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Offer-of-Judgment Rules and Civil Litigation: An Empirical Study of Automobile Insurance Litigation in the East

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Offer-of-Judgment Rules and Civil Litigation: An Empirical Study of Automobile Insurance Litigation in the East

*Albert Yoon and Tom Baker**

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I. INTRODUCTION

Although their express purpose is to adjudicate disputes, courts by their institutional design encourage civil litigants to settle their differences without resorting to trial. Most civil systems impose filing fees, pleading requirements, and a highly formalized presentation of evidence; also, because of crowded civil dockets, courts typically

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require litigants to wait months, or even years, for their trial date.¹ For these reasons, and because of the increasing costs of legal representation,² it is not surprising that the majority of litigants settle before trial.³ Notwithstanding these measures, federal courts and most state courts have an additional mechanism to encourage settlement, generally known as an *offer-of-judgment* rule.

Following the leads of Minnesota, Montana, and New York, the Supreme Court promulgated Federal Rule of Civil Procedure 68 (hereinafter "Rule 68") in 1937.⁴ Briefly stated,⁵ the rule allows a defending party—at her discretion—to submit a formal settlement offer to the court⁶ as well as to the claimant. If the plaintiff does not accept the offer and does not ultimately recover an amount greater than the proposed settlement,⁷ then she is required to pay the defendant's post-offer court costs. Although the original Advisory

1. See, e.g., George L. Priest, *Private Litigants and the Court Congestion Problem*, 69 B.U. L. REV. 527, 532 (1989) (describing how civil court suit-to-trial delays averaged 4.71 years and average incident-to-trial delays were 5.68 years).

2. See Lester Brickman, *Effective Hourly Rates of Contingency Fee Lawyers: Competing Data and Non-Competitive Fees*, 81 WASH. U. L.Q. 653, 655 (2003) (noting that in the 1960-2001 period, inflation-adjusted hourly rates of tort plaintiffs' lawyers have increased 1000% to 1400%).

3. See Marc Galanter & Mia Cahill, *"Most Cases Settle": Judicial Promotion and Regulation of Settlements*, 46 STAN. L. REV. 1339, 1340 (1994) (noting that two-thirds of civil cases settle without any court involvement).

4. See 12A CHARLES ALAN WRIGHT ET AL., *FEDERAL PRACTICE AND PROCEDURE* § 3001 (2005) (discussing the history and purpose of Rule 68).

5. The rule states in full:

At any time more than 10 days before the trial begins, a party defending against a claim may serve upon the adverse party an offer to allow judgment to be taken against the defending party for the money or property or to the effect specified in the offer, with costs then accrued. If within 10 days after the service of the offer the adverse party serves written notice that the offer is accepted, either party may then file the offer and notice of acceptance together with proof of service thereof and thereupon the clerk shall enter judgment. An offer not accepted shall be deemed withdrawn and evidence thereof is not admissible except in a proceeding to determine costs. If the judgment finally obtained by the offeree is not more favorable than the offer, the offeree must pay the costs incurred after the making of the offer. The fact that an offer is made but not accepted does not preclude a subsequent offer. When the liability of one party to another has been determined by verdict or order or judgment, but the amount or extent of the liability remains to be determined by further proceedings, the party adjudged liable may make an offer of judgment, which shall have the same effect as an offer made before trial if it is served within a reasonable time not less than 10 days prior to the commencement of hearings to determine the amount or extent of liability.

FED. R. CIV. P. 68.

6. To avoid prejudice, the court is not informed of the offer unless it has either been accepted, or invoked by the offeror following trial. 13 JAMES WM. MOORE ET AL., *MOORE'S FEDERAL PRACTICE* ¶ 68.04[2] (3d ed. 2004).

7. For example: Pursuant to Rule 68, D offers P \$1000 to settle their dispute. P does not accept the offer. At trial, P wins a judgment of \$800. P is entitled to the judgment, but must pay D's post-offer court costs. See MOORE ET AL., *supra* note 6, ¶ 68.06[1] (noting the cost-shifting consequences of a plaintiff's failure to accept a Rule 68 offer).

Committee Note said nothing about the purpose of the rule, it is generally understood that it was designed to “promote settlements and avoid protracted litigation”⁸ and, in so doing, provide a secondary benefit of reducing the caseload burden present in most jurisdictions.⁹ Most states subsequently adopted their own offer-of-judgment rules; the vast majority of these rules were modeled after the federal version.¹⁰

At their core, offer-of-judgment rules are about influencing the quantity and quality of cases that go to trial, an issue that scholars have spiritedly debated.¹¹ In examining offer-of-judgment rules, economists and legal scholars have focused on Rule 68, not surprisingly given the rule’s primacy at both the state and federal level. The scholarship has been primarily theoretical,¹² with considerable debate as to the rule’s efficacy. The few scholars who have examined the rule from an empirical perspective have done so through experimental data,¹³ finding only modest effects.¹⁴

This Article extends the existing scholarship in two significant ways. First, we direct our focus on an offer-of-judgment rule other

8. See MOORE ET AL., *supra* note 6, ¶ 68.02[2].

9. See Monida Wiseman Latin, *Avoiding Disaster: The Applicability of Federal Rule 68 When Multiple Offers of Judgment Result in a Settlement*, 12 REV. LITIG. 687, 696 (1993) (suggesting that “the purpose of rule 68 is to facilitate the speedier resolution of disputes and minimize the use of an overloaded judicial system”).

10. See Michael E. Solimine & Bryan Pacheco, *State Court Regulation of Offers of Judgment and Its Lessons for Federal Practice*, 13 OHIO ST. J. ON DISP. RESOL. 51, 79-81, app. A (1997) (noting that 30 out of the 42 states that have offer-of-judgment rules modeled them on Rule 68).

11. See, e.g., Steven Shavell, *The Level of Litigation: Private Versus Social Optimality of Suit and of Settlement*, 19 INT’L REV. L. & ECON. 99 (1999); Steven Shavell, *The Fundamental Divergence Between the Private and the Social Motive to Use the Legal System*, 26 J. LEGAL STUD. 575 (1997); A. Mitchell Polinsky & Daniel L. Rubinfeld, *The Welfare Implications of Costly Litigation for the Level of Liability*, 17 J. LEGAL STUD. 151 (1988); A. Mitchell Polinsky & Daniel L. Rubinfeld, *The Deterrent Effects of Settlement and Trials*, 8 INT’L REV. L. & ECON. 109 (1988); Louis Kaplow, *Private Versus Social Costs in Bringing Suit*, 15 J. LEG. STUD. 371 (1986).

12. See, e.g., Lucian Bebchuk & Howard Chang, *The Effect of Offer-of-Settlement Rules on the Terms of Settlement*, 28 J. LEGAL STUD. 489 (1999) (developing a model of bargaining under offer-of-settlement rules); Tai-Yeong Chung, *Settlement of Litigation Under Rule 68: An Economic Analysis*, 25 J. LEGAL STUD. 261 (1996) (suggesting that Rule 68 can be made more efficient by revising it so that a plaintiff awarded a judgment that is not more favorable than the defendant’s offer would pay the defendant’s post-offer cost to a third party).

13. Experimental data are data that have been obtained by running a controlled experiment (e.g., mock trials).

14. See, e.g., Brian G.M. Main & Andrew Park, *The Impact of Defendant Offers into Court on Negotiation in the Shadow of the Law: Experimental Evidence*, 22 INT’L REV. L. & ECON. 177, 188-89 (2002) (concluding that offer based fee-shifting rules do not significantly affect propensity to settle); David A. Anderson & Thomas D. Rowe, Jr., *Empirical Evidence on Settlement Devices: Does Rule 68 Encourage Settlement?*, 71 CHI.-KENT L. REV. 519, 534 (1995) (“[S]tandard regression analysis suggests that Rule 68 would decrease minimum ask levels by 7 percent and decrease maximum bid levels by 14 percent.”).

than Rule 68. The federal rule, notwithstanding the scholarly attention, has long been regarded by practitioners and jurists as largely inconsequential. The cost-shifting mechanism of Rule 68 and the state rules modeled thereafter are usually limited to post-offer court costs (e.g., docket and printing fees¹⁵), which, in most cases, are trivial, thereby diminishing the rules' potency.¹⁶ As a result, plaintiff and defense attorneys have reported these rules had little effect on how they approached their cases.¹⁷ Civil defendants who made unbeaten Rule 68 offers have argued that plaintiffs in cases under fee-shifting statutes should be liable for post-offer defense attorneys' fees, but federal courts have mostly declined to award such fees absent an express federal statutory provision¹⁸ or a specific state procedural rule.¹⁹ At the same time, critics of the rule argue that including attorneys' fees would raise statutory scope-of-authority²⁰ or normative concerns.²¹ Despite proposals for reform amidst public dissatisfaction,²² Rule 68 has not been significantly changed since its enactment. To contrast, we analyze New Jersey's offer-of-judgment rule. New Jersey is among the minority of states that allow both the

15. See FED. R. CIV. P. 54(d)(1) (setting forth the scope of court costs).

16. See Bruce P. Merenstein, *More Proposals to Amend Rule 68: Time to Sink the Ship Once and for All*, 184 F.R.D. 145, 149 (1999) (noting that "the 'costs' covered by Rule 68 are those usually recoverable by a prevailing party under [Fed. R. Civ. P.] 54(d)").

17. See Committee on Rules of Practice and Procedure of the Judicial Conference of the United States, *Preliminary Draft of Proposed Amendments to the Federal Rules of Civil Procedure*, 102 F.R.D. 407, 433 (1984) (commenting that Rule 68 is seldom used).

18. See *Marek v. Chesny*, 473 U.S. 1, 8 (1985) (requiring the express provision for attorneys' fees in the federal statute for federal question cases); see also *Le v. Univ. of Penn.*, 321 F.3d 403, 411 (3d Cir. 2003) (disallowing plaintiff's post-offer attorneys' fees); *EEOC v. Bailey Ford, Inc.*, 26 F.3d 570, 571 (5th Cir. 1994) (holding that the defendant could not recover attorneys' fees under Rule 68 absent a determination that the action was "frivolous, unreasonable, or without foundation"); *O'Brien v. City of Greers Ferry*, 873 F.2d 1115, 1120 (8th Cir. 1989) (disallowing attorneys' fees under Rule 68); *Crossman v. Marcoccio*, 806 F.2d 329, 334 (1st Cir. 1986) (disallowing attorneys' fees under Rule 68 for any prevailing party).

19. See, e.g., *Parkes v. Hall*, 906 F.2d 658, 660 (11th Cir. 1990) (stating that for diversity cases, applicable state law may provide for attorneys' fees or other items to be taxed as costs).

20. See, e.g., Merenstein, *supra* note 16, at 155 (arguing that including attorneys' fees would violate the Rules Enabling Act).

21. See, e.g., Owen M. Fiss, *Against Settlement*, 93 YALE L.J. 1073, 1075 (1984) (contending that "settlement is a capitulation to the conditions of mass society and should be neither encouraged nor praised").

22. See, e.g., William W. Schwarzer, *Fee-Shifting Offers of Judgment—An Approach to Reducing the Cost of Litigation*, 76 JUDICATURE 147, 150 (1992) (Article III judge advocating reforms to Rule 68); see also JOHN E. SHAPARD, *LIKELY CONSEQUENCES OF AMENDMENTS TO RULE 68, FEDERAL RULES OF PROCEDURE 2* (1995) (advocating changes to Rule 68 to increase judicial efficiency).

plaintiff and the defendant to make pre-trial offers to settle,²³ but it is distinctive in its categorical imposition of uncapped attorneys' fees as a cost-shifting measure.

We examine a New Jersey rule of civil procedure—New Jersey Court Rule 4:58 (“Rule 4:58”)—that was first adopted in 1971 and revised in 1994. The prior version of the rule differed from Rule 68 in that it allowed either litigant to issue a pre-trial settlement offer, but mirrored the federal rule in that it had a weak cost-shifting mechanism—a \$750 cap on attorneys' fees. The revised rule abolished the cap outright. By allowing for substantial cost-shifting, the revised rule provides a more credible inducement for litigants to settle.

Second, we offer what we believe is the first study of offer-of-judgment rules that is based on actual litigation data. Any comprehensive understanding of the rule's effects must include study of settlements as well as trials, since most civil litigation resolves through settlement. Settlement terms, however, are typically not publicly available.²⁴ In this study, we address this problem by using data from a large national insurer. This data includes the universe of suits defended by the insurer, irrespective of how the suit was resolved (i.e., settlement or trial).

