some evidence of ongoing out-of-state bias.[14] In short, the existence of such bias, its breadth, and the particular circumstances under which it persists, remain mysteries. In the next Part, we explain the experimental approach we undertook to shed light on this question.

II. The Base Experiment

The experiment is based on a vignette in which the respondents are asked to imagine that they are jurors in a lawsuit arising out of an automobile accident.[15] We deployed a 2x2 experimental design; versions of the vignettes can be found in Appendix A.1. In all versions of the vignette, a plaintiff Lauren Williams,[16] a resident of the respondent's home state,[17] sustained injuries in an automobile accident. The plaintiff filed a tort lawsuit in her home state. The respondent is told that the plaintiff is from the respondent's home state. The vignette explains that the

necessitates diversity jurisdiction, and many of their opponents regard this as the strongest argument for diversity jurisdiction.").

[13] *See* EDWARD A. PURCELL, JR., LITIGATION AND INEQUALITY: FEDERAL DIVERSITY JURISDICTION IN INDUSTRIAL AMERICA, 1870-1958, at 137-42 (1992).

[14] *See* Eric Helland & Alexander Tabarrok, *The Effect of Electoral Institutions on Tort Awards*, 4 AM. L. & ECON. REV. 341 (2002) (finding bias against out-of-state defendants in states with elected judiciaries); David L. Shapiro, *Federal Diversity Jurisdiction: A Survey and a Proposal*, 91 HARV. L. REV. 317, 330-32 (1977) (reporting results of survey of federal judges finding some evidence of continued bias against out-of-state residents); Daniel Klerman, *Bias in Choice of Law: New Empirical and Experimental Evidence* (forthcoming 2023) (finding that state (but not federal judges) were 15-20 percentage points more likely to choose law that favored an in-state parties); Andrew J. Wistrich, Jeffrey J. Rachlinski, & Chris Guthrie, *Heart Versus Head: Do Judges Follow the Law or Follow Their Feelings*, 93 TEX. L. REV. 855, 893-98 (2015) (state court judges awarded higher damages against out-of-state polluter); Reid Hastie, David A Schkade, and John W. Payne, *Juror Judgments in Civil Cases: Effects of Plaintiff's Requests and Plaintiff's Identity on Punitive Damage Awards,* 23 LAW & HUMAN BEHAVIOR 445 (1999) (local plaintiffs awarded more, but location of defendant did not have reliable effect on awards); Kyle Kopko & Christopher J. Devine, *Home Court Advantage? An Empirical Analysis of Local Bias in U.S. District Court Diversity Jurisdiction Cases*, 125 W. VA. L. REV. 543 (2022) (finding no bias in federal district court awards).

[15] Deliberation among respondents qua jurors was not part of the experiment. Assuming a jury consisting of some jurors with out-of-state bias and some without, deliberation could theoretically work in either direction.

[16] We used lists of common names among various races in an effort to ensure that the names of the two drivers could not reliably be associated with any particular racial group. In so doing, we hoped to minimize the possibility that other types of bias could seep into the results.

[17] All respondents were U.S. residents over the age of 17.

defendant has conceded liability (failure to maintain and repair the car's brakes), so the only issue is the amount of damages. Our experimental manipulation varied two factors: (i) whether the defendant was an individual or a corporation and (ii) whether the defendant was from in-state or out-of-state. Half the respondents received vignettes in which the defendant is the driver of the car, Michelle Johnson; the vignettes received by the other half identified the defendant as Tufon Products Inc. ("Tufon"), a corporation that employed Johnson and owned and maintained the car she was driving. In turn, half the respondents saw vignettes where Johnson was a resident of, or Tufon was "based in," the respondent's home state. The vignettes for the other half of respondents instead said that Johnson was a resident of, or Tufon was "based in,"[18] in a different state: California, Florida, New York, or Texas.[19] These four states were chosen because they were the four U.S. states with the largest population. They also represent four of the main regions of the US: Northeast (New York), West (California), and Southeast (Florida), and Southwest (Texas).

We started with some small pilot studies using the Qualtrics platform and Amazon Mechanical Turk respondents. These pilots revealed some confusion about whether a plaintiff could recover for medical expenses as well as difficulty in entering numerals for large numbers. We revised the materials to clarify that the plaintiff could recover for medical expenses regardless of insurance. To ensure that the numbers entered by respondents in fact reflected what they intended rather than accidental additional of additional zeros, (i) we asked respondents to put commas separating thousands and millions, (ii) we asked respondents to write out the award in words (as on a check) as well as in numerals, and (iii) we asked respondents to explain the damages they awarded. These changes reduced by 50% the number of respondents who awarded wildly implausible damages. We note, however, that these changes also introduced some possible anchoring, as we gave examples of numbers with commas – 600,000 and 1,000,0000 – and numbers written out in words – six hundred thousand and one million. We do not view this potential anchoring as a problem, as it was the same for all experimental conditions and thus does not bias the results. In addition, we view some anchoring as enhancing the realism of our

[18] We avoided technical legal discussion of a corporation's state(s) of citizenship for diversity jurisdiction purposes. *See* 28 U.S.C. § 1332(c). In later experiments, we hope to explore corporate citizenship more deeply, for example, by seeing whether people show more bias against a corporation headquartered in a different state, incorporated in a different state, or having the bulk of its operations in a different state, and/or whether bias against a corporation is moderated when that corporation has substantial facilities (e.g. a factory) or employment in the state.

[19] We initially placed all respondents who hailed from New York in the out-of-state condition and assigned them defendants from Iowa. Later, we placed all New York respondents in the in-state condition so that we could exclude the possibility that even New York respondents award higher damages against a New York defendant. In both cases, New York respondents were excluded from our main analyses. See n. _ below. [Jonathan. Please confirm this paragraph is correct.]

experiment, as, in a real case, the lawyers for the plaintiff and defendant are likely to have suggested numbers similar to the ones we gave as examples in their attempts to persuade the jury to award low or high amounts.

Because Mechanical Turk has well-known issues involving data quality,[20] we ran the final version of our study using Cloud Research Prime Panels. Cloud Research screens participants for higher quality, more representative samples.[21] The final version of the experiment, like the pilot, used the Qualtrics platform. We excluded from analysis participants who failed attention checks, were not U.S. citizens, and participants who otherwise clearly indicated that they had not given proper attention to the experiment (e.g. took less than 3 minutes and gave nonsensical answers to freeform questions). The resulting dataset involved 3463 participants. In addition to the core survey questions, we collected basic demographic[22] and political information.

III. Results from the Base Experiment

One of the key issues facing analysis of our data was outliers. Although economic damages (lost wages and medical expenses) were under $700,000, some respondents awarded extremely high damages, presumably for pain and suffering and perhaps punitive damages. For example, of the 3463 respondents, there were 107 respondents who awarded more than 5 million dollars, 68 respondents who awarded 10 million dollars or more, 23 who awarded 100 million dollars or more, and two who awarded a billion dollars or more. So, although the median award was $700,000, the mean was 3.6 million. The standard deviation was also extremely high, 38 million. Without adjustment for outliers, almost no differences in means are statistically significant, and results are highly influenced by a small number of observations. On the other hand, since the outliers are more likely to be in the out-of-state condition, analysis with outliers actually magnifies bias against the out-of-state defendant.

