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Testing Two Assumptions About Federalism and Tort Reform

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INTRODUCTION

A hallmark of the “Republican Revolution” is a shift of policymaking authority from the national government to the states. Various federal legislative initiatives would give states greater flexibility and autonomy in deciding how

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to fight crime, deliver health care to the poor, and reform welfare. One remarkable exception to this pattern of preferring state level policymaking is the area of tort reform. In 1996, both the United States House of Representatives and Senate passed legislation that, if enacted, would preempt state tort law in significant ways. Why would a Congress otherwise apparently committed to vesting states with greater policymaking autonomy call for federal control of tort law? These developments invite a reconsideration of federalism values and tort policymaking.

Tort policymaking traditionally has taken place at the state level. One assumption underlying this distribution of power is that states are better able than the national government to fashion tort rules appropriate for local conditions and circumstances. In other words, states are thought to possess a special competence in crafting tort rules responsive to local needs. Some advocates of tort reform at the federal level maintain, however, that states are incapable or unlikely to develop tort rules—especially in the realm of products liability—consistent with national economic policy. These proponents of federal level tort reform see the states as competing for tort judgments. Federal tort reform is needed, so the argument goes, to counter pressures that exist at the


There were substantial difference between the bills as originally passed by the House and Senate. Generally speaking, the original House bill included more far reaching tort reform than its Senate counterpart. For a concise summary of the bills as originally passed by the House and Senate, see Product Liability Fairness Act of 1995, H.R. 956, Prod. Liab. Rep. (CCH) No. 833, at 7 (Mar. 22, 1995).


At the time of this writing, President Clinton is threatening to veto the bill. Martha M. Hamilton, Liability Bill to Get Clinton Veto; President Calls Measure Limiting Damages Unfair, WASH. POST, Mar. 17, 1996, at A1.

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state level to use tort law as a vehicle for redistributing wealth from nonresident defendants to resident plaintiffs.6 Under this view, states are largely incompetent to make sensible rules about products liability.

Our paper examines these two,7 contradictory assumptions about state competence in the realm of tort policymaking. First, we explore the proposition that states are incompetent to formulate sensible tort law policy, especially in the area of products liability. If the assumption of state incompetency were true, we would expect to find state legislation and judicial opinions that systematically favor resident plaintiffs. Second, we employ social scientific research methodology to question whether states have special competence to formulate tort policy. Specifically, we focus on damage caps, one of the most controversial components of tort reform, and analyze differences in state legislation taking into account demographic, political and legal attributes of the state. If state policymaking is indeed responsive to local conditions, we would expect some association between insurance profitability and damage-cap legislation.

In the end, however, we find flaws with both sets of assumptions. We find little evidence of state incompetency fueled by a competition for damage awards against nonresident defendants. An examination of state legislation and judicial decisions does not reveal a systematic bias against the interests of nonresident defendants. On the contrary, states have engaged in a high degree of pro-defendant policymaking. At the same time, however, we find little to support the assumption that states are highly competent in the area of tort policymaking. There appears to be little correlation between local conditions (measured by insurance profitability) and policy output (reflected in damage-cap legislation). Instead, enactment of damage-cap legislation is more closely associated with other traditional indicators of political power. Our tentative conclusion is that, in the area of tort reform, federalism is less a principle for allocating power between national and state governments than it is rhetoric to support substantive policy preferences.

6. *See infra* notes 11-14 and accompanying text.

7. We recognize that there are other arguments made in support of and in opposition to federal tort policymaking. Professor Gary Schwartz maintains that federal legislation in the area of products liability is justified because of the need for uniform liability rules relating to nationally distributed products. Gary T. Schwartz, *The Proper Federal Role in American Tort Law*, 38 *Ariz. L. Rev.* (forthcoming 1996). For earlier discussions of this topic, see, for example, Perlm, *supra* note 5; O. Lee Reed & John H. Watkins, *Product Liability Tort Reform: The Case for Federal Action*, 63 *Neb. L. Rev.* 389 (1984); David A. Rice, *Product Quality Laws and the Economics of Federalism*, 65 *B.U. L. Rev.* 1 (1985). We confine our discussion to these two assumptions. Our contribution to the federalism debate is bringing an empirical focus to the underlying assumptions made by various advocates. We recognize the limitations of our paper. It is only a beginning and not the final word on the subject.
I. ARE STATES INCOMPETENT TORT POLICYMAKERS?

A. The Assumption: A "Race to the Bottom"

One justification for federal level policymaking is that states are structurally incompetent to develop policies that advance national goals. State sovereignty is one barrier to policymaking consistent with national goals. As independent sovereigns, each state retains a sphere of autonomy that another state cannot override. Illinois, for example, cannot dictate Wisconsin's water pollution control policies. Additionally, competitive forces might induce states to adopt policies that actually run contrary to national objectives. Independent states may compete with each other for some scarce resource, such as business development. For example, one state may choose to relax its pollution control laws in an effort to attract new industry. A neighboring state, also interested in attracting new industry, might respond by relaxing its pollution control standards even further. This competition for industry would in theory produce a "race to the bottom" externalizing pollution costs on neighboring states and impeding achievement of national environmental policy. Some argue that uniform federal environmental regulations are needed to prevent this race to the bottom among states competing for industrial development.

The race to the bottom rationale has emerged as a justification for federal level tort reform, particularly with regard to products liability. In a provocative book, Justice Richard Neely of the West Virginia Supreme Court asserted that state judges and legislators have incentives to shape and apply tort law to systematically favor the interests of resident plaintiffs over those of nonresident product manufacturers. In this context, the competition among states is said


9. The concept of a "race to the bottom" appears to have been coined by Professor Cary to explain why states, particularly Delaware, created a favorable legal climate for management in order to attract business incorporations. William Cary, Federalism and Corporate Law: Reflections Upon Delaware, 83 Yale L.J. 663, 668-69 (1974). For a thoughtful reexamination of this thesis, see Daniel R. Fischel, The "Race to the Bottom" Revisited: Reflections of Recent Developments in Delaware's Corporation Law, 76 NW. U.L. REV. 913 (1982).


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to be for tort judgments against nonresident defendants. Tort law is viewed as a mechanism for redistributing wealth from nonresident manufacturers to resident plaintiffs. According to Justice Neely, states competing for tort judgments will be indifferent to national economic policy. "As far as any elected legislator is concerned, then, generating more conservative product liability rules is the no-win political exercise of redistributing wealth from local residents to out-of-state business." Neely also claims that judges are influenced by this competition:

The fact of the matter is that as a state judge, I can do nothing to make the overall law more sensitive to concerns of national economic policy. The best I can do, and I do it all the time, is to make sure that my own state's residents get more money out of Michigan than Michigan residents get out of us. This I call the competitive race to the bottom and it is at the heart of the structural problems presented by uncoordinated local jurisdictions.

A few years after the publication of his book, Justice Neely provided a concrete example of the race to the bottom in action. In Blankenship v. General Motors Corp., the West Virginia Supreme Court considered whether to recognize a tort claim for "enhanced injuries" under the "crashworthiness" doctrine. General Motors argued that such an action would be "unfair," particularly since West Virginia did not allow the plaintiff's failure to wear a seat belt to be considered as contributory negligence. General Motors also claimed that recognizing this type of claim would encourage juries to "second-guess the safety standards promulgated by the National Highway Traffic Safety Administration . . . leaving manufacturers . . . unable to predict what juries will deem a 'defective product' . . . [and] giving the whole regulatory effort a

12. At first blush, it may appear counterintuitive that states would compete for business, see supra note 9, and at the same time compete for tort judgments against business. This apparent conflict evaporates when one considers who benefits from the respective competitions. The economic benefits of businesses locating plants or other facilities in a given state are captured by that state. Thus, there are incentives for states to compete for new automobile assembly plants and the like. Adopting pro-defendant tort rules, however, will do little to protect those businesses. The vast majority of products manufactured in a given state are used or consumed outside that state. The tort rules generated by the state in which the product is manufactured generally will not govern claims arising from the use of that product outside the jurisdiction. The vast majority of plaintiffs, on the other hand, are residents of the forum state. While the adoption of pro-defendant tort rules will provided only limited benefit to resident defendants, pro-plaintiff tort rules will enable resident plaintiffs to secure compensation from mostly nonresident defendants. For further discussion of this point, see S. Rep. No. 69, 104th Cong., 1st Sess. 13 (1995); Michael W. McConnell, A Choice of Law Approach to Products-Liability Reform, in NEW DIRECTIONS IN LIABILITY LAW 90, 92-93 (W. Olson ed., 1988).
13. NEELY, supra note 11, at 71.
14. Id. at 71-72.
16. Id. at 783-84.
certain *Alice in Wonderland* quality."\(^{17}\) Despite characterizing these arguments as "strong", \(^{18}\) the Court held for the plaintiff. In a revealing passage, Justice Neely wrote:

Although some members of this Court have reservations about the wisdom of many aspects of tort law, as a court we are utterly powerless to make the *overall* tort system for cases arising in interstate commerce more rational: Nothing that we do will have any impact whatsoever on the set of economic trade-offs that occur in the *national* economy. And, ironically, trying unilaterally to make the American tort system more rational through being uniquely responsible in West Virginia will only punish our residents severely without, in any regard, improving the system for anyone else.\(^{19}\)

The court then considered which party should bear the burden of proof with regard to the enhanced injury. General Motors urged the court to adopt a rule that would make the plaintiff prove what injuries would have resulted from the collision in the absence of the design defect.\(^{20}\) Again, the court agreed that such a rule "makes a great deal of sense and, perhaps, it should be the national standard in all crashworthiness cases."\(^{21}\) Nonetheless, the court placed the burden of proof on the defendant because "West Virginians are not going to pay product liability insurance premiums so that ... residents of ... [other states] can collect the benefits."\(^{22}\)