Our results reveal that while the relative average damage award in New Jersey did not undergo any statistically significant change after the rule was revised, suits in that state took less time to resolve by an average of 2.3 months, or roughly 7 percent. This reduction in litigation duration affected all quartiles of damage awards, with a statistically robust effect on all but the highest quartile. Correspondingly, shorter litigation periods translated into a decrease in the insurers' attorneys' fees by an average of nearly \$1,200, or approximately 20 percent. These findings suggest that allowing a substantial cost-shifting mechanism would be an effective means of increasing the efficacy of offer-of-judgment rules.

The format of the Article is as follows. In Part II, we discuss the offer-of-judgment rules relative to the competing paradigms of the American Rule and English Rule. We briefly describe Rule 4:58 in Part III: as initially enacted in 1971, the circumstances that led to its revision, and the 1994 revision. In Part IV, we discuss the individual-level data as provided by the insurer. We outline the variables within

23. Twelve states – Alaska, Arizona, California, Colorado, Connecticut, Florida, Michigan, Minnesota, Nevada, New Jersey, North Dakota, and Wisconsin – allow bilateral offers. See Solimine & Pacheco, *supra* note 10, at 78-81, app. A.

24. Some organizations collect information on jury verdicts and settlements, which is available to the public (typically for a fee). Because these data are drawn from a non-random sample of litigation, however, they are vulnerable to selection bias.

the data, describe how we define the periods of interest, and explain our econometric approach as a means for testing the effect of the revised rule while controlling for secular trends. We report our results in Part V and our interpretation of the results in light of the existing scholarship on offer-of-judgment rules. Part VI offers implications of these results. Part VII concludes and presents our proposal for future research.

II. COMPARISON OF FEE-SHIFTING RULES

Robert H. Mnookin and Lewis Kornhauser first articulated the idea, which is generally accepted among economists and legal scholars, that litigants “bargain[] in the shadow of the law.”²⁵ That is to say, litigants’ settlement negotiations are guided by what they believe will happen should the case be resolved by trial. Each side will agree to settle only if it believes the terms of settlement are at least as favorable as its anticipated net outcome at trial. Otherwise, the parties will remain in litigation.

At common law, the determination of who pays legal fees in cases that are resolved in trial is typically adjudicated in one of two ways.²⁶ The first, known as the *English Rule*, or *Loser Pays* rule, requires the litigant who loses at trial to pay at least a significant portion of the winner’s reasonable costs and attorneys’ fees. England and most European countries follow this rule. The implications of the English Rule’s cost-shifting have attracted considerable attention among legal scholars. There is general consensus that the rule dilutes the value of low-probability-of-prevailing cases while enhancing the value of high-probability-of-prevailing cases.²⁷ The broader implications of the rule are less clear. Proponents of the rule contend that it deters frivolous litigation by effectively raising the cost of

25. Robert H. Mnookin & Lewis Kornhauser, *Bargaining in the Shadow of the Law: The Case of Divorce*, 88 YALE L.J. 950, 950 (1979). But see William J. Stuntz, *Plea Bargaining and Criminal Law’s Disappearing Shadow*, 117 HARV. L. REV. 2548, 2548 (2004) (arguing that in criminal cases, litigants do not bargain in the shadow of the law).

26. For civil rights cases, there exists a third possibility: Prevailing plaintiffs are usually entitled to all of their reasonable fees; prevailing defendants usually are not entitled to any of their fees. Civil Rights Act of 1968, § 813(c)(2), as amended, 42 U.S.C.A. § 3613(c)(2) (West 2001); Americans with Disabilities Act of 1990, § 505, 42 U.S.C.A. § 12205 (West 2001).

27. See, e.g., Avery Katz, *The Effect of Frivolous Lawsuits on the Settlement of Litigation*, 10 INT’L REV. L. & ECON. 3, 17 (1990) (noting that many scholars believe that the English Rule would decrease the number of frivolous suits); Steven Shavell, *Suit, Settlement and Trial: A Theoretical Analysis under Alternative Methods for the Allocation of Legal Costs*, 11 J. LEG. STUD. 55, 59 (1982) (noting that the fee-shifting aspect of the rule increases the expected return for plaintiffs with high probability-of-prevailing cases).

bringing suit;²⁸ its detractors contend that this phenomenon also deters meritorious litigation, particularly by litigants with limited resources.²⁹ For suits that are filed, some scholars contend that the rule decreases the likelihood of settlement by encouraging parties to invest in litigation costs,³⁰ while others conclude that the rule can actually promote settlement, particularly among risk-averse litigants.³¹

The other method of resolving legal expenses is commonly referred to as the *American Rule*, which, in contrast to the English Rule, requires that litigants pay their own attorneys' fees, irrespective of the outcome at trial. The United States, which initially followed the English Rule, switched to the American Rule in the early nineteenth century,³² and it remains the rule in federal and state courts, limited only by bad-faith, contractual, and statutory exceptions. The absence of fee-shifting in the American Rule avoids the English Rule's potential chilling effect on meritorious litigation, but commentators on the rule contend that it encourages frivolous litigation.³³

28. See, e.g., James W. Hughes & Edward A. Snyder, *Litigation and Settlement Under the English and American Rules: Theory and Evidence*, 38 J.L. & ECON. 225, 229 (1995) ("[T]he English rule discourages plaintiffs with low-quality claims, as such plaintiffs will face higher expected legal costs than they do under the American rule."); James W. Hughes & Edward A. Snyder, *The English Rule for Allocating Legal Costs: Evidence Confronts Theory*, 6 J.L. ECON. & ORG. 345, 349 (1990) ("[T]he English rule discourages nuisance suits. . .").

29. See David Rosenberg & Steven Shavell, *A Model in which Suits are Brought for their Nuisance Value*, 5 INT'L REV. L. & ECON. 3, 10 (1985) (arguing that the English Rule would decrease both frivolous and meritorious litigation); Richard A. Posner, *An Economic Approach to Legal Procedure and Judicial Administration*, 2 J. LEG. STUD. 399, 428 (1973) (highlighting the costs that would be associated with an exceedingly high settlement rate).

30. See Avery Katz, *Measuring the Demand for Litigation: Is the English Rule Really Cheaper?*, 3 J.L. ECON. & ORG. 143, 144 (1987) (describing how the rule promotes litigants to spend more on attorneys' fees: the rationale is that, holding the adversary's legal expenditures constant, a litigant's marginal increase in attorneys' fees is partially externalized onto the adversary, whose chances of losing at trial marginally increase); Shavell, *Suit, Settlement and Trial*, *supra* note 27, at 64 (stating that under an asymmetric information model, the English Rule introduces an additional factor of uncertainty over litigation costs as well as outcome at trial).

31. See Don L. Coursey & Linda R. Stanley, *Pretrial Bargaining Behavior Within the Shadow of the Law: Theory and Experimental Evidence*, 8 INT'L REV. L. & ECON. 161, 164 (1988) (noting that under the British system trial is less attractive to risk averse litigants, thus settlement is more likely).

32. See John Leubsdorf, *Toward a History of the American Rule on Attorney Fee Recovery*, 47 LAW & CONTEMP. PROBS. 9, 10 (Winter 1984) (describing how the American Rule took form in the aftermath of the Revolutionary War as governments stopped imposing price controls on attorneys' fees).

33. See Richard W. Painter, *Litigating on a Contingency: A Monopoly of Champions or a Market for Champerty?*, 71 CHI.-KENT L. REV. 625, 694-95 (1995) (noting that the threat of high attorneys' fees may encourage prospective plaintiffs to file suits merely to coerce a settlement payoff). See generally Herbert M. Kritzer, *Lawyer Fees and Lawyer Behavior in Litigation: What*

Federal Rule 68, invoked at the option of the defendant, serves as a hybrid of the English and American rules. When the defendant invokes the rule by making a pre-trial offer to the plaintiff, who rejects it only to do no better in the end, it resembles the English Rule by imposing a cost-shifting measure, albeit one of smaller magnitude than awarding attorneys' fees. The key distinction is that only the defendant can make the offer and only the plaintiff can be assessed post-offer costs. Conversely, Rule 68 approximates the American Rule when the plaintiff rejects an offer but fares better at trial, resulting in each side paying its own attorneys' fees and the plaintiff usually being entitled to all reasonable non-fee costs.

Not surprisingly, given its predominance, Rule 68 has been the focus of most scholarship on offer-of-judgment rules. Because of its unilateral design, the rule redistributes wealth from the plaintiff to the defendant relative to the American Rule. Rule 68, if invoked, imposes risk onto the plaintiff without any corresponding risk borne by the defendant. The defendant can exploit this inequity in the settlement process, compelling a lower settlement than under the American Rule.³⁴ Scholars contend that the effect on the likelihood of settlement depends on what the litigants are contesting. If the litigants agree on damages but not on liability, the rule discourages settlement; conversely, if the litigants agree on liability but not damages, the rule encourages settlement.³⁵ According to practitioners, however, these distinctions are more theoretical than real, since litigants view court costs as an inconsequential part of legal costs.³⁶ If true, the impact of cost-shifting dissipates and the

Does the Empirical Literature Really Say?, 80 TEX. L. REV. 1943 (2002) (reviewing the empirical literature that demonstrates the impact of legal fees on both lawyers and clients).

34. See Geoffrey P. Miller, *An Economic Analysis of Rule 68*, 15 J. LEGAL STUD. 93, 108 (1986) (noting that Rule 68 redistributes wealth from plaintiffs to defendants); George L. Priest, *Regulating the Content and Volume of Litigation: An Economic Analysis*, 1 SUP. CT. ECON. REV. 163, 170-71 (1982) (noting that defendants will provide lower settlement offers under the English Rule).

35. Kathy Spier, *Pretrial Bargaining the Design of Fee-Shifting Rules*, 25 RAND J. ECON. 197, 202 (1994). But see Amy Farmer & Paul Pecorino, *Conditional Cost Shifting and the Incidence of Trial: Pretrial Bargaining in the Face of a Rule 68 Offer*, 2 AM. L. & ECON. REV. 318, 334 (2000) (arguing that when the level of damages is unknown and random, Rule 68 does not discourage settlement).

36. See Solimine & Pacheco, *supra* note 10, at 56 ("Because Federal Rule 68 has not been widely utilized by practitioners, the overwhelming majority of the commentary and the Federal Rules Advisory Committee have determined that Federal Rule 68 has not been effective in achieving its intended purpose."). For other articles citing the infrequent use of Rule 68, see David A. Anderson, *Improving Settlement Devices: Rule 68 and Beyond*, 23 J. LEGAL STUD. 225, 226 (1994) (stating that Federal Rule 68 requires that defendants collect post-offer court costs from the plaintiff if a refused offer is not improved upon at trial, and noting that "[i]n this form, Rule 68 offers have been underused and ineffective"); Keith N. Hylton, *Rule 68, The Modified*

negotiation environment under a Rule 68 regime reverts to that of the American Rule.

The bilateral offer-of-judgment rule is similar to the English Rule in that it allows for double-sided fee-shifting, eliminating the inherent bargaining advantage the defendant enjoys under Rule 68.³⁷ But this rule is more nuanced: because the cost-shifting mechanism is triggered not by who prevails at trial but by whether the litigant who rejects an offer fares worse at trial, the litigants are never punished solely for “losing” at trial. This affects the pre-trial negotiation process. Whereas a plaintiff with a strong probability of prevailing at trial enjoys a strong bargaining position under the English Rule, under the bilateral rule, her position is weakened somewhat, since the defendant can concede liability and still make a settlement offer that imposes cost-shifting at trial. The degree to which the rule influences litigation depends on the magnitude of the cost-shifting provision. The higher the cost-shifting, relative to the amount in controversy, the greater is the rule’s potential effect.

