No. 8 November 2007

# MERCATUS ON POLICY

USING ECONOMICS EXPERIMENTS TO EVALUATE TORT REFORM PROPOSALS

By Kevin McCabe and Laura Inglis MERCATUS CENTER GEORGE MASON UNIVERSITY ver the last three decades, the costs associated with the U.S. tort system have grown dramatically. Since 1980, the annual cost of tort claims filed in the United States has risen from \$42.7 billion to over \$260.8 billion (controlling for inflation), an increase of more than 610 percent.<sup>1</sup> These increasing costs have generated widespread concern about unfairness, wasted resources, and congestion within the legal system. Calls for tort reform are growing more insistent, and many politicians have come to see tort reform as a legislative priority.

The fundamental purpose of the tort system is to compensate injured parties for their losses while ensuring that those responsible for injuries bear the consequences of their harmful actions. A costly tort system that is slow to resolve disputes is especially harmful to injured parties. Money that could be used to compensate tort victims is wasted on costly litigation. Today only 46 percent of annual tort cost goes into compensating victims—the other 54 percent is lost to administration and attorney fees.<sup>2</sup> Plaintiffs with financial needs resulting from their injury may have to wait months or even years for their claims to be resolved.

Tort reforms designed to promote pre-trial settlement and relieve congestion in the system would mitigate these problems. If more cases could be induced to settle (or settle sooner), this would allow more money to go toward compensating injured parties while giving them quicker access to the funds they need.

# A SCIENTIFIC APPROACH TO POLICY ANALYSIS

As PUBLIC DISSATISFACTION with the tort system has increased, reform proposals have multiplied. Without an objective method of comparison, however, it can be difficult to determine which proposals will help and which will make things worse. Economics experiments provide an objective way to test and compare policy proposals without the difficulty and expense of real-world trials. In an economics experiment, researchers design a scenario that replicates the incentives faced by participants in some real-world decision-making situation. The researchers then change the rules of the game to simulate a policy change. The goal of the experiment is to study how rule changes influence people's behavior.<sup>3</sup>

Economics experiments provide an objective way to test and compare policy proposals without the difficulty and expense of real-world trials.

Essentially, an economics experiment functions like a wind tunnel, enabling policy makers to test proposed changes in a controlled environment before implementing them in the real world. Laboratory testing can save a great deal of time and money. In the lab it is possible to discern the effects of institutional changes and to correct mistakes before devoting resources to real-world reforms that might not produce the desired effect. A good experiment can also be repeated by other researchers, promoting objectivity and further validating results.<sup>4</sup>

## AN EXPERIMENT TO STUDY PRE-TRIAL NEGOTIATION

THE GOAL OF our research is to identify factors that promote pre-trial settlement. Therefore, our experiments focus on the negotiation stage of the tort process, after an injury has occurred and attorneys have been engaged.

Subjects in our experiments were mostly undergraduate students at George Mason University. Upon arrival at our laboratory, each subject was randomly assigned the role of plaintiff attorney or defense attorney. Subjects were informed about their client's case and anonymously matched with another subject in the opposite role. Each pair was then given a specified period of time during which to negotiate a settlement agreement. Subjects bargained by sending offers and counteroffers over a computer network. A settlement occurred if either side accepted the other's offer before the time ran out. If they failed to reach an agreement within the allotted time, the computer, acting as the court, imposed a judgment. After a settlement or court decision, the defense attorney paid the required damages to the plaintiff attorney. Every subject attorney negotiated a series of 24 suits, divided into six periods of four suits each.

In order to replicate a real-world negotiation scenario, it is important for subjects to feel the same preferences as realworld decision makers. Experimenters commonly create incentives for subjects through the use of cash payments.<sup>5</sup> In our experiment the subject attorneys negotiated in real money. Since real-world defense attorneys are often kept on retainer, the defense attorneys in our experiment each received a lump sum out of which to resolve all suits brought against their clients; at the end of the experiment, they got to keep whatever remained of that money. The plaintiff attorneys were paid on a contingency-fee basis, receiving a percentage of every recovery gained for their clients.

#### **EVALUATION OF TORT REFORM PROPOSALS**

ONE OF THE great advantages of the experimental approach is the ability to control and change external variables in a way that would not be possible in the real world. In the laboratory we can control the amount of information available to the parties, the cost of taking a case to court, and many other variables. By changing one variable while leaving everything else the same, we can evaluate the impact of that particular variable on pre-trial settlement rates. We used this method to study various tort reform proposals.

#### **Discovery Rules**

FOR HALF OF the suits in our study, both plaintiff attorney and defense attorney were fully informed about the strength of the other side's case. For the other half of our suits, each attorney only knew the strength of his own case. Figure 1 shows the effects of these information conditions on settlement rates.



#### FIGURE 1: COMPLETE VS. PARTIAL INFORMATION

These results indicate that increasing the amount of information available to parties increases the likelihood of pre-trial settlement. This suggests that judges and regulators should work to improve the information that each party has about the merit of the other side's claim, while guarding against strategic abuse of the discovery process. One way to accomplish this could be to outsource the discovery process to independent legal firms.