The simplest way to adjust for outliers is to compare medians rather than means. Another technique is to winsorize the data by setting the top 5% of damages equal to the 95th percentile of damages and the bottom 5% of damages equal to the 5th percentile of damages. That is, all damages higher than $5 million were set to $5 million and all damages lower than $14,000 were set to $14,000. The main results with both of these methods are reported in Table 1 and are broadly similar.[23]

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[20] Jessie Chandler, et al, *Online panels in social science research: Expanding sampling methods beyond Mechanical Turk*, 51 BEHAVIORAL RESEARCH METHODS 2022-2038 (2019).

[21] Id.

[22] In setting out some demographic categories, we relied upon suggestions by Qualtrics and standard U.S. census categories.

[23] The number in the control group (in-state defendant) varies slightly from state to state, because participants from the relevant state are excluded. For example, when analyzing bias

Table 1. Summary of Main Results

State	Medians			Winsorized Means		
	Total (Individual and Corporate Defendant Combined)					
	In-State Defendant	*Out-of-State Defendant*	*p*	*In-State Defendant*	*Out-of-State Defendant*	*p*
California	$688,257 (1,199)	$700,000 (904)		$1,041,143 (1,199)	$1,089,884 (904)	0.361
Florida	$650,000 (1,271)	$700,000 (306)		$1,033,581 (1,271)	$1,025,463 (306)	0.914
New York	672,644 (1,312)	$750,000 (591)	*	$1,042,994 (1,312)	$1,228,653 (591)	0.003***
Texas	$672,644 (1,272)	$600,000 (299)		$1,050,805 (1,272)	$1,047,879 (299)	0.970
	Individual Defendant					
	In-State Defendant	*Out-of-State Defendant*	*p*	*In-State Defendant*	*Out-of-State Defendant*	*p*
California	$600,000 (616)	$610,000 (451)		$931,977 (616)	$990,844 (451)	0.402
Florida	$600,000 (646)	$650,000 (151)		$893,328 (646)	$938,302 (151)	0.638
New York	$600,000 (672)	$700,000 (296)	*	$921,006 (672)	$1,041,944 (296)	0.127
Texas	$600,000 (646)	$600,000 (157)		$933,554 (646)	$889,812 (157)	0.666
	Corporate Defendant					
	In-State Defendant	*Out-of-State Defendant*	*p*	*In-State Defendant*	*Out-of-State Defendant*	*p*
California	$750,000 (583)	$750,000 (453)		$1,156,488 (583)	$1,188,487 (453)	0.690

against out-of-state New York defendants, participants from New York were excluded from both the out-of-state and in-state conditions. They were excluded from the out-of-state condition for the obvious reason that a New York defendant would not be out-of-state from the perspective of a New York participant. New York participants were excluded from the in-state comparison group so that the experimental and control groups came from the same set of state and therefore were balanced and comparable. If New York residents were different in some way (e.g., tended to award more or less in damages), inclusion of such residents would bias the results. Similarly, participants from California were excluded when analyzing bias against California out-of-state defendants, and participants from Florida and Texas were excluded when bias against their defendants was analyzed. The overall number in the in-state (control group) is higher because randomization between in-state and out-of-state conditions was done separately for experiments involving each state, so there were essentially four separate experiments. Nevertheless, because the four experiments were run at the same time or close in time, and because there were no significant differences between awards in the four experiments, we pooled the in-state condition results from the four experiments when analyzing the data (except, as noted above, excluding respondents from the same state as the out-of-state defendant).

Florida	$730,000 (625)	$750,000 (155)		$1,178,547 (625)	$1,110,374 (155)	0.551
New York	$750,000 (640)	$800,000 (295)		$1,171,081 (640)	$1,415,995 (295)	0.009***
Texas	$736,629 (626)	$700,000 (142)		$1,171,802 (626)	$1,222,644 (142)	0.673

Medians tested using bootstrapping; winsorized means tested using two-sided t-tests. *** means *p*-value of < 0.01; ** means *p*-value between 0.01 and 0.05; * means *p*-value between 0.05 and 0.10. In the columns for winsorized means, awards more than $5,000,000 were set to $5,000,000 and awards less than $14,000 were set to $14,000.

Damages against out-of-state New York defendants were consistently higher than damages against in-state defendants. The difference was about 15%. When analyzing the winsorized means, the results were statistically significant at the 1% level for corporate defendants and for corporate and individual defendants combined, but not for individual defendants alone. When analyzing medians, the differences were statistically significant at the 10% level overall and for individual defendants, but not for corporate defendants. For California and Florida, there was usually evidence of bias, but the differences were small and not statistically significant. For Texas, there is no evidence of bias, and even a little evidence the people *favored* out-of-state defendants by awarding lower damages, although the effect was not statistically significant.

It is important to note that in our experiment, participants were from all states, the plaintiff was always from the participant's state, and we varied the residence of the defendant. In the control condition, the defendant was from the participant's own state. In the experimental condition, the defendant was from a different state from the participants (and plaintiff); in the experimental condition, defendants were from California, Florida, New York, or Texas. So we are comparing the damages a person from state X awarded against a defendant from state Y to how much a respondent from state X awarded against a defendant from state X. When, as for out-of-state New York defendants, we find that damages are higher, there is a possible explanation other than bias. Perhaps everyone, even New Yorkers, would award higher damages against a New York defendant, perhaps because they think New York defendants have deeper pockets. To test for this alternative explanation, we checked the damages New York participants awarded in the in-state condition (e.g., how much damages New York participants awarded when the defendant was a New Yorker). The damages were almost identical to how much people in other states awarded when the defendant was in-state. Similarly, we checked how much California, Florida, and Texas participants awarded against in-state defendants. This confirms the bias interpretation of our main results.

When looking at the medians across demographic groups, the most striking result is how consistent the bias is. Table A.1 in Appendix A.2 breaks down the results for New York out-of-state defendants by demographic characteristics. For

nearly every group, the median and winsorized award against out-of-state defendants is higher than the median award and winsorized against in-state defendants,[24] and for only one small group (those who highest education is a trade certification) is there bias in favor of the out-of-state defendant that is statistically significant at the 5% level.

The demographic feature that seems most correlated with bias against out-of-state parties is gender. Men award 20% higher median damages and 32% higher winsorized damages against out-of-state New York defendants, and the differences are statistically significant at conventional levels. In contrast, the difference for women is smaller (less than 10%) and not statistically significant. A similar pattern emerges for non-New York out-of-state defendants but is less pronounced. This is reflected in Table A.2 in Appendix A.2.