III. BILATERAL OFFER-OF-JUDGMENT IN NEW JERSEY: ADDING TEETH TO AN ESTABLISHED RULE

Whereas most states simply modeled their offer-of-judgment rule on federal Rule 68, New Jersey took a different approach. From its inception in 1971, New Jersey’s rule was more ambitious in scope. First, the rule allowed the plaintiff as well as the defendant to make pre-trial settlement offers.³⁸ Second, the cost-shifting measure went beyond court costs to include attorneys’ fees.³⁹ Proponents of the law

British Rule, and Civil Litigation Reform, 1 MICH. L. & POL’Y REV. 73, 76 (1996) (stating that Rule 68 is “seldom used by attorneys”); Roy D. Simon, Jr., *The Riddle of Rule 68*, 54 GEO. WASH. L. REV. 1, 7-8 (1985) (arguing that “two principal defects” have “crippled” Rule 68’s effectiveness; namely, that Rule 68 is only available to defendants and that the sanction of post-offer costs is typically too minimal to motivate parties to settle); Roy D. Simon Jr., *Rule 68 at the Crossroads: The Relationship between Offers of Judgment and Statutory Attorneys Fees*, 53 U. CIN. L. REV. 889, 891 (1984) (“Rule 68 is seldom used and is widely considered a failure.”).

37. See Miller, *supra* note 34, at 124 (“[A] mutual offer of judgment rule would not be subject to the troubling redistributive effects of [Rule 68].”).

38. The only requirement was that the offeror file the offer with the clerk of the court at least three weeks before the scheduled court date. To agree to an offer, the offeree also had to file its acceptance with the clerk of the court no later than ten days prior to trial. See N.J. CT. R. 4:58-1 (2005). The court treated any failure to respond to an offer in a timely matter as a rejection, but both parties were free to submit more than one offer. See *id.* Submitting an additional offer, however, constituted a withdrawal of all previous offers made by that party. See *id.*

39. A set of examples is instructive. Case A – offeree not liable for cost-shifting sanction: P offers D \$1000 to settle; D rejects. At trial, P wins \$900. P is entitled to the damage award, but D need not pay any additional cost-shifting since the trial award was more favorable (to D) than

believed that, in addition to encouraging parties to settle, this rule would deter frivolous or bad-faith claims.⁴⁰ The law applied to all civil cases except matrimonial matters.⁴¹ Undercutting these enhancements to the federal rule, however, were two key qualifications. First, cost-shifting would be triggered only if the trial outcome was more than 20 percent less favorable (from the perspective of the offeree) than the rejected pre-trial offer.⁴² This provided a margin of error for the offeree when assessing any pre-trial offer. Second, and perhaps more significant, attorneys' fees were capped at \$750, with no provision to adjust the cap for inflation. Thus, the cap continued to decline in real dollars over time.⁴³

In the aftermath of the rule's adoption, grumblings within the New Jersey Bar persisted, mostly on the grounds that the rule was ineffective at promoting settlement. In the spring of 1994, the New Jersey Supreme Court appointed the State Bar's Civil Courts Task Force to evaluate the rule. The task force recommended a stronger offer-of-judgment rule, a sentiment echoed by the state's high court. The matter was subsequently referred to the Supreme Court Committee on Civil Practice for incorporation into the rules in the summer of 1994. Specifically, the Committee suggested the rule would be strengthened best by eliminating the cap on attorneys' fees when imposing sanctions.⁴⁴ The New Jersey Supreme Court adopted the Committee's recommendation, but left in place the 20 percent buffer on cost and fee-shifting.⁴⁵ The revised rule went into effect on September 1, 1994.

the pre-trial offer. Case B – offeree is liable for cost-shifting: D offers P \$800 to settle; P rejects. At trial, P is awarded \$500. D must pay the \$500, but D can deduct any costs pursuant to the rule because his pre-trial offer was more favorable (to P) than what P actually received at trial.

40. See Sylvia B. Pressler, Commentary, *N.J. Ct. R. 4:42-9 in RULES GOVERNING THE COURTS OF THE STATE OF NEW JERSEY* 998 (2005).

41. N.J. Ct. R. 4:58-1 (2005).

42. Another set of examples is instructive. Case C – offeree liable for attorneys' fees: P offers D \$1000 to settle; D rejects. At trial, P wins \$1500. D must pay P the \$1500 damage award as well as attorneys' fees, since the resulting damage award exceeded the pre-trial offer by more than 20 percent. Case D – offeree not liable for attorneys' fees: D offers P \$800 to settle; P rejects. At trial, D is found liable for \$700. D must pay the \$700, but P is not liable for attorneys' fees, since the pre-trial offer did not exceed the damage award by more than 20 percent.

43. For example, in 1971, the \$750 cap was equivalent to approximately \$3500 in 2004 dollars.

44. See *1994 Report of the Supreme Court Committee on Civil Practice*, 136 N.J. L.J. 581, 589 (Feb. 14, 1994). It is worth noting that the "legislative" history behind the revised rule was terse, with the committee simply noting that it believed eliminating the cap on attorneys' fees would strengthen the rule.

45. All attorneys' fees, however, are subject to a judge's determination that they are reasonable. See N.J. Ct. R. 4:58-2 (2005) (Consequences of Non-acceptance of Claimant's Offer); N.J. Ct. R. 4:58-3 (2005) (Consequences of Non-acceptance of Offer of Party Not a Claimant).

IV. DATA AND RESEARCH DESIGN

A. Description of Data

As a condition on using its data, the insurance company required that we preserve its anonymity. Accordingly, throughout the Article, we refer to the company as *Insurer X*. We can, however, provide some general information about the company. Insurer X is one of the largest investment and insurance companies in the United States, with a strong presence in the Northeast. Insurer X insures both businesses and individuals. It granted us its data on individuals for this study. Although it provides an array of insurance services for individuals, the overwhelming percentage of its suits falls under automobile and property insurance claims.

The dataset contains suits filed by individuals against Insurer X. “Suits” in this instance does not refer to routine insurance claims submitted to the insurer, which are handled administratively.⁴⁶ Rather, the suits in this dataset were claims that did not resolve through administrative means and resulted in litigation. In each case, the plaintiffs were non-policyholders suing for injuries allegedly caused by policyholders of Insurer X.

We examined individual insurance suits filed against Insurer X between January 1, 1992 and April 30, 1997. An overwhelming percentage of suits in the database come from the liability coverage offered as part of automobile and homeowners insurance policies. As the law was revised effective September 1, 1994, the selected time window allowed us to observe 2.67 years each in the pre- and post-amendment periods. The records of each suit filed during the period are included in each dataset, irrespective of outcome (e.g., whether the suit settled, was dismissed, proceeded to trial, or deemed time-barred). Over 99 percent of suits filed during this time resolved by July 31, 2004. To ensure against potential time bias from including extremely long-running cases filed early in the period, however, we limited the dataset to suits that resolved within 7.25 years.⁴⁷ Even with this

46. For example, a policyholder who damages his vehicle submits his claim to the insurance company, which typically reimburses him – minus the deductible.

47. For example, all suits filed in 1992 would be included in the dataset if completed within roughly twelve years, while for suits filed in 1997, only those completed within roughly seven years would be included. Given a positive correlation between duration of litigation and the size of the damage award, we chose 7.25 years because it represents the maximum amount of time between the last claims filing date – April 30, 1997 – and the last recording date of the data – July 31, 2004.

limitation, over 97 percent of suits filed during this period resolved within this moving window.

Figure 1
Geographical Map of Treatment and Control States



As illustrated in Figure 1, Insurer X provided data from six states: New Jersey, Connecticut, Delaware, Maryland, New York, and Pennsylvania. We selected the other states to serve as a suitable control group for two reasons. Most important, the other states did not enact any significant changes in their offer-of-settlement or other apparently relevant legal rules between 1992 and 1997. Also, we decided to define widely the states composing the control group, since no single state, in the Northeast or elsewhere in the United States, mirrors New Jersey – a geographically small but very densely populated state with a high number of registered drivers and property owners. Accordingly, the surrounding states, in the aggregate, better approximate the demographic profile of New Jersey.

Table 1 provides statistics on the United States and each of the states in the study, taken from the U.S. Census. As the table illustrates, New Jersey differs from the other states on some of the baseline statistics. For most variables, the trend between 1990 and 2000 in New Jersey follows that of other states, with New Jersey situated in the middle of the distribution of the control states.

Table 1
General Demographic Statistics for Treatment and Control States

	Year	United States	Connecticut	Delaware	Maryland	New Jersey	New York	Pennsylvania
Resident Population (in thousands)	1990	248,791	3,287	666	4,781	7,748	17,991	11,883
	2000	17.1%	3.6%	17.7%	10.8%	8.6%	5.5%	3.3%
Population Density (per square mile)	1990	70.3	678.5	341.0	489.1	1044.5	381.0	265.1
	2000	13.2%	3.6%	17.6%	10.8%	8.6%	5.5%	3.4%
Deaths (per 1,000)	1990	8.6	8.4	8.7	8.0	9.1	9.4	10.3
	2000	-1.2%	4.8%	1.1%	3.8%	-2.2%	-11.7%	3.9%
Educational Attainment (College Degree)	1990	20.3%	27.2%	21.4%	26.5%	24.9%	17.4%	17.9%
	2000	26.1%	16.2%	12.1%	21.9%	20.9%	33.3%	35.8%
Personal Income (Constant 2000 Dollars)	1990	\$24,196	\$32,925	\$26,612	\$28,389	\$30,525	\$29,222	\$24,457
	2000	23.4%	26.0%	16.0%	20.7%	25.7%	19.4%	21.4%
Motor Vehicle Registrations (in thousands)	1990	188,798	2,623	526	3,607	5,652	10,196	7,971
	2000	22.1%	11.2%	24.1%	9.2%	16.4%	0.0%	20.8%
Traffic Fatalities	1990	44,599	385	138	707	886	2,217	1,646
	2000	-6.0%	-11.4%	-10.9%	-16.8%	-17.5%	-34.1%	-7.7%
Occupied Housing Units (in thousands)	1990	91,947	1,230	247	1,749	2,795	6,639	4,496
	2000	14.7%	5.9%	21.1%	13.3%	9.7%	6.3%	6.3%

Note : All statistics taken from the U.S. Department of Commerce, Bureau of the Census, *Statistical Abstract of the United States: 2004-05* (2004), Tables 17, 99, 216, 653, 994, 1082, 1090.

Table 2 provides summary statistics comparing New Jersey and the states comprising the control group. For cases filed between 1992 and 1997, Insurer X resolved 41,545 suits. Of that total, New Jersey accounted for 8,062 suits, and the five control states included 33,483 suits. For each suit, Insurer X provided the following information: a unique identifier for each suit, the state where the suit was filed, the exact date the suit was filed, the type of insurance suit, the exact date the suit was resolved, how much Insurer X paid (if anything) to the plaintiff, and the attorneys' fees Insurer X paid to defend the suit.

Table 2
All Closed Insurance Suits in Treatment and Control States
Claims Filed between 1992 and 1997

	Entire Sample	New Jersey (Treatment Group)	Surrounding States (Control Group)
	(1)	(2)	(3)
Total Observations	45,998	8,062	37,157
Percentage of cases where damage payment exceeds zero	71%	70%	71%
Mean damage payment (all cases)	\$31,391 (\$117,385)	\$25,792 (\$79,397)	\$32,509 (\$123,952)
Mean damage payment where damage payment exceeds zero	\$43,882 (\$138,188)	\$36,601 (\$92,470)	\$45,614 (\$146,935)
Mean duration of litigation (years)	2.79 (1.58)	2.79 (1.51)	2.80 (1.60)
Mean attorneys' fees (paid by Insurer X for own attorney)	\$6,548 (\$34,317)	\$5,058	\$6,904 (\$37,762)

Note: Data provided by Insurer X, for all closed claims of duration not exceeding 7.25 years filed between January 1, 1992 and December 31, 1996. Connecticut, Delaware, Maryland, New York, and Pennsylvania comprise the control group. Standard deviations are in parentheses. All payout figures are in 2003 dollars, adjusted by the Consumer Price Index (CPI).

It is worth noting the limitations of our data. First, the data does not report whether the parties formally submitted any offers pursuant to Rule 4:58, or whether the offeree accepted or rejected any such offers, or whether the offeree who rejected the offer subsequently fared worse at trial. The dataset does include a variable reporting how each suit resolved, but it is coded only for 75.8 percent of the total observations. We use this variable with caution, although we note that this response rate was consistent across the states and over time. While we would have preferred this inclusion on offers and a complete coding of how suits resolved, we believe that even if available, this information would not provide a complete measure of the true effect of

the law. If parties indeed bargain in the shadow of the law,⁴⁸ then it logically follows that the law has an effect not merely before trial but before the rule is formally invoked. Litigants will account for the change in the law in their pre-trial negotiations even if they do not make a formal offer. Accordingly, that is why we analyze the full set of suits.