The race to the bottom thesis has become part of the academic and political discourse surrounding tort reform. Some scholars embrace\(^{23}\) or implicitly accept\(^{24}\) the proposition that states have built-in incentives to develop and

\[\text{References:}\]

17. *Id.* at 783.
18. *Id.*
19. *Id.* (emphasis in the original and footnotes omitted).
20. *Id.* at 785.
21. *Id.* at 786.
22. *Id.*
23. *See, e.g.*, McConnell, *supra* note 12, at 92 ("In effect, consumers in states with less generous products-liability laws pay a portion of the more generous recoveries won by plaintiffs in other states. This imbalance introduces an incentive for strategic behavior . . . . Each state can profit at the expense of the others by expanding its scope of liability, at least until the others catch up."); Michael E. Solimine, *An Economic and Empirical Analysis of Choice of Law*, 24 GA. L. REV. 49, 71 (1989) ("Any one state has little incentive to change pro-resident tendencies in its tort law. This tendency is exacerbated by the pro-plaintiff bias of modern choice of law theories, and by forum-shopping opportunities exercised by plaintiffs.").
24. *See, e.g.*, AMERICAN LAW INSTITUTE, 2 REPORTERS' STUDY, ENTERPRISE RESPONSIBILITY FOR PERSONAL INJURY: APPROACHES TO LEGAL AND INSTITUTIONAL CHANGE 261 (1991) (commenting that punitive damage reform by a single state is likely to be ineffective because "the state that acts alone may simply provide some relief to out-of-state manufacturers at the expense of its own citizen-victims . . . ."); Joseph William Singer, *Real Conflicts*, 69 B.U. L. REV. 3, 64 (1989) ("[W]e should worry about whether the tort victims' ability to choose to sue in plaintiff-favoring states allows these states to rule the nation under the guise of promoting justice, and results in a different—but no less per-
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apply legal doctrine that expands product manufacturer liability. Justice Neely and others have invoked this rationale in Congressional hearings to explain their support for federal products liability legislation. Their testimony appears to have been persuasive. Quoting directly from Justice Neely’s book, the House report on the pending federal tort reform bill states that this legislation is needed because of the “bias [state policymakers have] in favor of the in-state purchaser and against the out-of-state manufacturer.”

Thus, it appears that the race to the bottom thesis has played a significant role in justifying tort policymaking at the federal level. Proponents of this rationale argue that state judges and legislators cannot be trusted to develop balanced products liability doctrines because of their bias against product manufacturers. But how strong is the evidence of state incompetency? It is to this question that we now turn.

B. The Evidence

If state legislators and judges were engaged in a race to the bottom, we would expect statutes and court decisions to reflect a systematic bias against nonresident defendants, particularly product manufacturers. However, this does not appear to be the case. Instead, both statutory and judicial trends appear to favor defense interests. We will first describe legislative patterns and then judicial opinions.

1. Legislation

In the mid-1980s, the country experienced what was commonly referred to as a “tort crisis.” This crisis was marked by sharp increases in the cost and decreases in the availability of liability insurance. The conventional explanation for this development focused on increases in the frequency and severity of


claims. That is, insurance premiums rose and coverage shrank because of the growth in the number of tort claims being filed and in the size of damage awards. Additional pressure to raise premiums and reduce coverage stemmed from uncertainty about the legal standards governing the allocation of loss.

In the ensuing years, the legislatures of all fifty states responded to this crisis with a variety of tort reform packages. While the contours of these statutes vary from state to state, each was designed either to make it more difficult for plaintiffs to prevail in tort suits or to reduce or limit the amount of recovery in those suits in which the plaintiff did prevail. A thorough examination of the hundreds of tort reform statutes lies beyond the scope of this article. Here we briefly summarize state legislation in selected areas covered by the pending federal tort reform bill.

a. **Time-based Restrictions on Filing Claims** The Common Sense Product Liability Legal Reform Act of 1996 contains both statutes of limitations and of repose. Both of these areas have been addressed extensively by state legislatures.

In the late 1980s, many states enacted statutes directly or indirectly reducing statutes of limitations. The most direct method simply reduces the number of years in which to file suit. Other state statutes modify or abrogate the discovery rules, allowing the limitation period to begin running from the date of injury or the date of the defendant's culpable conduct. Many states

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30. Some of the legislation discussed here has been repealed or invalidated by state courts on state constitutional grounds. For purposes of assessing whether state legislators are engaged in a race to the bottom, however, the important point is that these statutes were enacted in the first place.

31. H.R. 956, 104th Cong., 2nd Sess. § 106 (1996) (establishing a two year statute of limitations which begins to run when the claimant should have reasonably discovered both the harm and the cause and establishing a 15 year statute of repose for durable goods).

32. See, e.g., COLO. REV. STAT. ANN. § 13-80-102 (West 1989) (reducing the limitations period for general tort claims from six years to two years).

33. See, e.g., ARK. CODE ANN. § 16-116-103 (Michie 1987) (products liability); MICH. COMP. LAWS ANN. §600.5838a (West 1987) (medical malpractice accrual is at the time of act, regardless of when plaintiff discovers the claim); TENN. CODE ANN. § 28-3-104 (1980) (limitation period begins running one year after injury). Some states kept the discovery rule but reduced the time period within which a plaintiff may file a claim after discovering an injury. See, e.g., NEB. REV. STAT. § 44-2828 (1993) (must file medical malpractice claim within one year after discovery of injury); NEB. REV. STAT. § 25-223 (1989) (claim for design or construction defect must be filed within two years after discovery.
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also enacted provisions modifying or eliminating the special tolling provisions for children.34

A second type of time-restriction is a statute of repose. Statutes of repose bar claims after a specified period of time regardless of when or whether an injury has occurred. Every state has enacted repose legislation for medical malpractice, products liability, or claims related to improvements to real property.35 The repose period itself varies significantly among the states. Typically, the period of repose begins to run upon the date of last treatment,36 the date of the original sale of the product,37 or the date of substantial completion of the improvement to real property.38

b. Joint and Several Liability The Product Liability Legal Reform Act contains provisions that would modify the common law doctrine of joint and several liability. Specifically, the Act would abolish joint and several liability for noneconomic compensatory damages in products liability actions.39

The rule of joint and several liability has been the subject of tort reform legislation in more than thirty states.40 The thrust of these statutes is to limit the application of joint and several liability in some or substantially all tort cases. The practical consequence of this legislation is to place the risk of tortfeasor insolvency on the plaintiff instead of other tortfeasors.

A few states have effectively abolished joint and several liability for most tort claims, with limited exceptions.41 The more common pattern of reform
legislation significantly modifies, but does not abolish, the doctrine. The types of modifications vary considerably. Perhaps the most common reform limits the application of joint and several liability to defendants whose culpability exceeds some specified threshold.\textsuperscript{42} Other states abolish joint and several liability only when the plaintiff is partially at fault,\textsuperscript{43} or only for particular types of damages,\textsuperscript{44} or place some limit on the total amount of damages for which a defendant may be held jointly and severally liable.\textsuperscript{45} A few statutes authorize the reallocation of uncollectible shares among all of the responsible parties, including the plaintiff if she was negligent.\textsuperscript{46}

c. Punitive Damages Reform  The Product Liability Legal Reform Act imposes procedural reforms and caps on punitive damages.\textsuperscript{47} The procedural reforms include a “conscious, flagrant, indifference” to the safety of others standard of culpability, a clear and convincing evidence standard for the burden of proof, and the use of bifurcated trials.\textsuperscript{48} The Act caps punitive damage liability at the greater of two times compensatory damages or $250,000.\textsuperscript{49}

Several states already have enacted punitive damage reform legislation. State punitive damage reform legislation often imposes caps expressed in terms

\textsuperscript{42} See, e.g., MONT. CODE ANN. § 27-1-703 (1991) (stating that defendant must be more than 50% at fault for joint and several liability); W. VA. CODE § 55-7B-9 (1994) (requiring that a medical malpractice defendant must be 25% at fault to be subject for joint liability); cf. Act Effective Sept. 1, 1995, ch. 19 (S.B. 25) 1995, TEX. SESS. LAW SERV. 108 (Vernon) (eliminating joint liability for defendant less than 51% at fault); Act of May 18, 1995, ch. 136, 1995 TEX. SESS. LAW SERV. 971 (Vernon).

\textsuperscript{43} See, e.g., GA. CODE ANN. § 51-12-33 (Supp. 1995) (stating that there is no joint liability for damages where plaintiff at fault); NEV. REV. STAT. § 41.141 (1996) (establishing several liability where plaintiff at fault except for strict liability, intentional tort, hazardous waste, concerted act); N.M. STAT. ANN. § 42-3A-1 (Michie 1989) (establishing several liability where comparative negligence applies, unless intentional tort, vicarious liability, strict liability).

\textsuperscript{44} See, e.g., CAL. CIV. CODE § 1431.2 (West Supp. 1995) (abolishing joint liability for noneconomic loss, but retaining it for economic loss); OHIO REV. CODE ANN. § 2315.19 (Baldwin 1993) (establishing several liability for non-economic damages where the plaintiff at fault).

\textsuperscript{45} See, e.g., LA. CIV. CODE ANN. art. 2324 (West Supp. 1996) (establishing joint liability only for 50% of plaintiff’s recoverable damages); MISS. CODE ANN. § 85-5-7 (Supplement 1995) (requiring joint liability only for 50% of plaintiff’s recoverable damages for non-intentional tort); S.D. CODIFIED LAWS ANN. §§ 15-8-15 (1984 & Supp. 1996) (establishing that defendant less than 50% at fault not liable for more than twice his fault).