Bias does not appear to vary much by region. The difference is statistically significant only for the south and only for New York out-of-state defendants, but that reflects the greater population in the south and thus the larger number of participants from the south rather than greater bias. Similarly, bias does not seem to vary much by urban/rural residence, or by length of residence in the state, or by age. There is no consistent relationship between education, income, and employment and bias; it does not seem that bias against out-of-state defendants is correlated with high or low socio-economic status. Both Democrats and Republicans show similar levels of bias.

Our experimental manipulation was relatively subtle with respect to the residence of the parties. As can be seen in Appendix A.1, the defendant's state is mentioned only twice in the materials, and no effort was made to accentuate the defendant's out-of-state (or in-state) residence or to activate any bias the participant might have. As a result, large numbers of participants simply did not remember the defendant's residence. In the out-of-state (experimental) condition, only 60% of respondents correctly remembered the defendant's residence, and in the in-state condition 82% did. When analysis is restricted to participants who correctly remembered the defendant's state of residence, bias is more pronounced, as can be seen in Table 2.

[24] The only exceptions are for non-binary/third gender individuals, "other" racial identifications, Hispanics, those whose highest education is trade certification, those whose income is between $60,000 and $79,999, and between $80,000 and $99,999, persons unemployed or looking for work, persons not in the labor force, those for who religion is "not too important" or "not important at all." That is, of 64 demographic subgroups, only 10 showed no bias against out-of-state parties.

Table 2. Summary of Main Results for Participants who Remembered Defendant's State of Residence

State	**Medians**			**Winsorized Means**		
	Total (Individual and Corporate Defendant Combined)					
	In-State Defendant	*Out-of-State Defendant*	*p*	*In-State Defendant*	*Out-of-State Defendant*	*p*
California	$1,048,258 (1013)	$1,238,338 (546)	0.004***	$700,000 (1013)	$750,000 (546)	0.003***
Florida	$1,025,400 (1058)	$1,096,410 (182)	0.445	$695,000 (1058)	$750,000 (182)	0.024**
New York	$1,039,193 (1092)	$1,315,762 (347)	0.000***	$700,000 (1092)	$750,000 (347)	0.000***
Texas	$1,043,310 (1058)	$1,069,891 (189)	0.777	$700,000 (1058)	$700,000 (189)	0.775
	Individual Defendant					
	In-State Defendant	*Out-of-State Defendant*	*p*	*In-State Defendant*	*Out-of-State Defendant*	*p*
California	$933,860 (537)	$1,117,078 (255)	0.038**	$600,000 (537)	$700,000 (255)	0.047**
Florida	$890,353 (554)	$1,035,557 (84)	0.248	$600,000 (554)	$650,000 (84)	0.067*
New York	$912,850 (576)	$1,064,494 (166)	0.122	$600,000 (576)	$700,000 (166)	0.018**
Texas	$929,659 (554)	$884,548 (96)	0.717	$600,000 (554)	$595,000 (96)	0.464
	Corporate Defendant					
	In-State Defendant	*Out-of-State Defendant*	*p*	*In-State Defendant*	*Out-of-State Defendant*	*p*
California	$1,177,317 (476)	$1,344,596 (291)	0.085*	$750,000 (476)	$850,000 (291)	0.066*
Florida	$1,173,845 (504)	$1,148,570 (98)	0.852	$750,000 (504)	$800,000 (98)	0.288
New York	$1,180,227 (516)	$1,546,207 (181)	0.001***	$750,000 (516)	$1,000,000 (181)	0.002***
Texas	$1,168,237 (504)	$1,261,214 (93)	0.508	$750,000 (504)	$ 750,000 (93)	0.771

Medians tested using Wilcoxen test [bootstrapping will be done soon]; winsorized means tested using two-sided t-tests. *** means *p*-value of < 0.01; ** means *p*-value between 0.01 and 0.05; * means *p*-value between 0.05 and 0.10. In the columns for winsorized means, awards more than $5,000,000 were set to $5,000,000 and awards less than $14,000 were set to $14,000.

As in the full sample, bias against out-of-state New York defendants is large and statistically significant at conventional levels. However, unlike the analysis of the full sample in Table 2, when analysis is restricted to those who remembered the defendant's state of residence, bias against California out-of-state residence is now similar to that for New York, and statistically significant at conventional levels when individual and corporate defendants are analyzed together. When individual and corporate defendants are analyzed separately, there are similar levels of bias, but because of the smaller sample sizes, the differences are not statistically significant at conventional levels. For Florida, out-of-state defendants, damages against out-of-state defendants are usually higher, although only sometimes statistically significant. For Texas, there remains no evidence of bias, even when analysis is restricted to those who remembered the state of defendant's residence.

This analysis suggests that a key issue might be salience. People remember information that is salient, and when participants remembered defendant's residence, they were more likely to exhibit bias. Nevertheless, the fact that people who remember the defendant's state are more likely to exhibit bias may not show that salience matters. Perhaps people who are unbiased don't pay attention to defendant's residence and therefore don't remember it. If so, increasing salience may simply cause unbiased persons to remember the defendant's residence, but may not change the results at all. In the next section, we described an experiment in which we manipulated salience in order to confirm that bias is a function of salience.

IV. Salience: The Second Experiment

In a second experiment, we explicitly varied the salience of information about a defendant's residence. To increase our power in this experiment, defendants were either from California or the participant's home state; no defendants were from Florida, Texas, or New York, unless that was the participant's home state. Also in order to increase power, the defendant was aways a corporation. The experiment was thus a 2x2 in which the defendant's residence (in-state or California) and salience (residence emphasized or not) were manipulated. The vignettes were identical to those in the base experiment, except we provided tables summarizing the facts. In the non-salient condition, the table does not mention the defendant's residence. In the salient condition, the defendant's residence is mentioned. Figures 1 and 2 show the summary tables, with the difference between the salient and non-salient conditions highlighted in yellow. There was no yellow highlighting in the versions that participants saw.

Figure 1. Summary Table, Non-Salient Condition

The following table summarizes the facts:

Lauren Williams	**Tufon Products**
• Not at fault for accident	• Admitted fault for accident • Negligently failed to maintain and repair brakes
• Major injuries to head, legs, and back • Enormous pain in jaw for several hours • Will walk with limp for rest of life • Will have back pain for rest of life • Medical expenses: $574,257.34 • Lost income: $14,000	

Figure 2: Summary Table, Salient Condition

The following table summarizes the facts:

Lauren Williams (Alabama resident)	**Tufon Products** (Alabama corporation)
• Not at fault for accident	• Admitted fault for accident • Negligently failed to maintain and repair brakes
• Major injuries to head, legs, and back • Enormous pain in jaw for several hours • Will walk with limp for rest of life • Will have back pain for rest of life • Medical expenses: $574,257.34 • Lost income: $14,000	

Notes. Yellow highlighting was added for this paper, but participants did not see any highlighting.

Both conditions also included some questions about the vignette. In the salient condition, one of the questions was about the plaintiff's residence and one was about the defendant's residence. In the non-salient condition, there were no questions about the parties' residence. Appendix B shows the questions and their physical relationship to the summary tables. Table 3 shows the results.