Second, because the data is provided by an insurer, we possess limited information about the plaintiff. While we know the duration of litigation and how much in damages, if any, the plaintiff received, we do not know how much the plaintiff paid in attorneys' fees, nor the conditions under which she received legal representation (e.g., hourly rate, contingency). The rule, while symmetric, may have an asymmetric effect on plaintiffs if they possess different levels of risk than that of the insurer. Unfortunately, a definitive answer to this question is beyond the scope of the data.

Table 3 summarizes the statutory regimes of the various states between 1992 and 1997. Three of the states—Delaware, New York, and Pennsylvania—expressly followed the federal rule. Connecticut allowed bilateral offers and attorneys' fees, but the latter were capped at \$350. Maryland did not have any offer-of-judgment rule at all. For New Jersey, its old Rule 4:58 was effectively the same as the Connecticut rule, the only difference being a slightly higher cap on attorneys' fees, neither of which were particularly significant by the 1990s.⁴⁹ Thus, before September 1994, New Jersey and the other states shared the common feature of failing to provide a powerful offer-of-judgment rule.

48. See Mnookin & Kornhauser, *supra* note 25, at 951 (examining "how the rules and procedures used in court for adjudicating disputes affect the bargaining process that occurs between divorcing couples *outside* the courtroom") (emphasis in original).

49. Connecticut's offer-of-judgment rule allows for an award of prejudgment interest if, having made an offer rejected by the defendant, the plaintiff receives a verdict at least as large as her offer. In that event, the plaintiff is entitled to the judgment plus 12% pre-judgment interest. If the action commenced before October 1, 1981, or the offer of judgment was filed later than eighteen months after the complaint was filed, interest is computed from the date the *offer* was filed. If the action commenced on October 1, 1981 or later and the offer was filed no later than eighteen months from the date of the complaint's filing, the interest is computed from the date the *complaint* was filed. CONN. GEN. STAT. ANN. § 52-192a(b) (West Supp. 2005).

Table 3
All Closed Insurance Suits in Treatment and Control States between 1992 and 1997

State	Statute or Rule	Description
New Jersey	N.J. Ct. R. 4:58	Offer: bilateral Sanction: court costs, attorneys' fees*
Connecticut	Ct. G.S.A. § 52-19	Offer: bilateral Sanction: court costs attorneys' fees capped at \$350
Delaware	Del. Super. Ct. R. 68	Follows F.R.C.P. 68
Maryland	No provision	
New York	N.Y. C.P.L.R. 3221	Follows F.R.C.P. 68
Pennsylvania	Pa. R. Civ. P. 238	Follows F.R.C.P. 68

* Note: Attorneys' fees changed in 1994 from a \$750 cap to include all reasonable fees.

Table 4 summarizes the change in New Jersey on September 1, 1994, following the revision of the rule.⁵⁰ Since this time, New Jersey has maintained the rule to allow bilateral offers and attorneys' fees. The other states did not enact any corresponding change. It is this contrast that this Article seeks to evaluate.

50. The full text of the statute is included in Appendix B.

Table 4
N.J. Ct. R. 4:58 (Original and Revised)

Period 1: January 1, 1992 - August 31, 1994	Period 2: September 1, 1994 - April 30, 1997
1. Offer (4:58-1) Bilateral: Either the plaintiff or the defendant can issue an offer up to 20 days before the start of trial	1. Offer (4:58-1) Same
2. Consequences of rejecting Offer a. Plaintiff rejects Defendant's offer (4:58-2) 1. Fares better at trial: rule has no consequence 2. If damage award less than 80% of defendant's offer: pays i) court costs; and ii) defendant's attorneys' fees (capped at \$750)	2. Consequences of Rejecting Offer a. Plaintiff rejects defendant's offer (4:58-2) 1. Same 2. Same, but no cap on attorneys' fees
b. Defendant rejects plaintiff's offer (4:58-3) 1. Fares better at trial: rule has no consequence 2. If damage award more than 120% of plaintiff's offer: pay i) court costs; ii) 8% interest on award; and iii) plaintiff's attorneys' fees (capped at \$750)	b. Defendant rejects plaintiff's offer (4:58-3) 1. Same 2. Same, but no cap on attorneys' fees

B. Econometric Approach

We analyzed the panel data using a difference-in-difference model.⁵¹ In a social science framework, this model measures the effect of a given policy or rule when it is imposed on one group (treatment) but not on the other group (control). In so doing, the model constructs a natural experiment where, whenever possible, the treatment and control groups are identical with respect to other observable characteristics. In quasi-experimental research, however, finding identical comparison groups is often elusive, so one strives for

51. See Albert Yoon, *Damage Caps and Civil Litigation: An Empirical Study of Medical Malpractice Litigation in the South*, 3 AM. L. & ECON. REV. 199 (2001) (using a difference-in-difference model to analyze the effect damage caps have had on plaintiff recovery in medical malpractice litigation); David Card & Alan B. Krueger, *Minimum Wages and Employment: A Case Study of the Fast-Food Industry in New Jersey and Pennsylvania*, 84 AM. ECON. REV. 772 (1994) (analyzing the effect of increased minimum wage in New Jersey by comparing surveys of fast food restaurants in New Jersey and eastern Pennsylvania before and after the increase); Jonathan Gruber, *The Incidence of Mandated Maternity Benefits*, 84 AM. ECON. REV. 622 (1994) (using the Current Population Survey to examine the impact of state and federal laws mandating comprehensive coverage for childbirth in health insurance policies); David Card, *The Impact of the Mariel Boatlift on the Miami Labor Market*, 43 INDUS. & LAB. REL. REV. 245 (1990) (relying on the Current Population Survey from 1979-85 to examine changes in the Miami labor market resulting from the influx of Cuban immigrants produced by the Mariel Boatlift); Orley Ashenfelter, *Estimating the Effect of Training Programs on Earnings*, 60 REV. ECON. & STAT. 47 (1978) (attempting to solve the problems encountered when evaluating the effect of governmental post-schooling training programs on earnings by employing a data system that matches a trainee's program records with her Social Security earnings history).

similarities between the two groups. More important, the driving assumption of a difference-in-difference approach is that, in the absence of the phenomenon, the observable trends in the treatment group would have remained the same as the control group.

Ideally, the phenomenon one wants to evaluate is an *exogenous* event, uninfluenced by the circumstances within the particular groups. Unlike a truly randomized experiment, the evaluation of any enacted rule always raises questions of *endogeneity*, because it is a product of a deliberative process.⁵² One can argue, however, that the revision of Rule 4:58 is an exogenous event: the rule change came about through judicial, not legislative means. While state supreme court justices are certainly not impervious to political pressures, they are certainly more independent than legislators, all the more so in New Jersey because of their terms of tenure as set forth in the state constitution.⁵³ While it is impossible to construct a true natural experiment in social science, the rule revision closely approximates this.

The treatment group comprises New Jersey litigants involved in suits defended by Insurer X under individual insurance policies, before and after Rule 4:58 was modified. The large majority of suits are by non-policyholders who sued Insurer X for allegedly tortious conduct by a policyholder; in a minority of cases, an Insurer X

52. In more formal terms, the concern here is with endogenous sample selection, where the independent variable of interest is related to the dependent variable, either directly or through the error term. In this event, the concern is that the observed changes in the outcome variable are attributable not to the aforementioned independent variable, but rather some unobserved difference between the treatment and control groups.

53. In addition, the institutional design within New Jersey allows state supreme court justices greater independence than any other state. These justices are appointed by the Governor and confirmed by the State Senate for an initial term of seven years. N.J. CONST. art. VI, § VI. On reappointment, they are granted tenure until they reach the mandatory judicial retirement age of 70. *Id.*

An illustration of the New Jersey Supreme Court's judicial autonomy is the series of decisions commonly known as the *Mount Laurel* Trilogy, in which the court repeatedly held that municipalities have a state constitutional duty to provide a realistic opportunity for affordable housing, notwithstanding the strong opposition of the New Jersey legislature and the public. See *S. Burlington County NAACP v. Twp. of Mount Laurel (Mount Laurel I)*, 336 A.2d 713 (N.J. 1975) (holding a zoning ordinance that intentionally prohibited moderate and low income housing from an area invalid because it violated the state constitutional requirement that land use regulations promote the general welfare); *Burlington County NAACP v. Twp. of Mount Laurel (Mount Laurel II)*, 456 A.2d 390 (N.J. 1983) (revisiting and clarifying *Mount Laurel I* after both the Mount Laurel community and many others failed to comply with the court's mandate to provide a realistic opportunity for affordable housing); *Bi-County Dev. of Clinton, Inc. v. Borough of High Bridge*, 805 A.2d 433, 434 (N.J. 2002) (holding that paying a development fee instead of constructing affordable housing as allowed under *Mount Laurel II* "does not justify disturbing the general rule that a municipality is not obligated to provide access to its sewer system to residents of a neighboring municipality").

policyholder sued Insurer X. The control group comprises similarly-situated litigants in Connecticut, Delaware, Maryland, New York, and Pennsylvania. We measured outcomes at the individual level (i), and the data varies across states (s) and year (t). We looked at the effect of Rule 4:58 on the amount that plaintiffs recover, the time it took to resolve the suit, and the amount that Insurer X paid in attorneys' fees to defend the suit.

As its description suggests, a difference-in-difference model measures the difference in the given variable of interest before and after the change in Rule 4:58, minus the difference in the same variable in the control group for the corresponding time. If o_g^p is the outcome for plaintiffs in group g (New Jersey, control states) and period p (prior version of Rule 4:58; revised version of Rule 4:58), then the raw difference-in-difference estimator is given by $(o_{NJ}^{post} - o_{NJ}^{pre}) - (o_{control}^{post} - o_{control}^{pre})$.

However, because the raw estimator does not account for other factors that may affect the variables of interest (e.g., the type of suit), we report the regression-adjusted difference-in-difference, in which we assume that the amount the plaintiff receives in damages is a function of individual-specific and state-wide factors,

$$O_{ist} = \alpha + \beta X_{ist} + \gamma NJ + \delta * Period\ 2 + \phi(NJ)*(Period\ 2) + \varepsilon$$

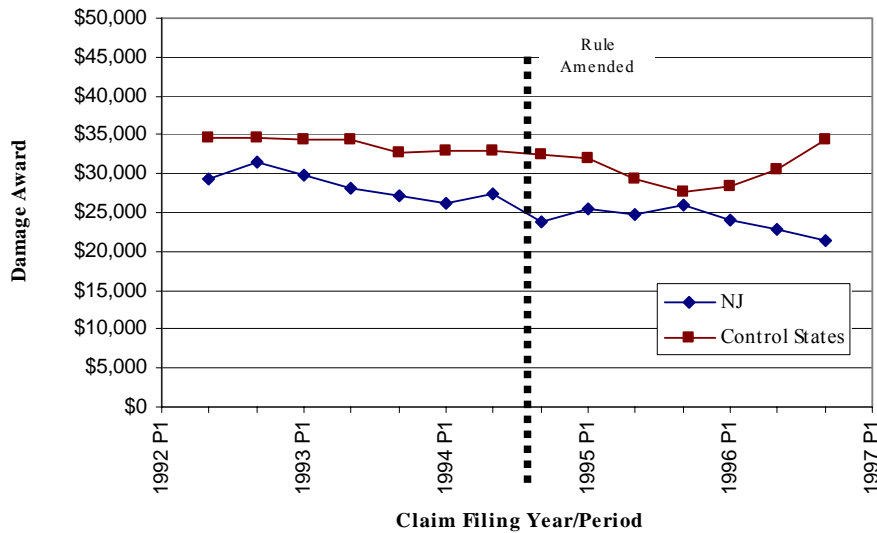
where O_{ist} is the outcome measure. In this model, we looked at three outcome measures: damage award (how much plaintiff received from Insurer X in damages), attorneys' fees (fees that Insurer X paid to defend the suit), and the duration of litigation. All dollar figures are in 2003 constant dollars, as established by the Consumer Price Index. The duration statistics are reported in months, unless otherwise stated. The y-intercept is measured by α . X_{ist} represents a series of dummies for the underlying basis of the insurance suit (e.g., subcategories for auto, property, general, and miscellaneous types of insurance). NJ is an indicator variable for whether or not the plaintiff filed the suit in New Jersey. $PERIOD\ 2$ represents an indicator variable for whether or not the case was filed after the September 1, 1994 modification of Rule 4:58. The variable of interest — $(NJ)(PERIOD\ 2)$ — is an interaction term of the two indicator variables. Accordingly, the coefficient on the interaction term is the regression-adjusted difference-in-difference estimator for each legal regime. The error term is captured by ε .