### Court Costs

IF THE ATTORNEYS in our study failed to reach a settlement within the allotted time, the case proceeded to court and both parties had to pay court costs. Theoretical models of pre-trial bargaining predict that parties will become more willing to settle as the cost of going to court increases. To test this prediction, half of our suits were negotiated under low court costs and the other half under high court costs. Figure 2 contrasts the settlement rates under both cost regimes.



We find that on average there were 35 percent more settlements when court costs were high than when they were low. Our results suggest that increasing the cost of going to court might be a very effective way to increase settlement rates.

# **Cost-Shifting Rules**

WE ALSO COMPARED settlement rates under various costshifting rules. In most American jurisdictions, both parties in a tort case are responsible for their own court costs. However, theoretical models suggest that shifting court costs between the parties might increase settlement rates. For example, Section 998 of the California Code of Civil Procedure provides that if either party declines an offer during pre-trial negotiation that would have been better for him than the court's eventual decision, that party must pay the court costs of both sides. This is thought to promote settlement by encouraging both parties to treat settlement offers more seriously.

Another cost shifting arrangement, known as the English Rule, requires the losing party to pay the court costs of both sides. This is thought to discourage frivolous lawsuits and to promote settlements by increasing the risk associated with going to court. Figure 3 shows the settlement results of Section 998 and the English Rule, compared to the baseline American Rule of no cost-shifting.

FIGURE 3 AMERICAN RULE VS. SECTION 998





#### AMERICAN VS. ENGLISH RULE

We find that settlement rates are approximately equal under Section 998 and the American Rule. On the other hand, settlements are much less likely to occur under the English Rule. It may be that the English Rule makes parties excessively optimistic about going to court. After all, each side faces the possibility of winning in court and avoiding the costs of a court decision all together. Judge Richard Posner considers overoptimism to be a leading cause of settlement failure in tort cases.<sup>6</sup> Another concern with Section 998 and the English Rule is that both rules might prevent some worthy cases from being filed. A plaintiff with a strong case but with limited resources might not seek relief because of the risk that she could end up having to pay her opponent's costs.

Our experimental research indicates that increasing the information available to parties and increasing the cost of going to court would increase the number of pre-trial settlements, but that adopting the English Rule or Section 998 would likely fail to do so.

#### **ENDNOTES**

1. Tillinghast Report, "2006 Update on U.S. Tort Cost Trends" (n.p.: Towers Perrin, 2006), 5, http://www.towersperrin.com/tp/getwebcachedoc?webc=TILL/ USA/2006/200611/Tort\_2006\_FINAL.pdf. For more information about empirical data on the tort system, see Eric Helland, Jonathan Klick, and Alexander Tabarrok, "Data Watch: Tort-uring the Data," *Journal of Economic Perspectives*, 19, 2 (2005): 207–20.

 Tillinghast Report, "U.S. Tort Costs: 2002 Update" (n.p.: Towers Perrin, 2002), 17, http://www.massmed.org/Content/ContentGroups/SectionsTopics/ AdvocacyandPolicy/ProfessionalLiability/3741profilability\_tortcosts.pdf.

3. For more on the methodology of economics experiments, see Vernon L. Smith, "Economics in the Laboratory," *Journal of Economic Perspectives* 8,1 (1994): 133–31. See also Vernon L. Smith, "Microeconomic Systems as an Experimental Science," *American Economic Review* 72, 5 (1982): 923–55.

4. Clearly, the design of an experiment affects the conclusions. One of the great advantages of the experimental approach is that anyone who disagrees with these results can run further experiments of their own.

5. Vernon L. Smith, "Experimental Economics: Induced Value Theory," *American Economic Review* 66, 2 (1976): 274–79.

6. Richard Posner, *Economic Analysis of Law*, 7th ed. (New York: Aspen Publishers, 2007), 599.

# CONCLUSION

PROMOTING PRE-TRIAL SETTLEMENT of tort claims would benefit plaintiffs and defendants alike. Money that is currently wasted on costly litigation could be used to compensate injured parties. Both sides would save money through quicker resolution of disputes, and injured parties would gain more timely access to the funds they need. Our experimental research indicates that increasing the information available to parties and increasing the cost of going to court would increase the number of pre-trial settlements, but that adopting the English Rule or Section 998 would likely fail to do so.

The Mercatus Center at George Mason University is a research, education, and outreach organization that works with scholars, policy experts, and government officials to connect academic learning and real world practice.

The mission of Mercatus is to promote sound interdisciplinary research and application in the humane sciences that integrates theory and practice to produce solutions that advance in a sustainable way a free, prosperous, and civil society.

Kevin McCabe is a professor of economics and law at George Mason University. He has written or co-written more than 70 articles on market design, industrial organization, game theory, monetary theory, behavioral economics, and experimental economics and has been co-principal investigator on many National Science Foundation (NSF) grants, including a recent NSF study on "Brain Function and Economic Decision Making."

Laura Inglis is a research scientist specializing in tort reform issues at the Center for the Study of Neuroeconomics at George Mason University. She is currently pursuing a Ph.D. in economic history at the University of Oxford.