Table 3. Results from the Salience Experiment

State	Medians			Winsorized Means		
	In-State Defendant	Out-of-State Defendant	*p*	In-State Defendant	Out-of-State Defendant	*p*
Non-Salient Condition	$ 900,166 (286)	$ 750,000 (280)		$1,659,166 (286)	$1,616,449 (280)	0.798
Salient Condition	$ 700,000 (290)	$ 900,000 (289)	**	$1,374,727 (290)	$1,621,306 (289)	0.107
TOTAL	$ 750,000 (576)	$ 800,000 (569)		$1,515,959 (576)	$1,618,916 (569)	0.362

Note: Medians tested using bootstrapping; winsorized means tested using two-sided t-tests. *** means *p*-value of < 0.01; ** means *p*-value between 0.01 and 0.05; * means *p*-value between 0.05 and 0.10. In the columns for winsorized means, awards more than $8,000,000 were set to $8,000,000 and awards less than $2,000 were set to $2,000.

As can be seen, damages were considerably higher against out-of-state defendants in the salient condition. The difference in medians was $200,000 or almost 30%. The difference was statistically significant at the 5% level using bootstrapping. The difference in winsorized means was even larger (almost $250,000), but the p-value was just over 0.10.[25]

In the non-salient condition, the damages were *lower* in the out-of-state condition, which is strange. Nevertheless, the differences are not statistically significant for medians or for winsorized means. Thus, it is best to view the results of the non-salient condition as implying that damages for in-state and out-of-state defendants were roughly equal.

These results suggest that salience may be the key to bias against out-of-state litigants. When the defendant's residence is made salient, jurors exhibit bias. When the defendant's residence is not salient, there is no evidence of bias. This means that federal courts may be able to control juror bias by limiting lawyer arguments that would mention or emphasize a party's residence.

[25] We also winsorized the top 10% and bottom 10% ($200,000 and $4,000,000), because the top and bottom 5% ($4000 and $8,000,000) both seemed absurd. When we winsorized to the top and bottom 10%, the difference in means had a p-value of 0.004 (1,180,056 v 1,388.029) in the salient condition, and the p-value for the non-salient condition was well above 0.10.

V. Future Research

Our results indicate that federal diversity jurisdiction continues to perform a useful function in today's society. We hope to further confirm our findings in the coming months by measuring the importance of salience by replicating the experiment described above using defendants from Florida and Texas rather than California defendants. In doing so, we will measure self-reported bias against out-of-state residents to confirm the plausibility that juror decisions on damages reflect bias.[26]

The research here also suggests avenues for further research that we plan to undertake. First, we will analyze the extent to which federal and state courts limit lawyer arguments mentioning or emphasizing a party's residence using both analysis of cases and experiments involving federal and state judges. As noted above, this relates to the hypothesis that federal courts mitigate bias by reducing the salience of the parties' residence.

Second, we will explore whether bias is regional. That is, are people biased against all persons who are not from their state, or only people who are from outside their region. It might be, for example, that Iowans are biased against people from the south, west, or northeast, but not against people from other midwestern states.

Third, we will explore whether there is bias against out-of-state plaintiffs as well as out-of-state defendants. With the flow of potential damage payments now directed out-of-state, there is reason to think that there could be bias here as well.

Fourth, we will explore whether bias against out-of-state corporations depends on the location of its headquarters, where the "bulk of its business" is located, its place of incorporation, or whether it has a substantial number of employees in state. This issue might help determine whether the U.S. Supreme Court was correct in *Hertz* v. *Friend*[27] to determine the "principal place of business" and thus citizenship of a corporation based on its "nerve center" or headquarters. Our experiments might suggest better ways of defining corporate citizenship.

Fifth, we will explore whether bias against out-of-state parties is reduced or eliminated when a co-party is from the forum state. For example, are Alabama jurors less likely to exhibit bias against a New York defendant when there is also an Alabama defendant in the case? This will help determine whether the complete diversity rule[28] is justified.

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[26] We also plan more sophisticated analysis of our data, including regression analysis. We will also complete our bootstrapping analysis of statistical significance.

[27] 599 U.S. 77 (2010).

[28] *See Strawbridge* v *Curtiss*, 7 U.S. 267 (1806) (Marshall, C.J.). *See also* Daniel Klerman & Jonathan R. Nash, "Aligning Diversity Jurisdiction with Its Bias Rationale" (draft).

Finally, we will explore whether bias against out-of-state parties depends on the amount at stake. Analysis of this question would shed light on the question of whether the amount-in-controversy requirement can be justified by variation in bias.

Conclusion

Our results suggest some bias against out-of-state litigants. This bias is clearest for New York defendants, but there is also some evidence for bias against other states when analysis is restricted to those who remember the defendant's state of residence. The bias is also stronger when information about the litigant's out-of-state residence is salient (emphasized), which suggests that federal courts may reduce bias by restricting lawyer arguments that make a party's residence more salient. These results provide some support for the bias rational for federal diversity jurisdiction.

Appendix A.1

Version 1: Individual Defendant:

Please assume that you are a juror in the following civil case. Michelle Johnson, a 40-year-old [state1] resident, got into a car accident in [state2] with Lauren Williams, a 25-year-old resident of [state2]. Michelle suffered only minor injuries and recovered swiftly. Lauren suffered major injuries to her head, legs, and back. She was trapped in the car for several hours. Emergency workers did not remove her immediately because they thought moving her would aggravate the injury to her back. During the time she was trapped in her car, Lauren endured enormous pain in her jaw. After emergency workers removed her from the car, Lauren was hospitalized for four weeks, and the injuries to her jaw, leg, and back required multiple surgeries. Her medical expenses were $574,257.34. The treatments were successful in that, after four months, she regained sufficient use of her legs, jaw, and back to perform ordinary tasks of daily living and to return to her job. Nevertheless, doctors predict she will walk with a limp and continue to have mild back pain for the rest of her life. Lauren's salary was $3,500 per month, and the accident caused her to lose four months of income or $14,000.

Lauren Williams, the injured 25-year-old [state2] resident, sued Michelle Johnson, the 40-year-old [state1] resident, alleging that Michelle negligently failed to maintain and repair the brakes on her car and that this negligence caused the accident. Michelle Johnson admitted that she was at fault. The only issue for the jury is the amount of compensatory damages (money) that Michelle Johnson should have to pay Lauren Williams. The judge has instructed you:

> You must determine an amount that is fair compensation for all of the plaintiff, Lauren Williams's, damages. These damages are called compensatory damages. The purpose of compensatory damages is to make the plaintiff whole – that is, to compensate the plaintiff for the damage the plaintiff has suffered. Compensatory damages are not limited to expenses that the plaintiff may have incurred because of her injury. The plaintiff is entitled to compensatory damages for the medical expenses, lost income, physical injury, pain and suffering, mental anguish, shock, and discomfort that she has suffered because of the conduct of the defendant, Michelle Johnson. The compensatory damages must be fair compensation for all of the plaintiff's damages, no more and no less. Damages are not allowed as a punishment and cannot be imposed or increased to penalize the defendant, Michelle Johnson. Injured persons are entitled to compensation for medical expenses, even if they are insured and even if the insurance company or some other entity pays the medical bills. You should be guided by dispassionate common sense. Computing damages may be difficult, but you must not let that difficulty lead you to engage in arbitrary

> guesswork. On the other hand, the law does not require proof of loss with mathematical precision, but only with as much definitiveness and accuracy as the circumstances permit.