Because the point estimates for the coefficients are similar under the raw estimate or the regression-adjusted difference-in-difference, we report the latter in the text, and include the former in Appendix A.

V. RESULTS

Figures 2 through 4 track the trends in damage awards, attorney expenses, and duration of litigation before and after the modification in Rule 4:58. Years are divided into three equal parts, and the figures report a three-period moving average to adjust for outliers in any given period. The figures show general trends across time, which vary depending on the outcome variable and the group. The variations one observes within and across groups reflect in part the effect of *outlier* claims, reflecting unusually high damage awards, lengthy litigation, or attorneys' fees.⁵⁴ Had these figures plotted the median, rather than mean amounts, the trends would have been less variable. But as insurers are concerned about all suits, we elected to report the mean to observe—albeit indirectly—any effect of the revised rule on outlier suits.

Figure 2
Average Damage Payment by Insurer X
(reported by three-period moving average)



54. For example, included among the outlier suits is a damage award exceeding \$10,000,000, and an attorneys' fee exceeding \$6,000,000.

Figure 3
Average Duration of Litigation for Insurer X
 (reported by three-period moving average)

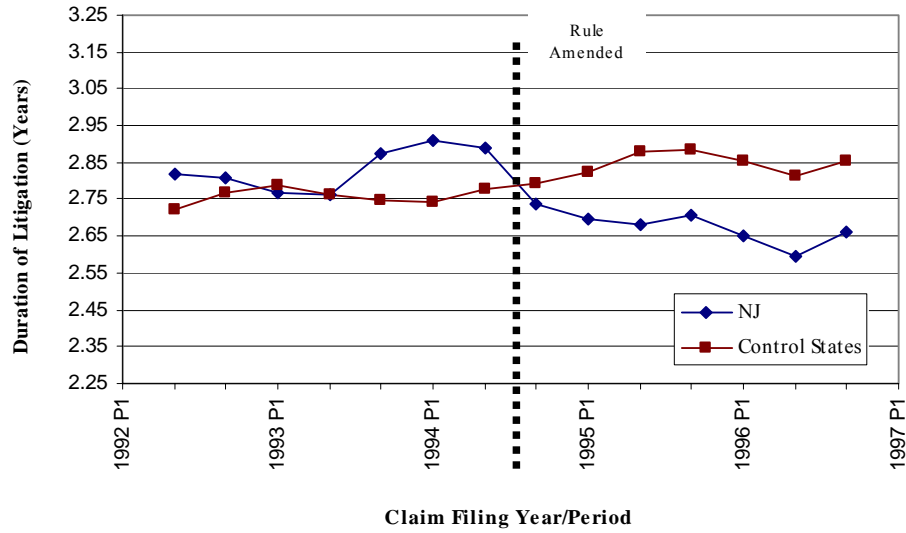


Figure 4
Average Attorneys' Fees for Insurer X
 (reported by three-period moving average)

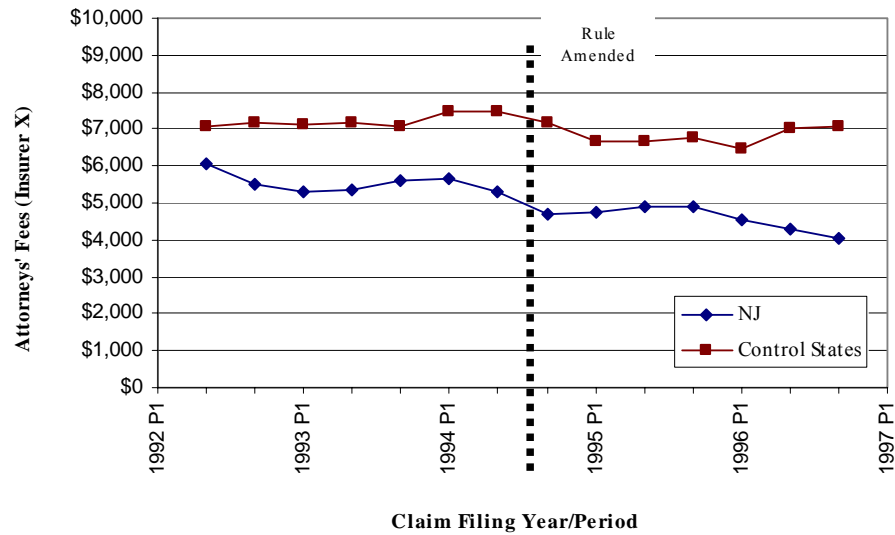


Figure 2 shows that damage awards vary for both New Jersey and the control states, with no clear discernible pattern until 1996, when the trend lines begin to diverge. By comparison, Figure 3, which reports the duration of litigation, shows a variable and visible downward trend for New Jersey but a less variable and discernible *upward* trend for the control states. Lastly, Figure 4 shows that Insurer X's attorneys' fees appear generally stable for the control states, but gradually declining in New Jersey.

The figures underscore the merits of the difference-in-difference approach. First, the approach highlights the importance of having a control group when engaging in any program evaluation. Trends that one may impute to the change in policy when looking only at the treatment group may, upon comparing them to a control group, simply reflect a broader secular trend. Second, it reveals the value of extending the period of analysis in each direction. Looking at the period immediately before and after the policy change may understate or overstate the policy's effect. Examining a broader period, and hence more observations, provides a more informed analysis.

Although the preceding figures suggest that the revised Rule 4:58 had an effect on litigation in New Jersey, it is hard to discern visually the magnitude of the policy change, and whether the results are statistically significant. To answer these questions, we turn to the regression-adjusted difference-in-difference analysis, as reported in Table 5.⁵⁵

55. Raw estimates of these difference-in-differences are presented in Appendix A.

Table 5
Regression-Adjusted Difference-in-Difference
Claims Filed against Insurer X between 1992 and 1997

	A. Damage Award ^a	B. Duration of Litigation	C. Attorneys' Fees (for Insurer X)
New Jersey	-\$11,285*** (\$2,660)	-0.1371 (0.3082)	-\$915*** (\$263)
Period 2	-\$8,286*** (\$1,668)	1.2087*** (0.2136)	-\$684* (\$400)
(New Jersey) x (Period 2)	-\$3,079 (\$3,794)	-2.3359*** (0.4498)	-\$1,173** (\$537)
Control for type of insurance claim ^d	Y	Y	Y
r^2	0.002	0.0411	0.0083
Mean	\$31,220	34.02	\$5,880
N	41,545	41,545	41,545

Notes: Data provided by Insurer X for all suits filed between January 1, 1992 and April 30, 1997. Claims exceeding 7.25 years are omitted. Standard errors are in parentheses. Control states are Connecticut, Delaware, Maryland, New Jersey, and New York. All payout figures are in 2003 dollars, adjusted by the Consumer Price Index.

^a Given high percentage of zero payouts, we use a Tobit model to estimate the regression.

^b The regression controls for type of insurance claim through a series of 27 dummy variables, including for auto: collision, dismemberment, other property; property: burglary, fire, and theft.

* Significant at the 90% confidence level, two-tailed test.

** Significant at the 95% confidence level, two-tailed test.

*** Significant at the 99% confidence level, two-tailed test.

Consistent with Figure 2, Column A shows that between 1992 and 1997, damage awards in New Jersey were lower than in the control states by an average of \$6,531. In Period 2 (after Rule 4:58 was revised), both New Jersey and the control states experienced lower payouts. The difference-in-difference estimate, $(NJ)(Per\ 2)$, reveals that in Period 2 New Jersey's payouts declined by \$1,560 relative to the control states. This reduction, however, was not statistically significant.

By contrast, Column B shows that the duration of litigation in New Jersey dropped by an average of 2.3 months in Period 2, relative to the control states, where duration actually increased over the same period. This change reflects a 7 percent relative reduction between Period 1 and Period 2, a statistically significant change where the overall litigation duration increased by less than one month from Period 1 (33.7 months) to Period 2 (34.3 months).

Given that there was a sizeable but statistically non-significant reduction in damage awards and a sizeable and statistically significant reduction in duration of litigation, how did it affect Insurer X's own attorneys' fees? Recall that Figure 4 suggests that these fees appear to move in slightly opposite directions in Period 2. Column C reports that, controlling for types of cases, attorneys' fees in New Jersey decreased by \$1,173 in Period 2 relative to the control states, a statistically significant reduction of nearly 20 percent.

With any analysis of panel data, there is always the possibility that results are being driven by outlier data. This is particularly true of litigation, where a few damage awards may be an order of magnitude higher than the others. Also, to the extent that the regression suggests that the law creates statistically significant change, it is helpful to see where along the distribution of a given outcome variable these changes are occurring. Conversely, a regression reporting a statistically non-significant change may be masking meaningful changes that occur along different points of the distribution. Accordingly, we find it instructive to examine the cumulative distribution functions of these outcome variables, comparing New Jersey to the control states before and after the change in the law.

Figure 5
Cumulative Distribution Function Comparison of Damage Awards
Period 1 vs. Period 2

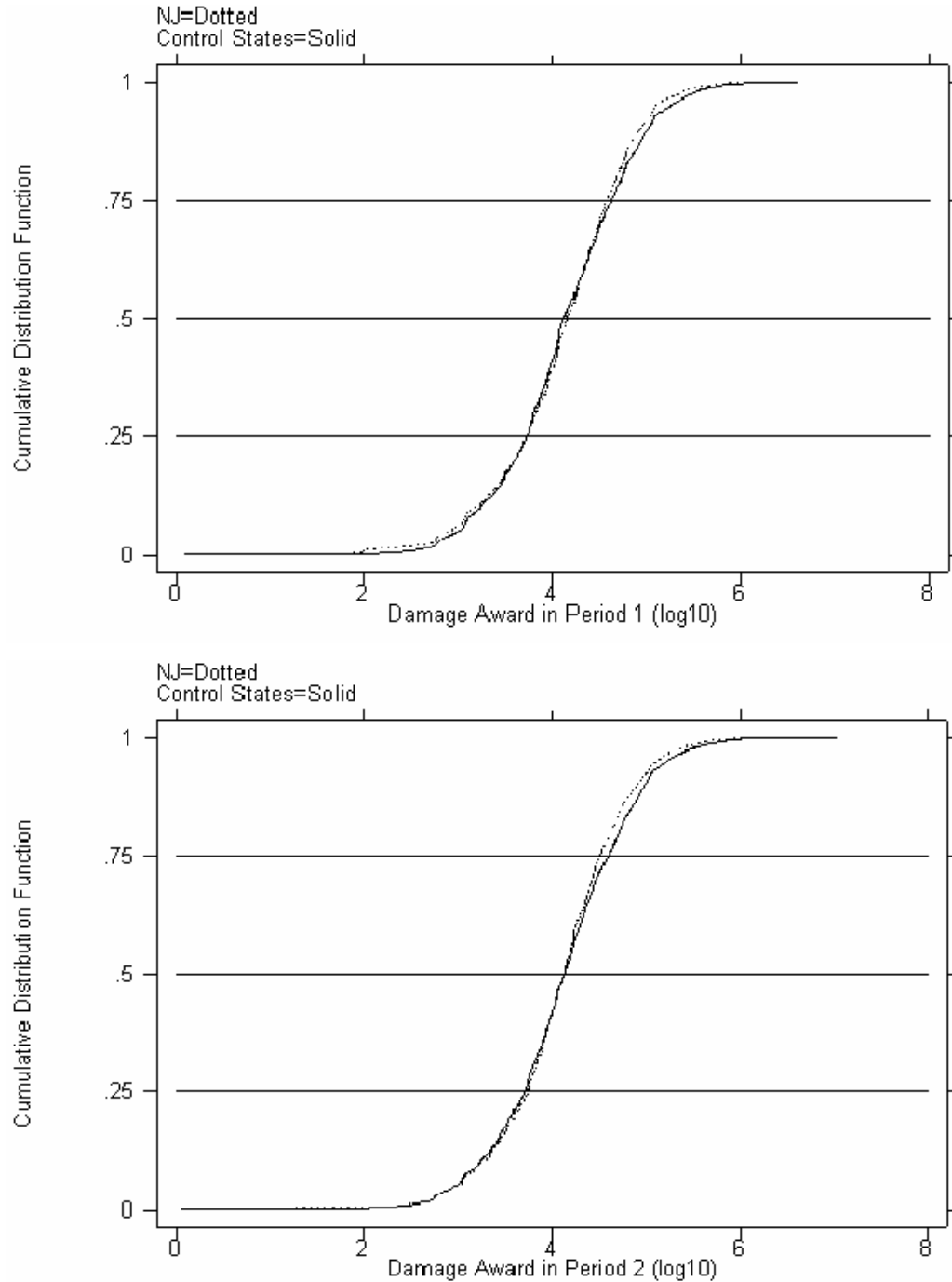
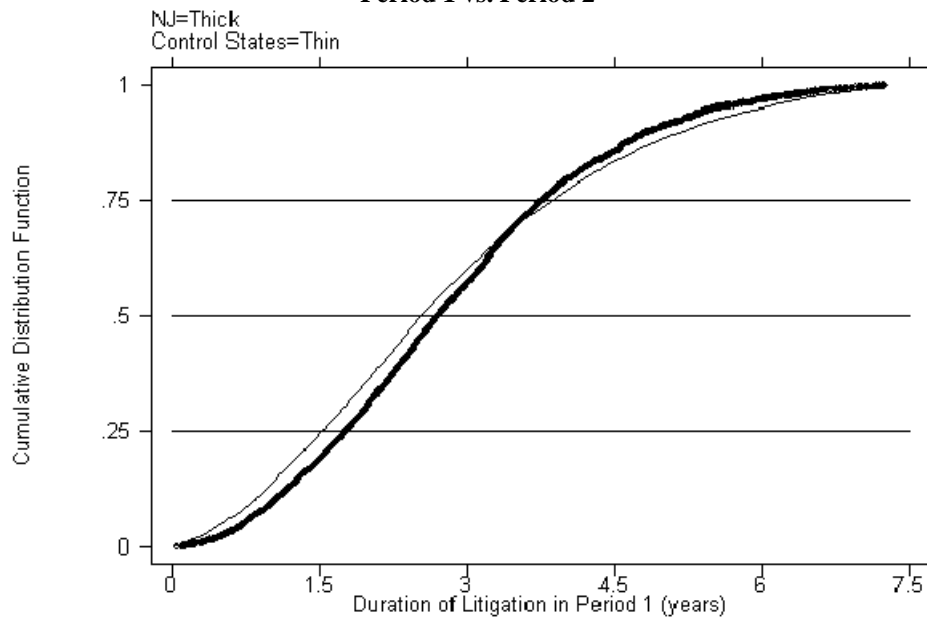