\textsuperscript{48} Id.

\textsuperscript{49} Id. The Act limits punitive damages to the lesser of two times compensatory damages or $250,000. The Act also authorizes the trial judge to award punitive damages in excess of the cap cases of egregious conduct.
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of a fixed ceiling, a multiple of compensatory damages, or both. Many states impose the type of procedural protections for defendants found in the proposed federal legislation. Indeed, some states provide defendants with additional protections, such as prohibiting multiple punitive damage awards in products liability cases and giving the state a percentage of punitive damage awards.

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d. **Substantive Products Liability Doctrine** The Product Liability Legal Reform Act contains several provisions addressing substantive products liability doctrine. The Act restricts the application of strict liability against many retail sellers and creates defenses based on misuse, alteration and user intoxication.

Once again, state legislatures have been active in these and other aspects of products liability doctrine. The thrust of virtually all state statutes is to afford greater protection to product liability defendants than existed before their enactment. More than a dozen states have passed legislation insulating retailers from strict liability in most cases. The general approach of this legislation is to preclude the application of strict liability (except for express warranty)

\[50. \text{See, e.g., GA. CODE ANN. § 51-12-5.1 (Michie Supp. 1995) ($250,000 in cases other than products liability); VA. CODE ANN. § 8.01-38.1 (Michie 1992).}


\[53. \text{See, e.g., GA. CODE ANN. § 51-12-5.1(e)(1) (Supp. 1995) (allowing only a single punitive damage award in products liability claims arising out of the same conduct); MO. ANN. STAT. § 510.263(4) (Vernon Supp. 1990) (allowing the defendant to request a credit against a punitive damage award for prior awards arising from the same conduct).}

\[54. \text{See, e.g., FLA. STAT. ch. 768.73 (1991); GA. CODE ANN. § 51-12-5.1 (Supp. 1995); IOWA CODE § 668A.1 (1991).}

\[55. \text{H.R. 956, 104th Cong., 2d Sess. § 103 (1996) provides that product sellers, rental and leasing companies are liable only for negligence, breach of warranty, or intentional wrongdoing (unless the manufacturer is not subject to court's jurisdiction or is otherwise judgment proof).}

\[56. \text{H.R. 956, 104th Cong., 2d Sess. § 104 (1996) provides an absolute defense if the product user was under the influence of alcohol or illegal drugs and that condition was more than 50% percent responsible for the user's injuries. Section 105 of the Act provides that misuse or alteration of a product by any person reduces the user's recovery by the percentage of harm attributable to that conduct, though the defense does not apply to misuse or alteration by the claimant's employer.}

against a retailer unless the manufacturer cannot be identified, is insolvent, or is not subject to the jurisdiction of the court.\textsuperscript{58} Such statutes sometimes include a "sealed container" defense which protects the retailer and other non-manufacturing sellers who buy and resell a product in a sealed container with no reason to believe it is defective.\textsuperscript{59}

Many states also have enacted legislation addressing such substantive products liability issues as product misuse or alteration, state of the art, and compliance with government regulations. One group of statutes treats evidence that a product design or warning complies with the "state of the art" as an affirmative defense\textsuperscript{60} or a rebuttable presumption that the product is not defective.\textsuperscript{61} Misuse or substantial alteration of a product will preclude or reduce liability in many states.\textsuperscript{62} Compliance with applicable government regulations creates a statutory rebuttable presumption that a product is not defective in some states,\textsuperscript{63} and bars recovery in others.\textsuperscript{64}

A few states have enacted statutes under which the passage of time affects substantive products liability doctrine or creates a defense to an otherwise valid claim. In Kentucky, for example, it is presumed that a product is not defective if the injury occurs more than five years from the sale to the first customer or eight years after manufacture.\textsuperscript{65} Other states recognize a "useful life" defense barring recovery when the injury occurs following the expiration of the ordinary useful life of the product.\textsuperscript{66} These statutes often specify the presumed useful life of various categories of products.\textsuperscript{67}

Of course, not every state has enacted each of these reforms and there are significant variations in legislative patterns among the states. However, the volume and direction of state tort reform legislation casts serious doubts on the assumption that state legislators have succumbed to a race to the bottom in

\textsuperscript{58} See, e.g., COLO. REV. STAT. ANN. § 13-21-402 (West 1989); IDAHO CODE § 6-1407 (1990); TENN. CODE ANN. § 29-28-106 (1980).

\textsuperscript{59} See, e.g., DEL. CODE ANN. tit. 18, § 7001 (1989); MD. CODE ANN., CTS. & JUD. PROC. § 5-311 (1989).

\textsuperscript{60} See, e.g., ARIZ. REV. STAT. ANN. § 12-683 (1992); IND. CODE ANN. § 33-1-1.5-4 (Burns 1992).

\textsuperscript{61} See, e.g., COLO. REV. STAT. ANN. § 13-21-403 (West 1989); KY. REV. STAT. ANN. § 411.310 (Michie 1992).


\textsuperscript{64} See, e.g., KAN. STAT. ANN. § 60-3304 (1994); WASH. REV. CODE ANN. § 7.72.050 (West 1992).

\textsuperscript{65} KY. REV. STAT. ANN. § 411.310 (Michie 1992).

\textsuperscript{66} See, e.g., IDAHO CODE § 6-1403 (1990); KAN. STAT. ANN. § 60-3303 (1985 & Supp. 1995); MINN. STAT. ANN. § 604.03 (West 1988).

\textsuperscript{67} See, e.g., IDAHO CODE § 6-1403 (1990) (ten years); KAN. STAT. ANN. § 60-3303 (1985 and Supp. 1995) (ten years).
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personal injury litigation. These statutes clearly inure to the benefit of tort
defendants in general and products liability defendants in particular. Far from
evidencing a systematic bias against nonresident defendants, the pattern of state
legislation reveals a pronounced willingness to compromise the interests of
resident tort plaintiffs.

2. Judicial Opinions

The race to the bottom thesis also postulates that judges will be unduly
predisposed to favor the interests of resident plaintiffs in the development and
application of tort doctrine. Again, one would expect the race to the bottom to
be most evident in products liability cases because most of the defendants are
nonresidents and most of the plaintiffs are residents of the forum state.
However, there is substantial evidence that over the past decade judges have
not systematically favored plaintiffs in products liability cases. On the contrary,
since the early 1980s, judicial decisions at both the trial and appellate levels
have tended to favor defendants.

Professors Henderson and Eisenberg documented this trend in a highly
publicized article analyzing more than 3000 products liability opinions
published between 1976 and 1988.68 They describe a “quiet revolution” in
which courts during the 1980s made “a significant turn in the direction of
judicial decision making away from extending the boundaries of products
liability and toward placing significant limitations on plaintiffs’ rights to
recover in tort for product-related injuries.”69 Henderson and Eisenberg’s data
base included published opinions from state and federal appellate courts and
federal district courts.

Looking first at appellate decisions, Henderson and Eisenberg found that
between 1983 and 1988 there were statistically significant increases in the
percentage of published opinions favoring defendants,70 the percentage of
cases in which defendants prevailed as a matter of law,71 and the percentage
of “groundbreaking” opinions favoring defendants.72 At the district court
level, Henderson and Eisenberg found statistically significant declines in

68. James A. Henderson, Jr. & Theodore Eisenberg, The Quiet Revolution in Products Liability:
69. Id. at 480.
70. Between 1976 and 1983 the defendant benefited from slightly more than half the reported
decisions (51.2%). Between 1983 and 1988 the percentage of decisions benefitting defendants steadily
increased, reaching 63.4% in 1988. Id. at 504.
71. Defendants prevailed as a matter of law in 13.9% of the reported opinions in 1983. The
corresponding figure for 1988 was 26.7%. Id. at 509.
72. A decision was characterized as “groundbreaking” based on Professor Henderson’s assessment
of whether and to what extent it changed the law. Id. at 511 n.138. In 1983, 2.5% of published opinions
broke new ground by ruling for the defendant and 5.8% broke new ground by ruling for the plaintiffs.
By 1988, 7.9% of the published opinions broke new ground for the defendants while 7.4% did so for
the plaintiffs. Id. at 512.
plaintiffs success rates\textsuperscript{73} and "expected returns"\textsuperscript{74} in products liability cases, and an increase in the percentage of cases in which the defendant prevailed on pretrial motion.\textsuperscript{75}

Interestingly, the pro-defendant shift in judicial opinions is evident before the wave of tort reform legislation of the mid-1980s.\textsuperscript{76} Thus, judges were not simply responding to legislative initiatives. In a subsequent article, Eisenberg and Henderson augment their earlier work with new data and additional analysis.\textsuperscript{77} In this article, they make clear that "the 1980s pro-defendant movement is not the result of sharp reversals in a few jurisdictions; rather it is truly national, with most states showing defendant success rate increases in the second half of the 1980s."\textsuperscript{78}

Professor Gary Schwartz offers another important assessment of judicial trends in tort.\textsuperscript{79} Professor Schwartz did not find a "revolution," but concluded that the early 1980's marked a "possible end" of an era of judicial expansion of tort liability rules. By this he meant that "courts have rejected invitations to endorse new innovations in liability; moreover, they have placed a somewhat conservative gloss on innovations undertaken in previous years."\textsuperscript{80}