How much would you award Lauren Williams in compensatory damages? Please do NOT include a dollar sign ($) in your answer. Please DO include commas to separate thousands and millions (e.g., 600,000 or 3,000,000).

_____

The number you awarded in damages in response to the previous question was $[response to previous question]. Please write out that number in words, as you would on a check. For example, if the number was "600,000," you would type "six hundred thousand" in the box below. Similarly, if the number was "3,000,000," you would type "three million" in the box below.

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Version 2. Corporate Defendant:

[Differences from Version 1 (Individual Defendant) are highlighted in yellow]:

Please assume that you are juror in the following civil case. Michelle Johnson, a 40-year-old, got into a car accident in [state2] with Lauren Williams, a 25-year-old resident of [state2]. Michelle was driving a car provided by her employer, Tufon Products Inc, which is based in [state1]. Michelle suffered only minor injuries and recovered swiftly. Lauren suffered major injuries to her head, legs, and back. She was trapped in the car for several hours. Emergency workers did not remove her immediately because they thought moving her would aggravate the injury to her back. During the time she was trapped in her car, Lauren endured enormous pain in her jaw. After emergency workers removed her from the car, Lauren was hospitalized for four weeks, and the injuries to her jaw, leg, and back required multiple surgeries. Her medical expenses were $574,257.34. The treatments were successful in that, after four months, she regained sufficient use of her legs, jaw, and back to perform ordinary tasks of daily living and to return to her job. Nevertheless, doctors predict she will walk with a limp and continue to have mild back pain for the rest of her life. Lauren's salary was $3,500 per month, and the accident caused her to lose four months of income or $14,000.

Lauren Williams, the injured 25-year-old [state2] resident, sued Tufon Products Inc., Michelle Johnson's [state1]-based employer and the owner of the car, alleging that Tufon Products Inc. negligently failed to maintain and repair the brakes on its car and that this negligence caused the accident. Tufon Products Inc. admitted that

it was at fault. The only issue for the jury is the amount of compensatory damages (money) that Tufon Products Inc. should have to pay Lauren Williams. The judge has instructed you:

> You must determine an amount that is fair compensation for all of the plaintiff, Lauren Williams's, damages. These damages are called compensatory damages. The purpose of compensatory damages is to make the plaintiff whole – that is, to compensate the plaintiff for the damage the plaintiff has suffered. Compensatory damages are not limited to expenses that the plaintiff may have incurred because of her injury. The plaintiff is entitled to compensatory damages for the medical expenses, lost income, physical injury, pain and suffering, mental anguish, shock, and discomfort that she has suffered because of the conduct of the defendant, Tufon Products Inc. The compensatory damages must be fair compensation for all of the plaintiff's damages, no more and no less. Damages are not allowed as a punishment and cannot be imposed or increased to penalize the defendant, Tufon Products Inc. Injured persons are entitled to compensation for medical expenses, even if they are insured and even if the insurance company or some other entity pays the medical bills. You should be guided by dispassionate common sense. Computing damages may be difficult, but you must not let that difficulty lead you to engage in arbitrary guesswork. On the other hand, the law does not require proof of loss with mathematical precision, but only with as much definitiveness and accuracy as the circumstances permit.

How much would you award Lauren Williams in compensatory damages? Please do NOT include a dollar sign ($) in your answer. Please DO include commas to separate thousands and millions (e.g., 600,000 or 3,000,000).

The number you awarded in damages in response to the previous question was $[response to previous question]. Please write out that number in words, as you would on a check. For example, if the number was "600,000," you would type "six hundred thousand" in the box below. Similarly, if the number was "3,000,000," you would type "three million" in the box below.

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Appendix A.2

Table A.1. New York Data with Demographics

	Median Awards			*Winsorized Mean Awards*		
	In-State Defendant	Out-of-State Defendant	*p*	In-State Defendant	Out-of-State Defendant	*p*
TOTAL	$ 672,644 (1312)	$ 750,000 (591)	*	$ 1,042,944 (1312)	$ 1,228,653 (591)	0.003***
Defendant type						
Individual defendant	$ 600,000 (672)	$ 700,000 (296)	*	$ 921,006 (672)	$ 1,041,944 (296)	0.127
Corporate defendant	$ 750,000 (640)	$ 800,000 (295)		$ 1,171,081 (640)	$ 1,415,995 (295)	0.009***
Region						
Northeast	$ 700,000 (144)	$1,000,000 (65)	*	$ 1,042,264 (144)	$ 1,172,958 (65)	0.468
South	$ 688,257 (559)	$ 750,000 (266)	**	$ 1,024,955 (559)	$ 1,230,336 (266)	0.022**
Midwest	$ 700,000 (301)	$ 700,000 (148)		$ 1,026,028 (301)	$ 1,174,442 (148)	0.238
West	$ 631,000 (308)	$ 700,000 (112)		$ 1,092,655 (308)	$ 1,328,439 (112)	0.112
Urban/Rural						
Rural	$ 700,000 (318)	$ 750,000 (142)		$ 996,212 (318)	$ 1,179,049 (142)	0.120
Town/small city	$ 695,000 (261)	$ 750,000 (129)		$ 1,068,657 (261)	$ 1,292,014 (129)	0.103
Medium city	$ 650,000 (190)	$ 750,000 (87)		$ 1,028,754 (190)	$ 1,087,329 (87)	0.705
Suburban	$ 700,000 (361)	$ 750,000 (166)		$ 1,135,805 (361)	$ 1,278,328 (166)	0.252
Urban core	$ 600,000 (182)	$ 750,000 (67)		$ 918,705 (182)	$ 1,272,228 (67)	0.045**
Length of residence in the state						
Born there	$ 600,000 (767)	$ 700,000 (320)	0.181	$ 1,003,389 (767)	$ 1,101,286 (320)	0.215
Moved there more than 10 years ago	$ 750,000 (375)	$ 800,000 (180)	0.050*	$ 1,172,074 (375)	$ 1,417,035 (180)	0.047**
Moved there 5-10 years ago	$ 700,000 (77)	$ 850,000 (40)	0.123	$ 1,107,779 (77)	$ 1,302,581 (40)	0.442
Moved there within the last 5 years	$ 600,000 (93)	$ 700,000 (51)	0.057*	$ 795,507 (93)	$ 1,304,961 (51)	0.010**
Age						
18 – 24	$ 588,650 (98)	$ 600,000 (46)	0.202	$ 715,890 (98)	$ 888,826 (46)	0.292
25 – 34	$ 600,000 (241)	$ 600,000 (101)	0.953	$ 829,020 (241)	$ 829,951 (101)	0.994
35 – 44	$ 600,000 (301)	$ 625,000 (110)	0.848	$ 902,189 (301)	$ 916,476 (110)	0.904
45 – 54	$ 700,000 (205)	$ 875,000 (83)	0.088*	$ 1,027,025 (205)	$ 1,270,450 (83)	0.102
55 – 64	$ 750,000 (186)	$1,000,000 (85)	0.074*	$ 1,312,332 (186)	$ 1,615,379 (85)	0.114
65 – 74	$ 850,000 (204)	$1,000,000 (126)	0.017**	$ 1,281,894 (204)	$ 1,621,143 (126)	0.031**
75 - 84	$1,000,000 (70)	$1,000,000 (34)	0.938	$ 1,479,054 (70)	$ 1,437,588 (34)	0.896
85 and older	$ 750,000 (7)	$ 600,000 (6)	0.710	$ 1,032,037 (7)	$ 785,667 (6)	0.601
Gender						
Female	$ 650,000 (791)	$ 700,000 (353)	**	$ 1,010,529 (791)	$ 1,115,442 (353)	0.176
Male	$ 700,000 (509)	$ 891,193 (232)		$ 1,076,325 (509)	$ 1,415,063 (232)	0.001***
Non-binary/third gender	$ 615,000 (11)	$ 750,000 (5)		$ 1,532,323 (11)	$ 777,652 (5)	0.347
Racial identification						
American Indian or Alaska Native	$ 645,000 (18)	$ 640,000 (9)	0.368	$ 1,104,333 (18)	$ 490,889 (9)	0.197