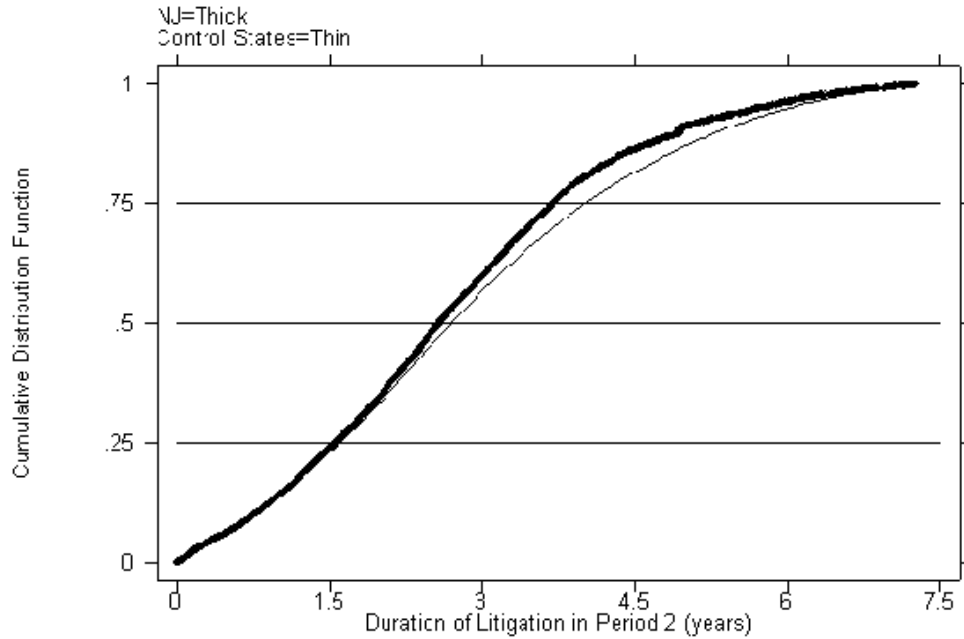
Figure 5 reports the cumulative distribution function⁵⁶ of damage awards in New Jersey and the control states in Period 1 and Period 2. The awards are reported in log (base 10) to observe the distribution of the lower payouts that comprise the majority of awards.⁵⁷ Figure 5 supports our inference from Figure 2, namely that there is not a clear difference in payouts between the two groups for either Period 1 or Period 2. The distributions in each period closely track one another, with slight spacing occurring at awards greater than \$10,000.

Figure 6
Cumulative Distribution Function Comparison of Duration of Litigation
Period 1 vs. Period 2



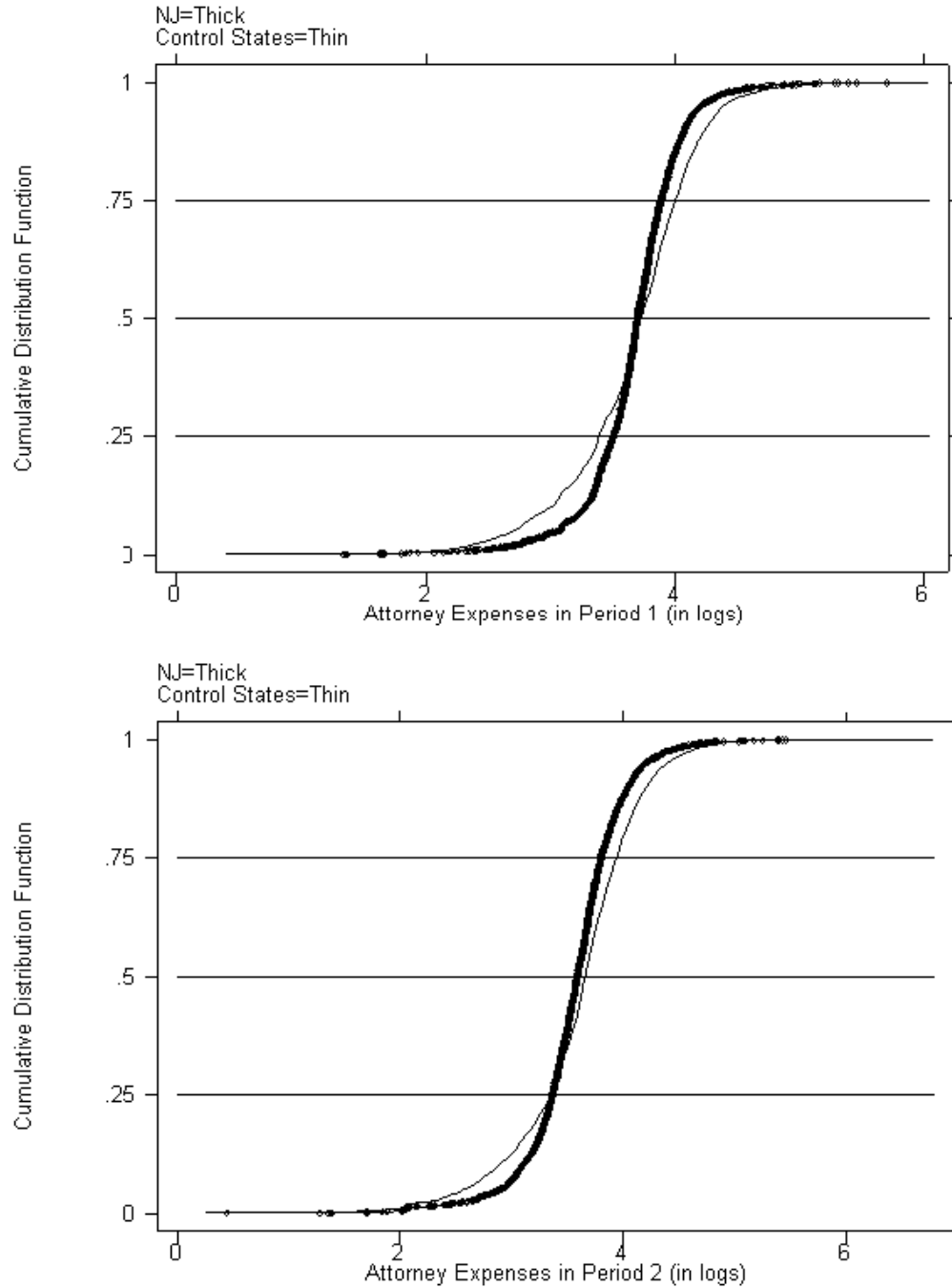
56. The cumulative distribution function (CDF) is “a function that gives the probability of a random variable being less than or equal to a specified real number.” JEFFREY M. WOOLDRIDGE, *INTRODUCTORY ECONOMETRICS: A MODERN APPROACH* 793 (South-Western College Publishing 2000). In the figures in the text, the CDF shows the successive probability—from zero to 100 percent—for each observed value in the probability distribution.

57. Showing the damage awards without transformation compresses smaller awards, rendering it difficult to discern any distinctions across groups.



The distribution of suits by duration reveals more pronounced results, as shown in Figure 6. In Period 1, the lines for New Jersey and the control states follow different trends, and actually cross one another. New Jersey had a smaller percentage of short-duration suits (e.g., under three years), but also a smaller percentage of medium-duration suits (e.g., between three and six years). Beyond six years, the lines converge. In Period 2, New Jersey's distribution shifts slightly to the left as the control states' distribution shifts more markedly to the right. New Jersey matches the control group's distribution for suits less than two years, and thereafter remains to the left. Relative to the control group, New Jersey in Period 2 distinguishes itself with a higher percentage of the suits between three and five years.

Figure 7
Cumulative Distribution Function Comparison of Attorneys' Fees
Period 1 vs. Period 2



Lastly, the figures for attorneys' fees follow similar trends as the duration distributions, albeit with more subtle differences. Figure 7 shows that in Period 1, New Jersey had relatively fewer suits with attorneys' fees below \$5,000, and relatively more suits with attorneys' fees between \$5,000 and \$10,000. In Period 2, the gap between New Jersey and the control group narrowed for smaller attorneys' fees (e.g., below \$5,000), although it appeared to hold constant for fees above \$10,000.

The question that naturally arises is what is the interaction between damage awards and duration of litigation? As one might expect, the correlation between duration of litigation and damage award is positive.⁵⁸ One explanation for this is that higher damage awards are more complex in nature, requiring parties to spend more time—e.g., through discovery, expert witnesses, etc.—to assess more accurately the merits of the suit. Alternatively, it may be that parties take more time reaching an agreement when the stakes are higher. After Rule 4:58 was revised, the results show that suits in New Jersey took less time on average to resolve, but where did this reduction occur with respect to damage awards? Does the reduction occur across the full distribution of awards, or does the revised rule appear to affect only one segment, such as small awards or large awards?

To answer this question more formally, we again turn to a difference-in-difference model. This time, however, we divided the data sample into four approximately equal-sized groups, based on the size of damage awards: \$0; \$1-\$7,500; \$7,501-\$25,000; and \$25,001 and above. For each of these quartiles we ran a separate difference-in-difference analysis with the duration of litigation as our outcome variable. The results are reported in Table 6.

58. For the overall sample, the correlation between duration of litigation and damage award was 0.09. Breaking down the damage awards into quartiles, the average duration litigation was as follows: \$0: 32.7 months; \$1-\$7500: 31.1 months; \$7501-\$25,000: 34.4 months; \$25,001 and above: 38.1 months.

Table 6
Change in Duration of Litigation - Period 1 vs. Period 2
Based on Damage Award Quartile

Damage Award Quartile	NJ (Per1-Per2)	Control States (Per1-Per2)	Difference-in-Difference	Mean	N
\$0	-5.54*** (0.7889)	-2.37*** (0.4418)	-3.17*** (0.8972)	32.66	[11988]
\$1-\$7,500	-2.54*** (0.8133)	2.07*** (0.4361)	-4.62*** (0.9201)	31.15	[10001]
\$7,501-\$25,000	1.23 (0.7757)	2.95*** (0.4247)	-1.71* (0.8853)	34.39	[9314]
\$25,001 and up	2.20*** (0.8204)	2.90*** (0.4085)	-0.70 (0.9264)	38.07	[10242]

Notes: Data provided by Insurer X for all suits filed between January 1, 1992 and April 30, 1997. Claims exceeding 7.25 years are omitted. Standard errors are in parentheses. Control states are Connecticut, Delaware, Maryland, New Jersey, and New York.