A large number of the cases cited by Schwartz in support of his conclusion come from the field of products liability—the area of tort law in which proponents of the race to the bottom thesis predict judges are most likely to favor plaintiffs. He discussed various opinions in which courts refused to apply strict liability principles for claims involving natural impurities in food, the sale of defective prescription drugs by pharmacies, successor corporate liability, warnings and general product design. He also observed that courts have generally rejected the theory of generic risk-benefit liability for inherently dangerous products like hand guns, cigarettes, trail bikes, and convertible automobiles, and that several state courts have ruled that manufacturers of DES

\begin{itemize}
\item \textsuperscript{73} Plaintiffs prevailed in 40.5\% of the product liability cases showing definite judgments in 1979. By 1987, the plaintiffs' success rate had declined to 32.5\%. Most of this decline occurred in 1983 and after. \textit{Id.} at 523.
\item \textsuperscript{74} The expected recovery is a product of the success rate for each year times the median and mean plaintiffs recoveries for the same year. \textit{Id.} at 527. Henderson and Eisenberg compared the expected returns in product liability cases with those in other types of cases. In 1982, "the ratio of expected returns in products and other tort litigation peaked at 3.23. That is, taking into account the likelihood of winning and the size of the award in cases that allowed awards, products plaintiffs could expect to recover slightly more than three times as much as other tort plaintiffs. By 1987 this ratio had dropped by one-half, to 1.65." \textit{Id.} at 528-29.
\item \textsuperscript{75} Product liability defendants prevailed at the pretrial motion stage in 4.4\% of the 1979 cases in which issue had been joined. By 1987 this rate had increased to 5.5\%. \textit{Id.} at 531.
\item \textsuperscript{76} \textit{Id.} at 480-81.
\item \textsuperscript{78} \textit{Id.} at 734.
\item \textsuperscript{80} \textit{Id.} at 603 (footnote omitted).
\end{itemize}
owed "no duty" to the second generation plaintiffs injured by the drug.81

Of course, Henderson, Eisenberg and Schwartz were not addressing the question of whether state judges have built-in incentives to favor the interests of resident plaintiffs over those of nonresident defendants. Yet, their studies suggest that such forces, if they exist, have had little effect in practice in the past decade. If judges were engaged in a race to the bottom as suggested by Justice Neely, one would not expect to find the pattern of pro-defendant judicial opinions described by Henderson and Eisenberg and cautiously confirmed by Schwartz.82

C. The Conclusion: An Assumption Found Wanting

There is little evidence that states are incompetent to formulate tort policy because they are competing with each other for judgments against nonresident defendants. The assumed biases and structural incentives, if they exist, do not appear to have substantially influenced policy output in the last ten years. The statutes and court opinions summarized above reflect the fact that states do have the capacity to consider and value the interests of nonresident tort defendants. Indeed, for the past decade, defendants have fared remarkably well in both judicial and legislative forums. If tort policy is to be formulated at the national level, other justifications are needed.83

II. Do States Possess Special Competency to Formulate Tort Policy?

The analysis of state statutory reforms and judicial decisions provided in the first half of this paper calls into question the assumption of state incompetence underlying current proposals to create federal tort law. Specifically, the scores of state statutes adopting reforms similar to those contained in the proposed

81. Id. at 653-61.
82. Judicial tempering of legal doctrine in a way that favors defendants continues. In Life Ins. Co. v. Johnson, 1995 Ala. LEXIS 435 (Ala. November 17, 1995), the Alabama Supreme Court established new rules for punitive damages. Punitive damages may be awarded only in bifurcated trials and one-half of the net award is to be given to the state.
83. For example, some proponents of federal tort reform emphasize the need for uniform rules. See, e.g., Gary Schwartz, The Proper Federal Role in American Tort Law, 38 ARIZ. L. REV. (forthcoming 1996). This justification for federal tort policy-making does not rest on the proposition that states are structurally biased against nonresident defendants. Rather, it rests on the proposition that uniformity itself is a virtue. For example, the complexity and variety of state contribution laws are said to impede the efficient settlement of mass tort claims. Jean M. Eggen, Understanding State Contribution Laws and Their Effect on the Settlement of Mass Tort Actions, 73 TEX. L. REV. 1701 (1995). Professor Eggen proposes a federal rule to provide the uniformity necessary to facilitate settlement. Variation, however, is touted as a virtue by those who see states as laboratories of experimentation. See, e.g., Periman, supra note 5, at 507. Thus, the same characteristic—variation—is cited by both proponents and critics of federal tort policy-making in support of their respective positions. Whether one thinks that tort law should be formulated at the state or national level depends on how one assesses the costs and benefits of uniformity measured against the costs and benefits of experimentation.
federal legislation suggest that states have not been "racing to the bottom" by expanding plaintiff opportunities for recovery, especially vis-a-vis out-of-state defendants.

This analysis, however, does not necessarily shed light on the second and contradictory assumption of special state competence. In particular, the preceding scrutiny of selected state tort reforms does not address questions related to the reasonableness or merit of the legislation. It is this assumption of special state competence that directly relates to new federalism proposals and that serves as the focus of this portion of the paper.

Whether or not state legislatures are more able than Congress to craft public policy is an empirical question, albeit one involving personal judgment. As such, it is an appropriate topic for more social scientific research methods. Here, these methods are applied to one of the most controversial dimensions of tort reform, legislative caps on damages, which has become a focal point in contemporary political debates about federal tort law.

In the following pages, we provide a descriptive statistical profile of these caps and systematically examine related differences against insurance profitability. If state legislatures are particularly competent policy-makers, there should be some correlation between insurance profitability and damage-cap legislation. In the process of examining this association, we control for other, potentially important correlates of public policy. These include the socio-economic, political, and legal characteristics of the fifty states. The tests that are presented here fall within an established line of inquiry in political science and sociology. However, it is important to note that this kind of analysis is more suggestive than conclusive. Questions of state legislative competence invariably lead to judgments about legislative ability, motivation and processes—conclusions that cannot be drawn from the aggregate state-level research offered here. Nonetheless, a systematic study of damage-cap legislation against a measure of insurance profitability and with controls for the social-economic, political, and legal characteristics of the states provides a first empirical step in analyzing the special state competence assumption.

This segment of the paper consists of five sections. First, we provide an overview of this type of social scientific research. Second, we provide a descriptive statistical profile of the legislative damage caps under scrutiny. Third, we outline the research methodology for the multivariate analysis of comparative state policy. Next we consider these results and offer some speculation on the related patterns. Finally, we consider the implications of both our legal and social scientific analyses for the issue of tort reform in particular and new federalism in general.

A. Social Scientific Analysis of State Policy and Problems

Political scientists have directed considerable attention to differences in
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state legislation. Underlying this research is the assumption that states with contrasting levels of population, education, per capita income, electoral ideology, and political party relationships will have similarly contrasting public policy. More generally, this research assumes that state policy outputs correlate with the social, economic, and political characteristics of the states themselves.

This line of inquiry developed in the 1960s with the works of Thomas Dye,84 Richard Hofferbert,85 Lewis Froman,86 and Ira Sharkansky.87 Its development followed economic studies on the relationship between the level of governmental expenditures and the socio-economic attributes of both states and municipalities.88 Although some of these early efforts were criticized for primitive conceptions of state political processes,89 the field of state comparative policy analyses developed and is now an established line of inquiry. In the process, political scientists have continued to examine state expenditures, especially in social welfare (e.g., Aid to Families with Dependent Children, Medicaid) against the social, economic, and political dimensions of the states themselves.90 They have also examined state taxation, transportation, education, and other public policies in similar fashion.91

Of more direct relevance to the research reported here are those comparative state policy studies on selected dimensions of criminal and tort law. Here, social scientists have examined differences in statutes, for example, those regarding selected victimless crimes,92 rape shield provisions,93 and state rape reform.94 Political scientists have also directed attention to differences in state judicial systems, such as differences in adoption of tort law innovations.95 Additionally, sociologists have examined state rape rates, police

88. For earlier economic studies see, for example, Glen W. Fisher, Determinants of State and Local Government Expenditures: A Preliminary Analysis, 14 NAT. TAX J. 349 (1961); Seymour Sacks & Robert Harris, The Determinants of State and Local Government Expenditures and Intergovernmental Flow of Funds, 17 NAT. TAX J. 75 (1964).
91. See, e.g., DAVID NICE, POLICY INNOVATION IN STATE GOVERNMENT (1994).
95. See, e.g., Bradley C. Canon & Lawrence Baum, Patterns of Adoption of Tort Law Innovations: An Application of Diffusion Theory to Judicial Doctrines, 75 AM. POL. SCI. REV. 975 (1981).
reports, and arrests.\textsuperscript{96}

In this study of comparative state policy, scholars have frequently debated the competing power of economic versus political correlates. More recent scholarship has tried to reconcile the "economics-politics" divide and suggests that both types of correlates are important.\textsuperscript{97} David Nice reviews these developments and argues that the explanatory power of any type of policy correlate depends on the subject matter under scrutiny.\textsuperscript{98}

In the comparative state policy analysis presented later in this paper, we generally follow Nice's advice. Incorporating social, economic, and political indicators, we also include factors particular to the tort reform debate and the strength of the insurance industry. We explicitly include varied measures of the insurance industry because the general tort reform debate has been framed, in large part, as a function of an "insurance crisis" and because that industry has much to gain or lose in legislative policies.

B. Descriptive Profile of Legislative Damage Caps

Prior to a multivariate analysis of comparative state policy, it is useful to construct a descriptive, statistical profile of the policy of interest. Coding state damage-cap legislation is complicated. Although the relevant statutes have patterns in common, variations among them make it difficult to devise one variable. The final quantitative coding scheme consisted of twenty dimensions ranging from the existence of caps on punitive damages to the repeal of damage-cap legislation.