Asian	$ 574,000 (35)	$ 625,000 (20)	0.071*	$ 654,286 (35)	$ 1,137,578 (20)	0.090*
Black or African American	$ 600,000 (130)	$ 600,000 (51)	0.957	$ 898,154 (130)	$ 960,539 (51)	0.752
Native Hawaiian or Pacific Islander	$ 600,000 (4)	$3,500,000 (2)	0.133	$ 623,500 (4)	$ 3,000,000 (2)	0.125
White	$ 700,000 (1081)	$ 750,000 (497)	0.001***	$ 1,055,030 (1081)	$ 1,263,498 (497)	0.002***
Other	$ 800,000 (41)	$ 250,000 (8)	0.419	$ 1,436,927 (41)	$ 1,454,250 (8)	0.978
Ethnicity						
Hispanic or Latino	$ 650,000 (85)	$ 675,000 (40)	0.890	$ 1,172,097 (85)	$ 1,174,555 (40)	0.993
Not Hispanic or Latino	$ 689,500 (1206)	$ 750,000 (541)	0.002***	$ 1,035,419 (1206)	$ 1,230,467 (541)	0.002***
Education						
Some high school, but didn't graduate	$ 600,000 (51)	$ 850,000 (14)	0.352	$ 1,009,418 (51)	$ 984,214 (14)	0.950
High school graduate	$ 600,000 (330)	$ 700,000 (167)	0.066*	$ 959,391 (330)	$ 1,262,879 (167)	0.007***
Some college, but didn't graduate	$ 700,000 (329)	$ 800,000 (136)	0.036**	$ 1,082,500 (329)	$ 1,296,002 (136)	0.104
Trade Certification	$ 725,000 (36)	$ 600,000 (11)	0.083*	$ 1,387,674 (36)	$ 664,000 (11)	0.069**
2-year college degree	$ 694,500 (150)	$ 825,000 (74)	0.053*	$ 1,001,614 (150)	$ 1,303,491 (74)	0.080*
4-year college degree	$ 700,000 (263)	$ 700,000 (129)	0.828	$ 1,122,300 (263)	$ 1,142,891 (129)	0.880
Graduate/ professional degree	$ 650,000 (153)	$ 750,000 (59)	0.033**	$ 972,698 (153)	$ 1,250,895 (59)	0.135
Family income						
Less than $19,999	$ 600,000 (245)	$ 750,000 (112)	0.068*	$ 1,068,867 (245)	$ 1,172,278 (112)	0.495
Between $20,000 and $39,999	$ 600,000 (368)	$ 750,000 (176)	0.029**	$ 941,355 (368)	$ 1,238,195 (176)	0.006***
Between $40,000 and $59,999	$ 675,000 (250)	$ 950,000 (95)	0.108	$ 1,065,590 (250)	$ 1,182,065 (95)	0.398
Between $60,000 and $79,999	$ 750,000 (139)	$ 700,000 (75)	0.649	$ 1,268,632 (139)	$ 1,243,964 (75)	0.908
Between $80,000 and $99,999	$ 725,000 (78)	$ 594,129 (42)	0.252	$ 986,424 (78)	$ 948,792 (42)	0.839
Between $100,000 and $124,999	$ 750,000 (73)	$ 900,000 (23)	0.121	$ 923,086 (73)	$ 1,624,807 (23)	0.009***
Between 125,000 and $149,999	$ 900,000 (48)	$1,000,000 (25)	0.500	$ 1,352,960 (48)	$ 1,430,809 (25)	0.844
$150,000 or more	$ 600,000 (87)	$ 700,000 (27)	0.059*	$ 842,020 (87)	$ 1,364,380 (27)	0.041**
Employment status						
Full-time employee	$ 600,000 (466)	$ 650,000 (198)	0.430	$ 901,071 (466)	$ 1,055,783 (198)	0.093*
Part-time employee	$ 600,000 (120)	$ 700,000 (46)	0.076*	$ 924,440 (120)	$ 1,179,651 (46)	0.222
Self-employed/ small business owner	$ 700,000 (91)	$ 800,000 (30)	0.360	$ 1,172,231 (91)	$ 1,353,842 (30)	0.533

Student	$ 590,000 (39)	$ 650,000 (10)	0.367	$ 796,592 (39)	$ 1,055,226 (10)	0.526
Unemployed or looking for work	$ 600 000 (144)	$ 600,000 (63)	0.748	$ 982,435 (144)	$ 1,009,076 (63)	0.884
Not in the labor force	$ 700,000 (109)	$ 700,000 (57)	0.759	$ 1,157,646 (109)	$ 1,044,248 (57)	0.592
Retired	$ 800,000 (324)	$1,000,000 (180)	0.004***	$ 1,274,259 (324)	$ 1,569,030 (180)	0.022**
Political party						
Democrat	$ 600,000 (476)	$ 750,000 (193)	**	$ 1,019,698 (476)	$ 1,309,728 (193)	0.008***
Republican	$ 750,000 (389)	$ 800,000 (180)		$ 1,051,929 (389)	$ 1,275,664 (180)	0.038**
Independent	$ 692,500 (398)	$ 700,000 (191)	0	$ 1,062,849 (398)	$ 1,055,583 (191)	0.945
Importance of religion						
Very important	$ 700,000 (438)	$ 750,000 (178)	0.066*	$ 1,026,544 (438)	$ 1,266,482 (178)	0.027**
Moderately important	$ 600,000 (222)	$ 750,000 (96)	0.032**	$ 1,025,557 (222)	$ 1,149,659 (96)	0.403
Somewhat important	$ 695,000 (213)	$ 750,000 (105)	0.175	$ 997,841 (213)	$ 1,274,095 (105)	0.046**
Not too important	$ 750,000 (163)	$ 700,000 (69)	0.466	$ 1,246,336 (163)	$ 1,056,334 (69)	0.334
Not important at all	$ 650,000 (241)	$ 750,000 (131)	0.039**	$ 937,703 (241)	$ 1,308,908 (131)	0.006***