* Significant at the 90% confidence level, two-tailed test.

** Significant at the 95% confidence level, two-tailed test.

*** Significant at the 99% confidence level, two-tailed test.

After Rule 4:58 was revised, the average duration of litigation dropped in New Jersey by roughly 5.5 months for suits where the insurer ultimately paid zero in damage awards and 2.5 months for suits where it paid between \$1 and \$7,500. For the upper two quartiles, the duration of litigation in New Jersey actually increased: by approximately 1.25 months for suits between \$7,501 and \$25,000 and 2.25 months for suits beyond \$25,000. The figures in the control states follow a similar upward trend, except that the control states experienced a steeper upward trend towards longer disputes. Thus, when we look at the difference-in-difference estimator, New Jersey experienced a relative drop in duration of litigation for each quartile of damage awards; all but the highest quartile were statistically significant.

VI. DISCUSSION

Our results show that the revision of Rule 4:58 appears to have had a discernable effect on insurance-based litigation. In the aftermath of the revision of the offer-of-judgment rule, which abolished the \$750 cap on attorneys' fees as a cost-shifting measure, the average duration of litigation decreased in New Jersey relative to the neighboring control states by 7 percent (2.3 months) on average. Correspondingly, the amount that Insurer X spent on its own attorneys' fees in New Jersey decreased on average by a relative

margin of 20 percent (\$1,173). Both of these reductions were statistically significant. At the same time, damage awards, which had a modest relative decrease in New Jersey, did not change in any statistically significant amount.

It may be instructive to take a step back and ask whether our empirical findings comport with expectations. We preface our remarks by cautioning against applying our findings as a direct test of existing theoretical models on offer-of-judgment rules.⁵⁹ In generating predictions, these models make strong assumptions regarding the bargaining process between litigants. Once we relax the aforementioned theoretical assumptions, however, the analysis grows increasingly complex. In actual litigation, litigants may disagree over who is at fault, the scope of damages, what will happen at trial, as well as their sense of urgency to reach a resolution.⁶⁰

With respect to damage awards, we would expect that, given the symmetric nature of the rule, neither plaintiffs nor defendants would receive an advantage. Assuming that plaintiffs and defendants are drawn from the same distribution of the population with respect to resources, attitudes towards uncertainty, and costs of litigating a suit, damage awards should not increase or decrease, on average, after the rule was revised.⁶¹ That is consistent with what we observed in our analysis. While average relative awards decreased in New Jersey in Period 2, the decrease was not statistically significant.

We offer one caveat: the fact that the coefficient on damage awards is negative suggests that the plaintiffs and defendants in our dataset may not be drawn from the same distribution. Considering the litigants in our dataset—individuals versus an insurer—this is certainly plausible. Unlike the insurer, individual plaintiffs are not typically repeat players, nor do they have the same resources to litigate the suit. Accordingly, one can argue that individual plaintiffs are more risk-averse⁶² than the insurer, explaining why damage

59. See *supra* Part II.

60. See Ariel Rubinstein, *Perfect Equilibrium in a Bargaining Model*, 50 *ECONOMETRICA* 97, 108 (1982) (stating how opposing parties' discounting of time affects their relative distribution of payouts).

61. One may argue, pursuant to Shavell and Katz, that the rule would lower damage awards as plaintiffs withdraw from filing low-probability-of-prevailing claims. See Shavell, *supra* note 27, and Katz, *supra* note 27. While true, this ignores the possibility that the rule may encourage plaintiffs with high-probability-of-prevailing claims (but with relatively low expected awards) to file suit. Again, assuming plaintiffs and defendants are drawn from the same distribution, there is no reason to expect any bias.

62. A risk-neutral person is one who is indifferent between choices that produce the same expected outcome, e.g., she is indifferent between receiving \$10 or a 10% chance for \$100, since both produce the same expected outcome of \$10. A risk-averse individual prefers a lower payout that is guaranteed to a higher expected payout that is uncertain, e.g., she prefers a guaranteed

awards decreased after Rule 4:58 was revised. But this is mere speculation, since the decline we observed was not statistically significant.

Even if damage awards do not change, some legal theorists have argued that the threat of cost-shifting increases the likelihood of settlement by encouraging litigants to be more generous in their offers.⁶³ Our findings on settlement rate, reported in Table 7, do not support this proposition.

Table 7
Rate of Settlement - Period 1 vs. Period 2

	New Jersey	Control States	Control States - New Jersey
Period 1	99.19% [3,084]	96.97% [12,394]	-2.22%*** [15,478]
Period 2	98.99% [3,166]	96.69% [12,828]	-2.30%*** [15,478]
Period 1 - Period 2	-0.20% [6,250]	-0.29% [25,222]	-0.09% [31,472]

Note: Figures drawn from suits where mode of resolution is reported. This variable was completed for 75.8% of the total sample.

*** Significant at the 99% confidence level, two-tailed test.

The settlement rate for New Jersey and the control states, while statistically significant from one another for each period, did not dramatically change before and after the rule's revision. The difference-in-difference estimate, -0.09 percent, actually runs counter to the prediction, but is small and not statistically significant. This result can hardly provide a refutation of the theory: our analysis looks at a subsection of civil litigation—insurance suits—where the baseline settlement rate is very high,⁶⁴ making it difficult for settlement rates to significantly increase.

payout of \$9 to an expected payout of \$10, but with a 50% chance of \$20 and a 50% of \$0. See DOUGLAS G. BAIRD ET AL., *GAME THEORY AND THE LAW* 314 (1994).

63. See Miller, *supra* note 34, at 124; see also Spier, *supra* note 35, at 211 (“[B]y increasing his offer, the defendant both reduces probability of a trial and reduces his expected cost contingent upon reaching trial.”).

64. The settlement rate in this dataset is higher than other estimates. See Marc Galanter, *The Vanishing Trial: An Examination of Trials and Related Matters in Federal and State Courts*, 1 J. EMPIRICAL LEGAL STUD. 459, 461 (2004) (stating that “the portion of dispositions that were by trial was less than one-sixth of what it was in 1962 – 1.8 percent now as opposed to 11.5

We believe, however, that the intuition underlying the theory on settlement rate remains valid but that settlement rate may be too blunt an instrument to measure the rule's effect on the litigation process. If we think of litigation as a dynamic process,⁶⁵ then duration of litigation—rather than settlement rate—may be a more precise measure of how the rule promotes resolution.⁶⁶ In litigation, particularly the early stages, the plaintiff and the defendant hold sincere but often differing beliefs (probability distribution functions) over how the suit would resolve at trial, both with respect to liability as well as damages.⁶⁷ Distinguishable from the litigants' probability distributions is the "true" probability distribution of what would happen if the case resolved by trial. Neither the plaintiff nor defendant knows the true distribution. For example, in Figure 8, illustrating a basic civil dispute for money damages, P believes that she is entitled to a higher range of damage awards (\$7,500 to \$10,000) than the defendant is willing to pay (\$2,500 to \$5,000). The true distribution likely lies between the two litigants' distributions.

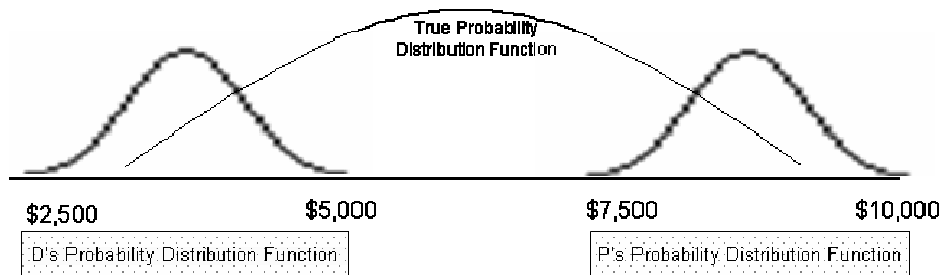
percent in 1962"); Galanter & Cahill, *supra* note 3, at 1339-40 (noting that most estimates find that between 85% and 90% of cases resolve before trial).

65. For examples of dynamic models of litigation, see Holger Sieg, *Estimating a Bargaining Model with Asymmetric Information: Evidence from Medical Malpractice Disputes*, 108 J. POL. ECON. 1006, 1008-15 (2000) (illustrating bargaining strategies and considerations for settlements); Joel Waldfogel, *The Selection Hypothesis and the Relationship between Trial and Plaintiff Victory*, 108 J. POL. ECON. 229, 232 (1995) (asserting that selection of suits for trial is a function of probability of plaintiff victory at trial). See also Yasutora Watanabe, *Learning and Bargaining in Dispute Resolution: Theory and Evidence from Medical Malpractice Litigation* (2004) (unpublished manuscript, on file with author).

66. Our reasoning is based on psychology as much as economic incentives. This point was suggested by Kathy Spier during conversation.

67. See Gregory Todd Jones & Douglas H. Yarn, *Evaluative Dispute Resolution Under Uncertainty: An Empirical Look at Bayes' Theorem and the Expected Value of Perfect Information*, 2003 J. DISP. RES. 427, 448 ("[A]s a whole, litigants tend to overestimate the expected outcomes of potential litigation.").

Figure 8
Plaintiff and Defendant's Perception of Dispute Without Offer-of-Judgment Rule



The litigation process allows for the plaintiff and the defendant to acquire more information about the case, in the process learning more about the true probability distribution of the suit. Remaining in litigation, however, represents a tradeoff for the litigants: more information allows the litigants to be more informed during settlement negotiations; this information is costly to obtain, incurring expenses in the form of attorneys' fees, expert witnesses, and depositions. Assuming that the true outcome probability distribution falls between the litigants individual probability distributions, over time the litigants converge towards a mutually acceptable outcome. This certainly describes the vast majority of litigants, who ultimately do reach a settlement. Those who do not, by definition, proceed to trial.

A bilateral offer-of-judgment rule reduces the duration of litigation by increasing the likelihood of settlement in any given period. One could imagine this could be done in a couple of ways. The first is by encouraging litigants to issue more attractive—i.e., generous—offers. Even if they hold different views over the range of outcomes at trial (e.g., their respective probability distribution), each litigant knows that a less generous offer within that range is less likely to be accepted and less likely to trigger cost-shifting should that offer be rejected with a trial to follow. Conversely, the more generous the offer, the more inclined the offeree will be to accept the offer, and the more credible the threat of cost-shifting will be if the offeree rejects the offer and proceeds to trial. As the rule is symmetric, the plaintiff has an incentive to demand less and the defendant to offer more. In any given period of litigation, the rule may not be enough to compel the litigants to reach a settlement, but it should draw them closer than they would be in the absence of the rule. And it is

reasonable to believe that being closer to an agreement at the end of one period of negotiations increases the likelihood of settlement for the next period.

Second, the rule may inspire parties to settle by making the costs of proceeding to trial less attractive. The intuition here is that the outcome at trial is determined, in part, by the resources expended by the litigant. Additional resources not only increase a litigant's likelihood of prevailing, but also the scope of damages. The issuance of pre-trial offers may lead to a game of mutually assured destruction,⁶⁸ where each side will spend an escalating amount of resources to achieve an outcome that triggers (or avoids) cost-shifting. Given the possibility of a financially catastrophic outcome, litigants would prefer to resolve the dispute before trial.⁶⁹

The predictions regarding attorneys' fees are merely a logical extension of the predictions on duration of litigation. In general, attorneys' fees are positively correlated with the time it takes to resolve a suit since, all things being equal, litigants incur greater attorneys' fees as litigation proceeds. If a litigant reaches a resolution sooner, it follows that her attorney works fewer hours, thereby reducing the litigant's attorneys' fees. We observe precisely that with Insurer X's attorneys' fees.⁷⁰ We would also predict that attorneys' fees for plaintiffs would similarly decline in New Jersey following the rule revision. Unfortunately, the data do not allow us to observe how much plaintiffs paid their attorneys, which would have allowed us to test whether this hypothesis is true, and if so, whether plaintiffs enjoyed the same degree of savings.