Table 1 provides a descriptive statistical summary of the damage-cap legislation that was considered in the first part of this paper. The summary results provided here indicate that state legislatures have enacted a variety of damage caps. First, twenty-two states have adopted legislation to restrict punitive damages. This legislation encompasses a variety of caps on punitive damages: caps with exceptions, caps without exceptions, caps restricted to specific areas, and one rather sweeping disallowance of punitives altogether. Of the twenty-two states with a punitive damage cap, some restrict the cap to certain areas, with medical malpractice the most common. Six states provide a fixed ceiling, five a compensatory multiple, and two a combination. The remainder simply disallow punitives in particular areas with no cap specified.

In addition, some punitive damage legislation has requirements for

\textsuperscript{96} See, e.g., LARRY BARON & MURRAY A. STRAUS, FOUR THEORIES OF RAPE IN AMERICAN SOCIETY: A STATE-LEVEL ANALYSIS (1989); Ronald J. Berger et al., The Impact of Rape Law Reform: An Aggregate Analysis of Police Reports and Arrests, 19 CRIM. JUST. REV. 1 (1994).


\textsuperscript{98} Nice, supra note 91, at 37.
bifurcated procedures and for payment to the state of a proportion of the award. As specified in Table 1, five states have adopted bifurcated proceedings for tort trials where punitives are sought. A slightly larger number of states (seven) have statutory provisions that authorize a claim by the state to a proportion of punitive awards. These provisions range from 33% to 75% with 50% the most common.

Thirty-five states have enacted legislation imposing caps on compensatory damages. These statutory provisions vary considerably. There are, for example, many statutes that place limits on compensatory damages in particular types of cases. Twelve states have caps on compensatory damages in medical malpractice, three apply to all types of tort claims, and the twenty remaining include varied restrictions related to compensatory damages in diverse and special circumstances (e.g. professional malpractice other than medical and auto claims when driver and passengers were not wearing seat belts).

State statutory provisions related to compensatory damages also vary in terms of the element of compensatory damage subject to the cap. Of the thirty-five states that limit compensatory damages, eleven apply the cap only against non-economic damages while twenty-four do not. Three states cap only economic compensatory damages, while twenty-one limit recovery for some combination of economic and non-economic damages.

As summarized in Table 1, state legislative restrictions and caps on both punitive and compensatory damages are both extensive and varied. Nevertheless, several states have not taken any legislative action in either area. This distinction and other statutory differences are potential subjects for the statistical tests that are outlined next.

C. Methodology for Multivariate Analysis

The first step in this stage of the research consisted of the specification of the dependent variable(s). Since it was impractical to use all of the twenty dimensions of statutory damage caps discussed previously, we initially applied two statistical approaches to help reduce the twenty dimensions for multivariate tests of comparative state policies. The first such test consisted of factor analysis where we examined whether subsets of the twenty dimensions are highly related. If this were the case, a small set of factors could then be used as dependent variables in statistical tests. Factor analysis of the twenty dimensions was inconclusive, however.99

Our second statistical effort to reduce the number of dependent variables consisted of the construction of an additive index. This index was a composite

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99. This was not surprising as some of the twenty dimensions were quite skewed with very limited numbers of states in given categories. Results of this factor analysis are available on file with the authors.
of seven dimensions of legislative damage caps. These consisted of damage
caps on punitives, punitive cap restrictions, fixed ceilings on punitive caps,
bifurcated procedures for punitive caps, caps on compensatory damages,
compensatory cap restriction, and compensatory caps inclusive of both
economic and non-economic injury. The index was constructed as follows: a
state was given a point if it had some kind of punitive damage cap, a point if
that cap was not restricted to any area or type of action, a point if there was
a fixed ceiling, a point if it had a bifurcated procedure, a point if it had a some
kind of cap on compensatory damages, a point if that cap was not restricted to
any area or type of action, and a point if the compensatory cap applied to both
economic and non-economic injury. Possible scores on this index ranged from
zero to seven. Although this index provided a logical summary measure of
some of the most consequential of the twenty dimensions of statutory damage
caps, it did not yield significant results in multivariate testing.\textsuperscript{100}

In the face of the failures of these efforts to specify the dependent
variable(s) for multivariate analysis, we decided to focus on two of the most
general dimensions: caps on punitive damages and caps on compensatory
damages. Methodological as well as practical reasons dictated this choice. The
first of the two dependent variables, whether states had adopted some kind of
limit on punitive damages or not, exhibited sufficient variation (22 with limits,
28 without) for multivariate analysis. A similar pattern held for the second
variable as 15 states had no cap on compensatory damages and 33 had enacted
some kind of limit in this area.

Can we explain any of the basic differences in state adoption of punitive
and compensatory caps by using the comparative state policy analysis
approach? Are differences in statutory damage caps (punitive and compensatory)
correlated with any state attributes? Of primary importance here is the
potential correlation between legislative damage caps and insurance company
profitability. If states are particularly competent in policy-making, then we
would expect some correlation between statutory damage caps and insurance
company profitability. We cannot, though, consider that correlation without
controlling for socio-economic, political, and legal attributes. These potential
correlates of state public policy were discussed in the earlier summary of the
state comparative policy analysis literature and are outlined in Appendix A.

For socio-economic or demographic variables, we obtained data on four
possible indicators: per capita income, degree of urbanization, racial
composition, and level of education.\textsuperscript{101} We hypothesize (1) that states with

\textsuperscript{100} Specifically, the additive index "washed out" in ordinary least squares regression. This
indicates that variation in the index could not be accounted for by the independent variables in our data
set. Related results are not reported here but are available on file with the authors.

\textsuperscript{101} For Information on these and all potential independent variables in the data set, see Appendix
B.
higher per capita income would be more inclined to have damage caps, (2) that the more urbanized the state, the more likely the legislature would have enacted damage caps, and (3) that the higher the proportion of African-Americans the less likely the legislature would have enacted damage caps. In these propositions, we assumed that more wealthy states would be more inclined to support corporate and industrial interests; that more urbanized states would be more likely to have the exceptional, "large verdict" tort cases and, as a consequence, support statutory limits on juries; and that states with larger proportions of African-Americans would be less likely to support legislation that has frequently been characterized as more reflective of corporate than individual interests.

Hypotheses about the relationship between level of education and damage-cap statutes are not as clear and, in fact, we posit two, contradictory propositions. Higher levels of education could suggest that a more sophisticated citizenry would be more aware of the complex character of the tort reform debate and less supportive of simplistic, legislative approaches. In turn, the legislature would be less likely to enact statutory damage caps. Alternatively, higher levels of education could suggest a higher standard of living that might correlate with the more corporate interests reflected in tort reform.

The second category of potential correlates of damage-cap legislation consists of insurance industry attributes. The variables in this category include a measure of insurance profitability,\textsuperscript{102} the strength of insurance industry lobbyists, the proportion of insurance agents in the state legislature, and the selection of the insurance commissioner. Propositions about these attributes and damage-cap legislation are fairly obvious. We hypothesize that states with higher loss ratios in 1986, with stronger insurance lobbyists, and with higher proportions of insurance agents in the legislature would be more likely to have statutory damage caps. We used adjusted loss ratio data from 1986 because the bulk of state tort reform legislation was enacted in 1986-87. The specific relationship between the selection method of the insurance commissioner was less obvious and we posited both direct and inverse correlations.

The third group of potential correlates of damage-cap legislation consists of the state legal environment. These include the proportion of attorneys in the legislature, the nature of the judicial selection system, and the partisan nature of the same system. The proportion of attorneys in the state legislature is parallel to the proportion related to insurance agents. In contrast to the latter, however, we hypothesized two, conflicting relationships. The proportion of attorneys in the legislature could signal support for plaintiff trial lawyers and

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\textsuperscript{102} Insurance profitability is operationally defined as the ratio of direct losses to premiums earned, a measure recommended by the American Insurance Association's research division and regularly used in insurance-related research. For data from 1986, see \textit{NATIONAL ASSOCIATION OF INSURANCE COMMISSIONER, NIAC REPORT ON PROFITABILITY BY LINE AND BY STATE} (1987).

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inversely correlate with tort reform. Or, it could signal an orientation in favor of the defense bar that would yield a positive correlation. Propositions about the relationship between damage-cap legislation and the character of the state's judicial selection system were more straight-forward. We hypothesize that states with electoral and partisan systems would be more likely to have enacted statutory damage caps as legislatures may be more skeptical about a judiciary that is so obviously political.

The final set of potential independent variables consists of state political indicators. Here we include electoral conservatism, state policy innovation, and legislative partisanship. We hypothesize that the more conservative the electorate, the more likely the state legislature would be to enact damage caps. A similar proposition holds for legislative partisanship as we anticipate that the greater the proportion of Democrats, the less likely the enactment of damage caps. These two hypotheses reflect popular conceptions of tort reform as both conservative and Republican agenda items. The variable on state policy innovation lends itself to more complex research propositions. Since the measure we use consists of an index of plaintiff-oriented doctrinal innovations in tort law, one could hypothesize that the more innovative states would be less likely to enact damage caps. However, if the innovation in question is less representative of ideology and more reflective of legislative willingness to adjust tort doctrine, it could have an inverse relationship.