Differences in medians tested using bootstrapping. [Bootstrapping analysis is in process. Results of the Wilcoxen test are reported where we do not yet have bootstrapped results. The Wilcoxen results can be identified by the fact that they have precise p-values (e.g. 0.066) rather than just asterisks noting the range of possible p-values]; winsorized means tested using two-sided t-tests. *** means *p*-value of < 0.01; ** means *p*-value between 0.01 and 0.05; * means *p*-value between 0.05 and 0.10. In the columns for winsorized means, awards more than $5,000,000 were set to $5,000,000 and awards less than $14,000 were set to $14,000.

Table A.2. Non-New York Data with Demographics

	Median Awards			*Winsorized Mean Awards*		
	In-State Defendant	Out-of-State Defendant	*p*	In-State Defendant	Out-of-State Defendant	*p*
TOTAL	$ 654,832 (1363)	$ 666,000 (1509)		$ 1,043,872 (1363)	$ 1,068,497 (1509)	0.584
Defendant type						
Individual defendant	$ 600,000 (697)	$ 600,000 (759)		$ 920,140 (697)	$ 959,492 (759)	0.502
Corporate defendant	$ 746,629 (666)	$ 750,000 (750)		$ 1,173,363 (666)	$ 1,178,811 (750)	0. 936
Region						
Northeast	$ 675,000 (195)	$ 650,000 (268)		$ 1,048,592 (195)	$ 956,571 (268)	0.401
South	$ 688,257 (559)	$ 650,000 (675)		$ 1,024,955 (559)	$ 1,093,185 (675)	0.328
Midwest	$ 700,000 (301)	$ 750,000 (374)		$ 1,026,028 (301)	$ 1,099,406 (374)	0.413
West	$ 631,000 (308)	$ 600,000 (192)		$ 1,092,655 (308)	$ 1,077,728 (192)	0.898
Urban/Rural						
Rural	$ 700,000 (322)	$ 700,000 (337)		$ 1,012,097 (322)	$ 1,049,337 (337)	0.669
Town/small city	$ 700,000 (266)	$ 700,000 (301)		$ 1,063,660 (266)	$ 1,135,408 (301)	0.493
Medium city	$ 650,000 (193)	$ 700,000 (252)		$ 1,026,303 (193)	$ 1,070,197 (252)	0.704
Suburban	$ 700,000 (374)	$ 650,000 (395)		$ 1,132,328 (374)	$ 1,088,196 (395)	0.625
Urban core	$ 600,000 (208)	$ 600,000 (224)		$ 925,006 (208)	$ 970,703 (224)	0.691
Length of residence in the state						
Born there	$ 600,000 (805)	$ 650,000 (875)	0.665	$ 999,229 (805)	$ 1,033,145 (875)	0.558
Moved there more than 10 years ago	$ 750,000 (385)	$ 750,000 (414)	0.899	$ 1,183,992 (385)	$ 1,133,427 (414)	0.568
Moved there 5-10 years ago	$ 700,000 (78)	$ 650,000 (79)	0.725	$ 1,101,269 (78)	$ 1,151,826 (79)	0.805
Moved there within the last 5 years	$ 600,000 (95)	$ 688,257 (141)	0.178	$ 807,181 (95)	$ 1,050,553 (141)	0.099*
Age						
18 – 24	$ 588,300 (103)	$ 588,257 (143)	0.438	$ 704,568 (103)	$ 645,373 (143)	0.590
25 – 34	$ 600,000 (251)	$ 600,000 (273)	0.578	$ 812,099 (251)	$ 799,615 (273)	0.891
35 – 44	$ 600,000 (323)	$ 603,000 (364)	0.521	$ 935,411 (323)	$ 982,746 (364)	0.583
45 – 54	$ 700,000 (208)	$ 737,500 (244)	0.247	$ 1,018,895 (208)	$ 1,173,315 (244)	0.161
55 – 64	$ 763,889 (192)	$ 900,000 (211)	0.444	$ 1,310,384 (192)	$ 1,350,897 (211)	0.770
65 – 74	$ 900,000 (206)	$ 900,000 (214)	0.467	$ 1,284,011 (206)	$ 1,324,919 (214)	0.743
75 - 84	$1,000,000 (73)	$ 925,000 (58)	0.918	$ 1,493,120 (73)	$ 1,517,221 (58)	0.930
85 and older	$ 750,000 (7)	$ 600,000 (2)	0.889	$ 1,032,037 (7)	$ 600,000 (2)	0.550
Gender						
Female	$ 650,000 (815)	$ 620,000 (957)		$ 1,005,980 (815)	$ 1,009,798 (957)	0.946
Male	$ 700,000 (535)	$ 750,000 (530)		$ 1,086,156 (535)	$ 1,176,849 (530)	0.236
Non-binary/third gender	$ 607,500 (12)	$ 600,000 (19)		$ 1,454,630 (12)	$ 981,891 (19)	0.343
Racial identification						
American Indian or Alaska Native	$ 645,000 (18)	$ 600,000 (21)	0.961	$ 1,104,333 (18)	$ 1,195,060 (21)	0.844
Asian	$ 587,000 (36)	$ 600,000 (51)	0.641	$ 663,889 (36)	$ 1,057,436 (51)	0.152