At the same time, however, we would expect the downward effect of the rule on duration of litigation—and thereby attorneys' fees—should decline as damage awards increase. The reason is that the relationship between attorneys' fees and damage awards is non-

68. The doctrine of mutually assured destruction (MAD) is rooted in the Cold War and nuclear deterrence, and states that adversaries possess enough weaponry to destroy the other side and that either side, if attacked for any reason by the other, would retaliate with equal or greater force. See STEPHEN J. CIBALA, *THE PAST AND FUTURE OF NUCLEAR DETERRENCE* 128 (1998).

69. This claim stands in contrast to some of the existing theoretical literature on the effect of offer-of-judgment rules on the likelihood of settlement. Some scholars believe that such offers, if rejected, create a "dig-in" effect that decreases the likelihood of settlement. See Thomas D. Rowe, Jr., *Predicting the Effects of Attorney Fee Shifting*, 47 *LAW & CONTEMP. PROBS.* 139, 165 (1984). These theoretical issues will be explored in future research. See Eric Talley & Albert H. Yoon, *Offers of Judgment, Credible Commitment, and Asymmetric Information Bargaining*, (2005) (unpublished manuscript, on file with authors).

70. See *supra* note 51.

linear.⁷¹ For low damage awards, attorneys' fees comprise a larger part of total expenses and often exceed the damage award. As damage awards grow, however, one would expect that the ratio of attorneys' fees to damage awards decreases.

Table 8
Insurer X's Average Damage Award and Attorneys' fees
Full Sample, All Years between 1992 and 1997

Range	Damage Award	Attorneys' Fees	N
\$0	\$0	\$6,967	11,988
\$1 - \$7500	\$3,384	\$3,949	10,001
\$7,501 - \$25,000	\$14,391	\$5,017	9,314
\$25,001 and above	\$110,246	\$10,416	10,242

Table 8 substantiates this hypothesis. For the total sample, Insurer X's attorneys' fees as a ratio to the damage award decreased for each succeeding quartile. Therefore, if the relationship between attorneys' fees and damage awards is non-linear, one would expect the effect of the rule on litigation duration to be non-linear as well. As the size of damage awards increases, the threat of attorneys' fees as a cost-shifting punishment diminishes. From a purely economic perspective, this may be a desirable result. If litigants are going to commit resources into litigation—and be relatively undeterred by an offer-of-judgment rule—they should do so where the stakes are highest.⁷²

VII. CONCLUSION

Using a unique data set provided by a large insurance provider, this Article shows that Rule 4:58, after it was revised to abolish the cap on attorneys' fees, had a real effect on insurance-based litigation. The change did not occur in the form of reduced or increased damage awards, but Insurer X experienced shorter periods of litigation and reduced attorneys' fees in New Jersey, relative to the control states. These reductions were substantial and statistically significant. While we do not have the data to confirm this, we would hypothesize that plaintiffs also enjoyed lower attorneys' fees on their end, at least those

71. This is true even when the attorney is working on a contingency fee basis, since attorneys' fees for the purpose of cost-shifting are based on a reasonable fee and not necessarily the agreed-upon contingency percentage.

72. The relationship between attorneys' fees and damage awards is likely more complex. The two factors are endogenous: for Insurer X, increased investment in attorneys' fees likely lowers the damage award.

whose attorneys billed on an hourly rather than contingency fee arrangement.

What does this study tell us about the efficacy of offer-of-judgment rules? We offer two points, one economic and the other legal. First, an offer-of-judgment rule must have a credible cost-shifting mechanism in order to influence pre-trial negotiations. This point is not lost on commentators of the rule, who have repeatedly noted the ineffectiveness of Rule 68—and state rules modeled on Rule 68—because most litigants are unfazed by having to pay the other side's post-offer court costs.⁷³ The prior version of Rule 4:58 appears to have suffered this plight.

Second, the revised Rule 4:58 illustrates how offer-of-judgment rules can provide an attractive means of addressing perceived deficiencies in the tort system. States have experimented with other tort reform measures but with mixed results. Some reforms, such as damage caps, are highly effective in reducing the size of damage awards but have encountered constitutional resistance in some states.⁷⁴ Other reforms, such as mandatory arbitration, have reduced the administrative burden on state courts to adjudicate disputes without any appreciable difference in duration of litigation or costs, but raise questions about how the process in which arbitration panels are constructed.⁷⁵

While the merits of any tort reform measure depend on its stated objective, the revised Rule 4:58 offers a promising alternative. In contrast to damage caps, the rule is not biased against the plaintiff. And, unlike arbitration panels, the rule requires less regulation and does not raise questions of political capture. Based on our empirical results, one can argue that from a societal perspective, a powerfully

73. See Edward H. Cooper, *Rule 68, Fee Shifting, and the Rulemaking Process*, in REFORMING THE CIVIL JUSTICE SYSTEM 108 (Larry Kramer ed., 1996) (stating that "Rule 68 has been viewed by many, including me, as an uninteresting provision that remains on the fringe of procedure because it has been little used to scant effect").

74. See, e.g., Albert Yoon, *supra* note 51, at 216 (showing how damage caps enacted by the Alabama legislature in 1987 reduced payouts by an average of \$20,000). In a trilogy of cases — *Moore v. Mobile Infirmary Association*, 592 So. 2d 156 (Ala. 1991) (\$400,000 cap on economic damages), *Henderson ex rel Hartsfield v. Alabama Power Co.*, 627 So. 2d 878 (Ala. 1993), (\$250,000 cap on punitive damages), and *Smith v. Schulte & Pulmonary Association of Mobile, P.A.*, 671 So. 2d 1334 (Ala. 1995) (\$1,000,000 cap on wrongful death) — the Alabama Supreme Court subsequently struck down all damage cap provisions. *But see* Pulliam v. Coastal Emergency Servs., Inc., 509 S.E.2d 307 (Va. 1999) (holding that Virginia's damage cap provisions do not violate the U.S. or Virginia constitutions); *Etheridge v. Med. Ctr. Hospis.*, 376 S.E.2d 525 (Va. 1989) (same).

75. See, e.g., Albert Yoon, *Mandatory Arbitration and Civil Litigation: An Empirical Study of Medical Malpractice Litigation in the West*, 6 AM. L. & ECON. REV. 95, 131 (2004) (describing how mandatory arbitration in Nevada resulted in a lower percentage of claims requiring resolution in court).

symmetrical offer-of-judgment rule enhances social welfare because it achieves similar damage awards but with lower transaction costs (e.g., time and attorneys' fees). Perhaps the only ones who might be worse off under this change are the attorneys themselves. Other states may similarly be inspired to follow New Jersey's example. Indeed, in the aftermath of Rule 4:58's revision, at least one other state has strengthened its existing offer-of-judgment rule.⁷⁶

In future work, we intend to examine how litigants apply and respond to offer-of-judgment rules. Is the mere threat of the rule enough to motivate litigants in their pre-trial discussion, or do the litigants actually make offers to each other? If so, for what type of suits does this occur? A promising area of comparison would be medical malpractice suits, an area of litigation which continues to draw the attention of legislators at both the state and federal level.

76. For example, in 1995, Oklahoma passed a comprehensive tort reform bill, of which a central component was a bilateral offer-of-judgment rule with attorneys' fees. OKLA. STAT. tit. 12, § 1101.1 (Supp. 1995).

Appendix A

Raw Estimate Difference-in-Difference

Duration of Litigation

	Period 1 (Jan92-Aug94)	Period 2 (Sept94-Apr97)	Period 2 - Period 1
New Jersey	34.24 (0.2733) [4064]	32.69 (0.2970) [3998]	-1.55*** (0.4034)
Control States	33.61 (0.1534) [16443]	34.67 (0.1542) [17040]	1.05*** (0.2176)
(NJ-CS) Difference	-0.6153* (0.3372)	1.9806 (0.3492)	-2.60*** (0.4585)

Payout

	Period 1 (Jan92-Aug94)	Period 2 (Sept94-Apr97)	Period 2 - Period 1
New Jersey	\$27,748 (\$1,322) [4064]	\$23,803 (\$1,171) [3998]	-\$3,946** (\$1,768)
Control States	\$33,718 (\$845) [16443]	\$31,377 (\$1,077) [17040]	-\$2,340* (\$1,375)
(NJ-CS) Difference	\$5,969*** (\$1,822)	\$7,575*** (\$2,294)	-\$1,606 (\$2,234)

Attorneys' Fees

	Period 1 (Jan92-Aug94)	Period 2 (Sept94-Apr97)	Period 2 - Period 1
New Jersey	\$5,670 (\$211) [4064]	\$4,438 (\$179) [3998]	-\$1,231 (\$277)
Control States	\$7,245 (\$161) [16443]	\$6,838 (\$389) [17040]	-\$406 (\$427)
(NJ-CS) Difference	\$1,574*** (\$341)	\$2,400*** (\$808)	-\$825 (\$504)

Notes: Data provided by Insurer X for all suits filed between January 1, 1992 and April 30, 1997. Claims exceeding 7.25 years are omitted. Standard errors are in parentheses. Control states are Connecticut, Delaware, Maryland, New Jersey, and New York. All payout figures are in 2003 dollars, adjusted by the Consumer Price Index.

* Significant at the 90% confidence level, two-tailed test.

** Significant at the 95% confidence level, two-tailed test.

*** Significant at the 99% confidence level, two-tailed test.

Appendix B**Text of N.J. Ct. R. 4:58****N.J. Ct. R 4:58. Offer of Judgment****4:58-1. Time and Manner of Making and Accepting Offer**

Except in a matrimonial action, any party may, at any time more than 20 days before the actual trial date, serve upon any adverse party, without prejudice, and file with the court, an offer to take judgment in the offeror's favor, or as the case may be, to allow judgment to be taken against the offeror, for a sum stated therein or for property or to the effect specified in the offer (including costs). If at any time on or prior to the 10th day before the actual trial date the offer is accepted, the offeree shall serve upon the offeror and file a notice of acceptance with the court. The making of a further offer shall constitute a withdrawal of all previous offers made by that party. An offer shall not, however, be deemed withdrawn upon the making of a counter-offer by an adverse party but shall remain open until accepted or withdrawn as is herein provided. If the offer is not accepted on or prior to the 10th day before the actual trial date or within 90 days of its service, whichever period first expires, it shall be deemed withdrawn and evidence thereof shall not be admissible except in a proceeding after the trial to fix costs, interest and attorney's fee. The fact that an offer is not accepted does not preclude a further offer within the time herein prescribed in the same or another amount or as specified therein.

4:58-2. Consequences of Non-acceptance of Claimant's Offer

If the offer of a claimant is not accepted and the claimant obtains a verdict or determination at least as favorable as the rejected offer, the claimant shall be allowed, in addition to costs of suit, (a) all reasonable litigation expenses incurred following non-acceptance; (b) eight per cent interest on the amount of any money recovery from the date of the offer or the date of completion of discovery, whichever is later; and (c) a reasonable attorney's fee, which shall belong to the client, for such subsequent services as are compelled by the non-acceptance. In an action for unliquidated damages, however, no allowances under this rule shall be granted to the offeror unless the amount of the recovery is in excess of 120% of the offer. A claimant entitled to interest under R. 4:42-11(b) shall be allowed interest under this rule only to the extent it may exceed the interest allowed under R. 4:42-11(b).

4:58-3. Consequences of Non-acceptance of Offer of Party Not a Claimant

If the offer of a party other than the claimant is not accepted and the determination is at least as favorable to the offeror as the offer, the offeror shall be allowed, in addition to costs of suit, litigation expenses and attorney's fee as prescribed by R. 4:58-2, and any such allowances shall constitute a prior charge upon the judgment. In an action for unliquidated damages, however, no allowances under this rule shall be granted to such offeror unless the amount awarded to the claimant is in excess of \$750.00 and is less than 80 per cent of the offer.

4:58-4. Multiple Defendants

If there are multiple defendants against whom a joint and several judgment is sought, and one of the defendants offers in response less than a pro rata share, that defendant shall, for purposes of the allowances under R. 4:58-2 and -3, be deemed not to have accepted the claimant's offer. If, however, the offer of a single defendant, whether or not intended as the offer of a pro rated share, is at least as favorable to the offeree as the determination of total damages to which the offeree is entitled, the single offering defendant shall be entitled to the allowances prescribed in R. 4:58-3, provided, however, that in an action for unliquidated damages the offeree has received at least \$750 and that single defendant's offer is at least 80% of the total damages determined.