In any aggregate, statistical analysis of state policy outputs, the sample size is small. Although we have the universe of states, the fact that there are only fifty limits the number of independent variables that can be tested in multivariate analyses. In this stage of the research, then, we had to select a smaller set of independent variables. To reduce the set of fourteen, potential independent variables, we first examined the bivariate relationships between each of the twenty dimensions of legislative damage caps and each of the potential independent variables. The resulting correlations indicated that two variables could be eliminated at this stage, i.e., two indicators did not correlate significantly with any of the twenty dimensions of damage-cap legislation. Table 2 provides a list of those independent variables that significantly correlated with individual dimensions in the full set of twenty damage-cap provisions. In order to reduce the set of independent variables further and also to guard against multicollinearity, we examined the correlations among the

103. Multicollinearity refers to the problem of inter-item correlation. When independent or predictor variables are highly correlated with each other, their separate effects cannot be distinguished and the resulting statistics are unstable. Prior to multivariate analysis, then, inter-item correlations have to be examined and variables that are highly correlated reduced or eliminated. In this research we used a coefficient standard of .6 although .7 is a frequently cited norm. See, e.g., BRUCE D. BOWEN & HERBERT F. WEISSBERG, AN INTRODUCTION TO DATA ANALYSIS 160 (1980).
remaining twelve variables. At this stage, we were able to eliminate four other variables, leaving us with a set of eight. Eight independent variables, however, is still unwieldy for multivariate analysis, so we referred to both the comparative state policy literature and the current tort reform debate to direct the selection of the final set. This set included one socio-demographic indicator (per capita income), a measure of insurance profitability (adjusted loss ratio), a dimension of the insurance industry’s political strength (strength of insurance industry lobby), one dimension of the legal environment (proportion of attorneys in the state legislature), and two political attributes (proportion of Democrats in state legislature and tort policy innovation).

D. Results

We focused on two dependent variables in the multivariate analysis of comparative state tort reform policy. More specifically, we hypothesize that states with higher insurance industry losses, stronger insurance lobbies, higher per capita income, and fewer Democrats in the legislature would be more likely to have statutory caps on punitive and compensatory damages. Regarding patterns of tort policy innovation and the proportion of attorneys in the legislature, we expect that the correlation could be either direct or inverse.

Of particular interest in this multivariate test is the variable that relates to insurance profitability (1986 adjusted loss ratio). If state legislatures are closer to problems in their respective jurisdictions and if this proximity carries some kind of rational sensitivity, then we would expect that states with greater insurance industry losses would be more likely to have enacted some kind of statutory cap on punitive and compensatory damages. This, then, is the focal point of our initial effort to test the special state competence hypothesis. The other five variables in the model are basically included as controls.

Multivariate models were used to examine the correlation between the dependent variables of interest (statutory caps on punitive and compensatory damages) and the final set of six independent variables. Because the dependent variable in both instances is binary, logit analysis is especially appropriate. This particular statistical model is designed to test the predictive or correlative powers of the independent variables, and in particular to identify the degree to which those factors help to distinguish the states beyond what we could anticipate by chance. The results of this logit model are set out in Table 3 for

104. These and the full set of inter-item correlation coefficients are on file with the authors.
105. Logit is a multivariate statistical model that is appropriately used with nominal or categorical dependent variables. In contrast to linear regression where the dependent variable represents the probability of an event happening, in logit the dependent variable is the log of the odds ratio of that event happening. This dependent variable is not the odds ratio itself but the natural log of the odds ratio. For a succinct overview of logit, see JEFFREY A. SEGAL & HAROLD J. SPAETH, THE SUPREME COURT AND THE ATTITUdINAL MODEL, app. at 364-72 (1993).
punitive caps and in Table 4 for the compensatory variety. Logit results are discussed in greater detail in Appendix B.106

With specific attention to the analysis of caps on punitive damages, only two of the six independent variables were statistically significant at standard levels (p = .05 or less). These consist of the strength of the insurance industry lobby and the proportion of attorneys in the legislature. A third variable, the Democratic proportion of the state legislative, approaches statistical significance but does not quite meet the conventional standard. The remaining three variables did not even begin to approach statistical significance, indicating that they do not correlate with the statutory difference in question.

Of particular interest in the logit analyses of both punitive and compensatory damage caps is the fact that insurance company profitability did not emerge as a statistically significant correlate. This is interesting as one would expect such a correlation if state legislatures were particularly competent. As explained earlier, legislative competence is frequently described as sensitivity to local problems. The profitability of the state's insurance industry, then, could be construed as an indicator of a problem of critical relevance in the debate about damage caps. The fact that this measure of insurance profitability did not correlate with related statutory provisions does not automatically indicate that state legislatures are incompetent. But it does call that assumption into question and reinforces the need for more in-depth, empirical examinations.

Multivariate analysis of the basic statutory difference in state compensatory caps were strikingly inconclusive. As table 4 indicates no variable emerged as a significant correlate. This means that we were unable to account for the difference between those states that had adopted some kind of compensatory cap and those that had not. In the next section, we will consider what the preceding multivariate results might indicate.

E. Discussion of Implications

Where does this preliminary test of state competence lead us? First, it clearly suggests that insurance company profitability bears no relationship to legislative damage caps. Although there are limits to this kind of analysis, it is both interesting and provocative that no correlation emerged between this "measure of the problem" and the enactment of statutory caps on both punitive and compensatory damages. Although it is important to recognize that the multivariate models need to be refined, the results here suggest that other

106. Logit analysis was run with two different statistical software programs, namely SPSS and Microcrunch. The results were parallel especially vis-a-vis patterns of statistical significance. As indicated in Table 3, SPSS program results were reported. Those obtained via Microcrunch are on file with the authors.
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factors drive the tort reform process.

The correlates of punitive damage caps that emerged in this research call to mind Stewart Macaulay’s description of the two, most common reactions of lawyers to social scientific evidence: “I already knew that” and “That is not true.” The correlation between the insurance industry lobby and damage caps makes intuitive sense and clearly deserves the “I already knew that” rejoinder. Anyone with exposure to American politics at any level of government appreciates the fact that interest groups often help to shape, if not define, legislation. The same can be said about the negative correlation between the proportion of Democrats in the legislature and statutory damage caps. Both common and political sense suggests that tort reform is more of a Republican than a Democratic agenda item. Consequently, there is little surprise when we find that the greater the proportion of Democrats in the legislative, the less likely the state has enacted legislative damage caps.

But what do we make of the positive correlation between the proportion of attorneys in the legislature and punitive damage caps? Although one might be initially inclined to repeat Macaulay’s “That is not true” rejoinder, there are ways in which this association makes sense. Tort reform has been very popular, perhaps resulting from popular misconceptions about the civil justice system.

Attorneys in the legislature are likely to be highly sensitive to legal issues and thus more willing to support reforms that address public concerns about tort law. The number of attorneys in the legislature, then, may simply reflect a propensity to appeal to public sentiment while also trying to limit reforms in something akin to “damage control”.

When considering the influence of the plaintiff or defense bar on legislators, however, the correlation between the proportion of attorneys in the legislature and state differences in punitive damage caps is not as clear. Some attorney legislators may be aligned with the plaintiff’s trial bar. In this case, both their personal and their clients’ interests would be opposed to damage caps. Other attorney legislators may be aligned with insurance and corporate interests. In this situation, their clients (insurance companies and businesses) would clearly favor such legislation. The personal interests of the defense attorney, however, may be more complicated. Damage-cap legislation might hurt the insurance defense lawyer if it produces a reduction in the number of cases filed. There are recent reports of efforts by plaintiffs’ lawyers to solicit PAC contributions from attorneys who represent tort defendants to mount a
campaign against a pending California automobile no-fault proposition. All of this does not necessarily shed light on the specific correlation noted in this research. But it does suggest that Macaulay's "That is not true" response may not be accurate.

Our inability to account for differences in state compensatory caps is even more difficult to interpret. One would think that limits on compensatory damages would be as much a political goal as caps on punitive damages, particularly since the latter are awarded so infrequently. However, our statistical results may be a function of the fact that a sizeable proportion of states (35) have enacted some kind of compensatory cap which may, in turn, affect the statistical calculations.

However intriguing the aforementioned results, it is important to recognize that the aggregate analyses provided in this paper are more suggestive than conclusive. Better measures of the variables of interest (e.g., more particular or "line" adjusted loss ratios) may yield different results. Nonetheless, the results are provocative and indicate that systematic, social scientific testing of special state competence and other empirical assumptions related to "new federalism" is needed. Additional aggregate-level analyses and case studies may be especially illuminating. Case studies may be particularly valuable as more definitive assessments of special state competence require analysis of legislative histories to determine whether statutory damage caps are rational responses to local problems or instead simply "politics as usual".

Anecdotal evidence from one state, Georgia, demonstrates the potential value of case studies. In a 1991 case, the plaintiff claimed that the state's $250,000 cap on punitives damages in non-product liability claims was unconstitutional because the amount was arbitrary. In support of his position, the plaintiff filed an affidavit from the chief lobbyist of the state medical association at the time this statute was adopted. As an organizer of the Georgia Liability Crisis Coalition who worked closely with insurance industry representatives, this lobbyist was involved in virtually all related legislative activity.

In his affidavit, this lobbyist acknowledged that despite requests from himself and key legislators, insurance industry representatives could provide


110. Here, it is important to keep in mind that "politics as usual" is not necessarily "irrational". Specifically, public choice and neo-institutional theoretical frameworks suggest that there is considerable rationality in the political process. In the context of this research, legislators' efforts to respond to the interests of lobbyists (and campaign contributors) can be construed as quite rational, especially in terms of electoral self-interest. As used in this context, however, rational refers to understandable or reasonable without necessarily any dimension of self-interest. See, e.g., Neil K. KOMESAR, IMPERFECT ALTERNATIVES: CHOOSING INSTITUTIONS IN LAW, ECONOMICS, AND PUBLIC POLICY 53-97 (1994).