Black or African American	$ 600,000 (133)	$ 600,000 (199)	0.461	$ 888,233 (133)	$ 942,082 (199)	0.679
Native Hawaiian or Pacific Islander	$ 600,000 (4)	$ 250,000 (1)	0.400	$ 623,500 (4)	$ 250,000 (1)	
White	$ 700,000 (1126)	$ 750,000 (1182)	0.242	$ 1,059,012 (1126)	$ 1,095,496 (1182)	0.466
Other	$ 700,500 (43)	$ 600,000 (43)	0.187	$ 1,371,349 (43)	$ 913,099 (43)	0.103
Ethnicity						
Hispanic or Latino	$ 600,000 (87)	$ 600,000 (104)	0.418	$ 1,152,374 (87)	$ 1,019,102 (104)	0.483
Not Hispanic or Latino	$ 688,500 (1255)	$ 700,000 (1383)	0.335	$ 1,037,829 (1255)	$ 1,074,821 (1383)	0.428
Education						
Some high school, but didn't graduate	$ 600,000 (51)	$ 600,000 (66)	0.672	$ 1,009,418 (51)	$ 751,935 (66)	0.202
High school graduate	$ 600,000 (335)	$ 600,000 (403)	0.616	$ 969,557 (335)	$ 951,895 (403)	0.828
Some college, but didn't graduate	$ 700,000 (333)	$ 670,000 (347)	0.854	$ 1,076,146 (333)	$ 1,075,161 (347)	0.992
Trade Certification	$ 725,000 (36)	$ 750,000 (37)	0.569	$ 1,387,674 (36)	$ 1,427,318 (37)	0.906
2-year college degree	$ 669,500 (154)	$ 750,000 (185)	0.086*	$ 984,462 (154)	$ 1,235,554 (185)	0.062*
4-year college degree	$ 730,000 (275)	$ 750,000 (312)	0.846	$ 1,130,963 (275)	$ 1,123,951 (312)	0.946
Graduate/ professional degree	$ 600,000 (179)	$ 694,129 (154)	0.242	$ 980,898 (179)	$ 1,101,073 (154)	0.374
Family income						
Less than $19,999	$ 600,000 (250)	$ 600,000 (257)	0.740	$ 1,070,102 (250)	$ 1,029,462 (257)	0.726
Between $20,000 and $39,999	$ 600,000 (374)	$ 650,000 (407)	0.198	$ 938,295 (374)	$ 1,080,272 (407)	0.086*
Between $40,000 and $59,999	$ 687,500 (256)	$ 700,000 (276)	0.442	$ 1,061,276 (256)	$ 989,027 (276)	0.461
Between $60,000 and $79,999	$ 750,000 (142)	$ 750,000 (184)	0.889	$ 1,289,717 (142)	$ 1,127,962 (184)	0.278
Between $80,000 and $99,999	$ 700,000 (80)	$ 694,129 (122)	0.642	$ 971,763 (80)	$ 1,075,136 (122)	0.509
Between $100,000 and $124,999	$ 750,000 (78)	$ 700,000 (77)	0.798	$ 943,978 (78)	$ 1,088,961 (77)	0.372
Between 125,000 and $149,999	$ 750,000 (56)	$ 850,000 (52)	0.446	$ 1,235,573 (56)	$ 1,332,159 (52)	0.720
$150,000 or more	$ 600,000 (101)	$ 650,000 (83)	0.406	$ 921,443 (101)	$ 1,076,696 (83)	0.392
Employment status						
Full-time employee	$ 600,000 (495)	$ 650,000 (528)	0.475	$ 896,128 (495)	$ 979,978 (528)	0.214
Part-time employee	$ 600,000 (125)	$ 600,000 (46)	0.414	$ 902,862 (125)	$ 978,528 (151)	0.593
Self-employed/ small business owner	$ 700,000 (92)	$ 600,000 (112)	0.154	$ 1,170,359 (92)	$ 1,022,256 (112)	0.411
Student	$ 590,000 (39)	$ 600,000 (50)	0.946	$ 796,592 (39)	$ 748,459 (50)	0.814

Unemployed or looking for work	$ 600 000 (148)	$ 600,000 (169)	0.512	$ 1,027,599 (148)	$ 841,595 (169)	0.152
Not in the labor force	$ 700,000 (113)	$ 750,000 (155)	0.376	$ 1,145,006 (113)	$ 1,280,788 (155)	0.420
Retired	$ 800,000 (332)	$ 975,000 (308)	0.211	$ 1,285,614 (332)	$ 1,345,195 (308)	0.568
Political party						
Democrat	$ 600,000 (507)	$ 650,000 (535)		$ 1,015,748 (507)	$ 993,848 (535)	0.767
Republican	$ 700,500 (397)	$ 700,000 (457)		$ 1,046,132 (397)	$ 1,173,617 (457)	0.119
Independent	$ 700,000 (409)	$ 650,000 (459)		$ 1,078,467 (409)	$ 1,055,797 (459)	0.785
Importance of religion						
Very important	$ 700,000 (462)	$ 625,000 (515)	0.802	$ 1,034,061 (462)	$ 1,051,178 (515)	0.819
Moderately important	$ 600,000 (228)	$ 700,000 (221)	0.208	$ 1,033,867 (228)	$ 1,039,250 (221)	0.962
Somewhat important	$ 700,000 (221)	$ 700,000 (254)	0.740	$ 1,006,064 (221)	$ 1,048,461 (254)	0.682
Not too important	$ 750,000 (168)	$ 650,000 (184)	0.461	$ 1,216,856 (168)	$ 1,088,420 (184)	0.377
Not important at all	$ 650,000 (249)	$ 700,000 (306)	0.085*	$ 936,300 (249)	$ 1,125,305 (306)	0.065*

Differences in medians tested using bootstrapping. [Bootstrapping analysis is in process. Results of the Wilcoxen test are reported where we do not yet have bootstrapped results. The Wilcoxen results can be identified by the fact that they have precise p-values (e.g. 0.066) rather than just asterisks noting the range of possible p-values]; winsorized means tested using two-sided t-tests. *** means *p*-value of < 0.01; ** means *p*-value between 0.01 and 0.05; * means *p*-value between 0.05 and 0.10. In the columns for winsorized means, awards more than $5,000,000 were set to $5,000,000 and awards less than $14,000 were set to $14,000.

Appendix B.1. Sample Salient Condition

Below please find a screenshot for the salient condition, in which the residence of the parties is emphasized. The table and questions would immediately follow the jury instructions, which can be found on pages 18-19. This screenshot is for the, in-state defendant condition. Aspects that are different form the non-salient condition are highlighted. For a sample of the non-salient condition, see Appendix B.2.

The following table summarizes the facts:

Lauren Williams (Alabama resident)	**Tufon Products** (Alabama corporation)
• Not at fault for accident	• Admitted fault for accident • Negligently failed to maintain and repair brakes
• Major injuries to head, legs, and back • Enormous pain in jaw for several hours • Will walk with limp for rest of life • Will have back pain for rest of life • Medical expenses: $574,257.34 • Lost income: $14,000	

What is the name of the corporation at fault for the accident?

In what state is Tufon Products based?

What is the name of the injured person?

In what state does Lauren Williams reside?

In what part of her body will Lauren Williams have pain for the rest of her life?

Now that we have confirmed your understanding of the facts, how much would you award Lauren Williams in compensatory damages? Please do NOT include a dollar sign ($) in your answer. Please DO include commas to separate thousands and millions (e.g., 600,000 or 3,000,000).

Appendix B.2. Sample Non-Salient Condition

The following table summarizes the facts:

Lauren Williams	**Tufon Products**
• Not at fault for accident	• Admitted fault for accident • Negligently failed to maintain and repair brakes
• Major injuries to head, legs, and back • Enormous pain in jaw for several hours • Will walk with limp for rest of life • Will have back pain for rest of life • Medical expenses: $574,257.34 • Lost income: $14,000	

What is the name of the corporation at fault for the accident?

What is the name of the injured person?

In what part of her body will Lauren Williams have pain for the rest of her life?

Now that we have confirmed your understanding of the facts, how much would you award Lauren Williams in compensatory damages? Please do NOT include a dollar sign ($) in your answer. Please DO include commas to separate thousands and millions (e.g., 600,000 or 3,000,000).