## Deterrence, Lawsuits and Litigation Outcomes under Agency Problems and Court Errors

## **Extended Abstract**

Punitive damage awards have been widely criticized for their unpredictability (2004 Economic Report of the President) and for generating a plaintiff's windfall (i.e., a payment in excess of the costs of pursuing the punitive claim), which promotes unnecessary litigation (Dodson, 2000), the escalation of liability insurance premiums and over-deterrence. In an attempt to overcome some of these negative effects, several US states have implemented different kinds of tort reform. Some reforms take the form of caps or limits on punitive damage awards while others, called "split-recoveries", have mandated that a share of the award be allocated to the plaintiff with the remainder going to the state.

Our paper presents a strategic model of liability and litigation that incorporates agency problems between the plaintiff and its attorney and court errors on assessing liability. We extend Hylton's (2002) theoretical framework by explicitly modeling the role of the plaintiff's attorney and by deriving sufficient conditions for a unique universally-divine mixed-strategy perfect Bayesian equilibrium (Banks and Sobel, 1987). In this empirically relevant equilibrium, some defendants choose to be liable; some lawsuits are not meritorious (frivolous lawsuits); and, some lawsuits are dropped, some are resolved outof-court and some go to trial. Our model allows for court errors on assessing the liability of defendants. Predictability of punitive awards is defined as the probability that a defendant will be erroneously found liable of punitive damages by the court. We derive analytically the optimal level of punitive awards under caps and split-recoveries. We also analyze the effect of predictability on deterrence and litigation outcomes and find a predictability threshold beyond which the deterrence effect of punitive awards vanishes. We then analyze the effect of split-recoveries and caps on the probability that firms choose to be liable, the probability that frivolous lawsuits are filed, and the probability that a lawsuit proceeds to the award stage of a trial. Consistent with Babcock and Pogarsky's (1999) findings on caps, and with Landeo, Nikitin and Babcock's (2004) findings on split-recoveries, our model predicts that caps and split-recoveries decrease the probability of trial. However, caps and split-recoveries also increase the likelihood that a firm chooses to be liable (and therefore, increase the probability of accidents) because they lower the expected litigation costs. The firm reacts to these lower expected costs by reducing expenditures on safety. Finally, split-recoveries and caps reduce the incentives for the frivolous plaintiffs to file a lawsuit. We establish sufficient conditions under which the overall welfare effect of these reforms is unambiguously positive, because the reduction in frivolous lawsuits and the reduction in litigation costs of meritorious plaintiffs and defendants offset the negative effect of increasing the likelihood of accidents.