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no "hard evidence" that proposed caps on compensatory or punitive damages would affect insurance rates. Rather, he was instructed to respond to legislators' inquiries with the statement that "most insurance companies are multi-faceted companies and it's awfully difficult for them to separate out one segment of data and give the sort of evidence requested."\footnote{112. Affidavit of Rusty Kidd at 4, Bagley v. Shortt, 410 S.E.2d 738 (Ga. 1991), Civil Action No. 88-CV-5648-B (Super. Ct. White County, State of Georgia, June 29, 1990).} According to this lobbyist, the specific amount of the punitive damage cap ultimately enacted ($250,000) was selected simply because it had been used in California. There was no empirical evidence that the cap "was an appropriate or necessary ceiling insofar as affecting (insurance) rates was concerned."\footnote{113. Id. at 6.}

The legislative profile that emerges from this affidavit does not lend credence to claims of special competence at the state level. Rather, it suggests that statutory provisions are haphazardly formulated and that legislators have little empirical evidence to evaluate either the need for or the potential effect of tort reforms. Also, it suggests that insurance industry representatives were either unable or unwilling to respond to repeated requests for information, even when the requests came from their chief lobbyist and key legislators. Moreover, the profile that emerges from the affidavit also illustrates the relationship between tort reform policy-making and the insurance industry lobby that our aggregate analysis suggested. More systematic legislative histories in Georgia and other states, however, are needed if we want to be able to offer more conclusive and reliable assessments of state policy-making competence.

CONCLUSION

We have found evidence from the past decade that casts doubts on the assumption that states are incompetent to formulate tort policy, particularly in the area of products liability. Since the early 1980's, both statutes and court decisions have been decidedly pro-defendant, thus suggesting that states are not engaged in a race to the bottom for tort judgments against nonresident defendants. At the same time, however, we find little evidence that states are particularly competent in the formulation of tort policy. If they were, we would expect some correlation between local measures of the underlying problem (1986 insurance company profitability) and policy output (damage-cap legislation). We found no such correlation for either punitive or compensatory damage caps. Instead, punitive damage-cap legislation is positively associated with insurance industry strength and the proportion of lawyers in the legislature, and negatively associated with the proportion of Democrats in the legislature. This suggests that state lawmakers are responding more to the
political demands of powerful interest groups than to objective assessments of particular local problems.

These results do not speak to the need for or desirability of specific tort reform statutes. Nor do they suggest that tort policy is better made at the state or national level. The debate about federalism in the context of tort reform may be more an exercise in political rhetoric than a principled discourse in the proper allocation of power between state and federal governments. Those who believe that their substantive policy preferences will fare better in Congress will invoke the rhetoric of the race to the bottom and the states’ incompetency to address a national problem. Those who believe that their substantive policy preferences will fare better in the statehouses will invoke the rhetoric of states as laboratories of experimentation and the need to have localized solutions to local problems. Representative Barney Frank candidly acknowledged as much during the hearings on the proposed 1995 federal tort reform legislation:

This legislation ought to make it absolutely clear that the number of people in Congress who conscientiously decide how to vote based on their conception of whether or not things ought to be State or Federal is less than six. In fact, almost all of us vote to have that level of government decide the question where we are most likely to agree with the outcome.

114. Of course, we are not the first to suggest that the language of federalism masks substantive policy preferences. See, e.g., Michael Wells, The Impact of Substantive Interests on the Law of Federal Courts, 30 WM. & MARY L. REV. 499 (1989) (writing that the procedural and jurisdictional rules of federal courts promotes substantive ends); Jonathan R. Macey, Federal Deference to Local Regulators and the Economic Theory of Regulation: Toward a Public-Choice Explanation of Federalism, 76 VA. L. REV. 265, 265 (1990) (“Conservatives and liberals alike extol the virtues of state autonomy whenever deference to the states happens to serve their political needs at a particular moment. Yet both groups are quick to wield the power of the supremacy clause, while citing vague platitudes about the need for uniformity among the states, whenever a single national rule in a particular area furthers their political interests.”)(footnote omitted)).

Federalism and Tort Reform

**TABLE 1**

**DESCRIPTIVE PROFILE OF STATUTORY CAPS ON DAMAGES**

<table>
<thead>
<tr>
<th>VARIABLE</th>
<th>FREQUENCY/PERCENTAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>DAMAGE CAP ON PUNITIVES</strong></td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>28 56.0</td>
</tr>
<tr>
<td>Yes w/ Exception</td>
<td>4  8.0</td>
</tr>
<tr>
<td>Yes w/out Exceptions</td>
<td>6 12.0</td>
</tr>
<tr>
<td>Punitive not Allowed at All</td>
<td>1  2.0</td>
</tr>
<tr>
<td>Punitive not Allowed in Spec. Areas</td>
<td>11 22.0</td>
</tr>
<tr>
<td>Total</td>
<td>50 100.0</td>
</tr>
<tr>
<td><strong>IF CAP ON PUNITIVES, RESTRICTED TO CERTAIN TYPES</strong></td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>5  10.0</td>
</tr>
<tr>
<td>Medical Malpractice</td>
<td>4  8.0</td>
</tr>
<tr>
<td>Products Liability</td>
<td>2  4.0</td>
</tr>
<tr>
<td>All</td>
<td>1  2.0</td>
</tr>
<tr>
<td>Other</td>
<td>10 20.0</td>
</tr>
<tr>
<td>Not Applicable</td>
<td>28 56.0</td>
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<tr>
<td>Total</td>
<td>50 100.0</td>
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<tr>
<td><strong>IF CAP ON PUNITIVES, FIXED CEILING</strong></td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>16 32.0</td>
</tr>
<tr>
<td>Yes</td>
<td>6 12.0</td>
</tr>
<tr>
<td>Not Applicable</td>
<td>28 56.0</td>
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<tr>
<td>Total</td>
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<tr>
<td><strong>IF FIXED CEILING, AMOUNT</strong></td>
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<tr>
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<td>$5,000,000</td>
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<tr>
<td>Variable</td>
<td>Frequency/Percentage</td>
</tr>
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<td>---------------------------------------------------</td>
<td>----------------------</td>
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<td><strong>IF CAP ON PUNITIVES, MULTIPLE OF COMPENSATORY</strong></td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>17 34.0</td>
</tr>
<tr>
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<td>5 10.0</td>
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<tr>
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<tr>
<td>Total</td>
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<td>45 90.0</td>
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<td>1 2.0</td>
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<tr>
<td>“2”</td>
<td>1 2.0</td>
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<td>“3”</td>
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<tr>
<td>“4”</td>
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<td>20 40.0</td>
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<tr>
<td>Yes</td>
<td>2 4.0</td>
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</tr>
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<td>Total</td>
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<td><strong>RAISE IN STANDARD OF PROOF FOR PUNITIVE AWARDS</strong></td>
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<td>Beyond a Reasonable Doubt</td>
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<td>Other</td>
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Federalism and Tort Reform

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<tr>
<td>Products Liability</td>
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<td>Other</td>
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<td><strong>Total</strong></td>
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<td>50%</td>
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<td>FREQUENCY/PERCENTAGE</td>
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<td>----------------------</td>
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<td>All</td>
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<td>Other</td>
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<td>Not Applicable</td>
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<td>15</td>
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<tr>
<td><strong>IF CAP ON COMPENSATORY, RESTRICTED TO TYPES</strong></td>
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<tr>
<td>Not Restricted</td>
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<td>Not Applicable</td>
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<td><strong>Total</strong></td>
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<td><strong>IF CAP ON COMPENSATORY, DAMAGES LIMITED TO NON-ECONOMIC</strong></td>
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Federalism and Tort Reform

<table>
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<tr>
<th>VARIABLE</th>
<th>FREQUENCY/PERCENTAGE</th>
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<tr>
<td><strong>IF CAP ON COMPENSATORY, DAMAGES LIMITED ONLY TO ECONOMIC</strong></td>
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<td>No</td>
<td>32 64.0</td>
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<tr>
<td>Not Applicable</td>
<td>15 30.0</td>
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<tr>
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<td><strong>ANY REPEAL ON DAMAGE-CAP LEGISLATION</strong></td>
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<tr>
<td>No</td>
<td>38 76.0</td>
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<td>3 6.0</td>
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<td>9 18.0</td>
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<td><strong>COMPENSATORY CAPS DECLARED UNCONSTITUTIONAL BY STATE COURT</strong></td>
<td></td>
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<td>No</td>
<td>47 94.0</td>
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<td>Yes</td>
<td>3 6.0</td>
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<td>Total</td>
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### Table 2
**Bivariate Correlations***

<table>
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<tr>
<th>Dependent Variable/Independent Variables</th>
<th>R-Value</th>
<th>P-Value</th>
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<tr>
<td><strong>Damage Cap on Punitives</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Electoral Sel. of Judges</td>
<td>-.31</td>
<td>(.026)</td>
</tr>
<tr>
<td>Insurance Ind. Strength</td>
<td>.31</td>
<td>(.028)</td>
</tr>
<tr>
<td>% Democrat in State Leg.</td>
<td>-.28</td>
<td>(.046)</td>
</tr>
<tr>
<td>% Metropolitan</td>
<td>.34</td>
<td>(.015)</td>
</tr>
<tr>
<td>Per Capita Income</td>
<td>.33</td>
<td>(.021)</td>
</tr>
</tbody>
</table>

**If Cap on Punitives, Restricted to Certain Types**

| Insurance Industry Strength              | -.31    | (.031)  |

**If Cap on Punitives, Fixed Ceiling**

| Innovation Score                        | -.28    | (.048)  |
| Insurance Industry Strength              | -.41    | (.003)  |
| % Metropolitan                           | -.38    | (.007)  |
| Partisan Sel. of Judges                  | .28     | (.051)  |
| Per Capita Income                        | -.33    | (.021)  |

**If Fixed Ceiling, Amount**

| Selection of Insur. Commiss.             | .31     | (.028)  |

**If Cap on Punitives, Multiple of Compensatory**

| Insurance Industry Strength              | -.34    | (.016)  |
| % Metropolitan                           | -.32    | (.021)  |

**If Multiple of Compensatory, Specific Proportion**

| Insurance Industry Strength              | .30     | (.032)  |
| % Metropolitan                           | .28     | (.049)  |

**If Multiple of Compensatory, Combination**

| Insurance Industry Strength              | -.33    | (.018)  |
| % Metropolitan                           | -.36    | (.011)  |
| Per Capita Income                        | -.29    | (.038)  |
Federalism and Tort Reform

<table>
<thead>
<tr>
<th>DEPENDENT VARIABLE/INDEPENDENT VARIABLES</th>
<th>R-VALUE</th>
<th>P-VALUE</th>
</tr>
</thead>
<tbody>
<tr>
<td>RAISE IN STANDARD OF PROOF</td>
<td></td>
<td></td>
</tr>
<tr>
<td>% Democrat in State Leg.</td>
<td>-.36</td>
<td>(.011)</td>
</tr>
<tr>
<td>% Black</td>
<td>-.31</td>
<td>(.028)</td>
</tr>
<tr>
<td>CAP ON COMPENSATORY DAMAGES</td>
<td></td>
<td></td>
</tr>
<tr>
<td>% Attorneys in State Leg.</td>
<td>.31</td>
<td>(.031)</td>
</tr>
<tr>
<td>IF CAP ON COMPENSATORY, RESTRICTED TO CERTAIN TYPES</td>
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<td></td>
</tr>
<tr>
<td>Selection of Insur. Commiss.</td>
<td>-.31</td>
<td>(.030)</td>
</tr>
<tr>
<td>Any Repeal of Damage-cap Leg.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Adjusted Loss Ratio</td>
<td>.29</td>
<td>(.044)</td>
</tr>
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</table>

* Only statistically significant (p <= .05) bivariate correlations are reported.
### TABLE 3
LOGISTIC REGRESSION OF DAMAGE CAPS ON PUNITIVES*

<table>
<thead>
<tr>
<th>VARIABLE</th>
<th>MLE</th>
<th>S.E.</th>
<th>SIGNIFICANCE</th>
<th>IMPACT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adjusted Loss</td>
<td>-0.050</td>
<td>0.060</td>
<td>.40</td>
<td>-</td>
</tr>
<tr>
<td>% Att. in Legis.</td>
<td>8.870</td>
<td>4.575</td>
<td>.05**</td>
<td>.49</td>
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<tr>
<td>Innovation</td>
<td>4.270</td>
<td>3.151</td>
<td>.18</td>
<td>-</td>
</tr>
<tr>
<td>Ins. Ind. Strgth.</td>
<td>1.213</td>
<td>0.567</td>
<td>.03**</td>
<td>.27</td>
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<tr>
<td>% Dem. in Legis.</td>
<td>-4.261</td>
<td>2.513</td>
<td>.09*</td>
<td>-.49</td>
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<tr>
<td>Per Cap. Inc. 1990</td>
<td>0.000</td>
<td>0.0001</td>
<td>.85</td>
<td>-</td>
</tr>
<tr>
<td>Constant</td>
<td>2.402</td>
<td>5.911</td>
<td>.69</td>
<td>-</td>
</tr>
</tbody>
</table>

Chi Square 15.084 (Model Sig. at .02)
Goodness of Fit 53.106
-2 Log Likelihood 53.509
% Modal Category 56%
% Of Caps Pred. Correctly 77.27%
% Reduct. in Error 48.34%

* Damage Caps for punitives coded as 0 (none) and 1 (some kind of cap on punitives). N = 50; 22 states with caps, 28 states w/o caps. The model correctly predicts 77.27% of the states who enacted caps, for a 48.34% reduction in error. Significance based on two-tailed t-distributions; * = p < .10; ** = p < .05; *** = p < .01.

Data compiled by SPSS 6.1 Logistic Regression.
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<table>
<thead>
<tr>
<th>VARIABLE</th>
<th>MLE</th>
<th>S.E.</th>
<th>SIGNIFICANCE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adjusted Loss</td>
<td>-0.016</td>
<td>0.048</td>
<td>.73</td>
</tr>
<tr>
<td>% Att. in Legis.</td>
<td>6.053</td>
<td>5.026</td>
<td>.23</td>
</tr>
<tr>
<td>Innovation</td>
<td>-1.916</td>
<td>3.089</td>
<td>.54</td>
</tr>
<tr>
<td>Ins. Ind. Strgth.</td>
<td>-0.503</td>
<td>0.509</td>
<td>.32</td>
</tr>
<tr>
<td>% Dem. in Legis.</td>
<td>-1.819</td>
<td>2.318</td>
<td>.43</td>
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<tr>
<td>Per Cap. Inc. 1990</td>
<td>0.0001</td>
<td>0.0002</td>
<td>.45</td>
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<tr>
<td>Constant</td>
<td>1.137</td>
<td>5.305</td>
<td>.83</td>
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</table>

Chi Square 5.514 (Model Insignif. at .48)
Goodness of Fit 46.73
-2 Log Likelihood 55.57
% Pred. Correctly 68%

* Compensatory Damage Caps coded as 0 (none) and 1 (some kind of cap on compensatory damages). N = 50; 15 states without caps, 35 states with some kind of cap. Model correctly predicts 91.43% of the caps, but only 13.33% of the states without caps. Overall prediction rate is 68%. Significance based on two-tailed t-distributions; * = p < .10; ** = p < .05; *** = p < .01.

Data compiled by SPSS 6.1 Logistic Regression.
APPENDIX A
POTENTIAL INDEPENDENT VARIABLES*

SOCIO-ECONOMIC VARIABLES

1. per capita income (+)
   ● state mean, 1990 census data
   ● STATISTICAL ABSTRACTS OF US
2. urbanization (+)
   ● % metropolitan, 1990 census data
   ● STATISTICAL ABSTRACTS OF US
3. racial composition (-)
   ● % African-American, 1990 census data
   ● STATISTICAL ABSTRACTS OF US
4. level of education (+/-)
   ● % high school graduation, 1990 census data
   ● STATISTICAL ABSTRACTS OF US

INSURANCE INDUSTRY VARIABLES

5. adjusted loss ratio (+)
   ● ratio of direct losses to premiums earned, 1986
   ● NATIONAL ASSOCIATION OF INSURANCE COMMISSIONERS
6. insurance industry lobbyist strength (+)
   ● categorical measure (0,1,2)
7. insurance agents in state legislature (+)
   ● % of state legislature, 1986
   ● NATIONAL ASSOCIATION OF STATE LEGISLATORS
8. selection of insurance commissioner (+/-)
   ● categorical measure of method (0,1)
   ● NATIONAL INSURANCE ASSOCIATION
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LEGAL VARIABLES

9. attorneys in state legislature (+/-)
   • % of state legislature, 1986
   • NATIONAL ASSOCIATION OF STATE LEGISLATURES

10. judicial selection method (+)
    • categorical measure of method (0,1)
    • THE BOOKS OF THE STATES, 1984-85

11. partisan identification in judicial selection (+)
    • categorical measure of partisanship identification (0,1)
    • THE BOOKS OF THE STATES, 1984-85

POLITICAL VARIABLES

12. electoral conservatism (+)
    • estimates of state public opinion derived from national polling data, 1980s
    • ERICKSON, WRIGHT, MCIVER, 1993 (complete citation)

13. tort policy innovation (+/-)
    • post WW2 index of plaintiff-oriented doctrinal innovations in tort law
      (index of 23 measures) constructed by Bradley C. Canon and Lawrence Baum,
      Patterns of Adoption of Tort Law Innovations: An Application of Diffusion Theory to Judicial Doctrines, 75 AM. POL. SCI. REV. 975 (1981).

14. legislative partisanship (-)
    • % Democratic in state legislature, 1985
    • NATIONAL ASSOCIATION OF STATE LEGISLATURES

* The plus and/or minus sign indicates the direction of the hypothesized relationship with legislative damage caps.
MLE
This refers to maximum likelihood estimates. These represent the probability of impact but are difficult to interpret without the impact measure of substantive significance (see below).
With specific attention to Table 3, the results indicate that two variables (insurance industry strength and % attorneys in the legislature) are significant at p < .05. One (% Democrat in legislature) is significant at p < .10. The size of the MLE suggests that the higher a positive coefficient, the higher the probability of state enacting damage caps. The reverse effect holds for negative coefficients.

SUBSTANTIVE SIGNIFICANCE (IMPACT)
The impact of specific variables is the probability of caps on damages when that variable is present rather than absent. It is measured from an arbitrary baseline (here .5). With specific attention to a particular variable, the impact refers to the effect that variable has on the probability of damage caps. For example, the proportion of attorneys in the legislature raises the probability of a cap on damages by .49 or 49% for every percent increase in that proportion.

THE MODEL
Chi square refers to the significance of the model itself. With six degrees of freedom, it is quite significant in this instance at p < .02. The goodness of fit is about 53% but the measure itself is not generally regarded as a stable overall indicator (equivalent, say, to the adjusted r square in ordinary least squares regression). The model’s predictive accuracy, however, is easier to understand and more stable. In this instance, it is respectable at 77.27% which refers to our ability to explain or predict states with caps. The percentage reduction in error (or a comparison of the error rate of the model with that of predicting the modal value every time (i.e. by chance) is 48.34%.