
Introduction

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The “new” economic analysis of law began with the economic analysis of torts—with the early analyses focusing on questions such as when does the law need to intervene to internalize externalities (Coase 1960), when should intervention occur through liability rules (Calabresi and Melamed 1972), and what is the optimal structure of liability (e.g., Shavell 1980a; Landes and Posner 1987).¹ The original economic models of torts tried to provide an economic framework for analyzing accidents that could be applied generally. The resulting simple and elegant models tended to focus on accidents involving one injurer and one victim operating in a world of perfect information, optimal courts, no litigation costs and no insurance. In this world, tort liability is an effective mechanism for inducing optimal investments in care by both injurers and victims when liability is needed to internalize costs, as it is for accidents involving strangers (Calabresi and Melamed 1972; Shavell 1980a; see Landes and Posner 1987) or customers who cannot observe the quality of the goods or services they are purchasing (Spence 1977). Moreover, negligence liability is both effective and low cost. The mere threat of negligence liability is sufficient to induce due care. Thus optimal negligence liability produces an equilibrium in which injurers and victims take due care and tort litigation is unnecessary (Shavell 1980a). A central feature of this scholarship, and of many early models of torts, is that they were designed to apply to many different types of accidents, and thus tended to abstract away from information and institutional features specific to particular contexts.

In the decades that followed, applied microeconomics was transformed by three new waves of scholarship: economic analysis of imperfect information (and incomplete contracts), experimental economics, and empirical legal studies. Each of these approaches has helped to transform the economic analysis of tort law.

Economic analysis of imperfect information—and of incomplete contracts—has transformed the economic analysis of torts because it reveals that we cannot understand either the incentive effects of liability or the expected outcome of litigation without attending carefully to the information available to the parties in each time period. It reveals that in order to evaluate optimal liability for a particular type of risk, one must attend closely to the root cause of negligence in that area—for example, injurers’ lack of information about optimal care or inability to fully control their own caretaking (as is the case with organizations making products). Identifying the causes of accidents is important because injurers’ imperfect information or imperfect control not only can produce accidents but also may affect how injurers respond to liability rules. Scholars also now give increased

¹ See Posner (1975, 758–59, citing the publication of articles by Calabresi and Ronald Coase in the early 1960s as giving birth to the “new” economic analysis of law that differs from prior economic analyses that did not “apply economic analysis in a *systematic* way to areas of law that did not purport to regulate economic relationships”).

attention to the institutional context surrounding risky activities, including organizations (and thus contracts), insurance, and market structure. As a result, the trend in the economic analysis of torts is away from more generalized models of accidents and towards efforts to develop economic models that are specific to the area in question, e.g., medical malpractice or product liability.

Economic analysis of imperfect information also motivated more attention to the litigation process itself and its effect on underlying behavior. While early scholarship in torts tended to focus on the incentive effects of liability rules assuming that litigation functioned optimally, concern for the distortions created by imperfect information naturally led scholars to examine the litigation process itself—and to understand how inefficiencies in litigation outcomes can alter the incentive effects of liability rules. As a result, law and economics scholars gave increased attention to how facets of the tort system beyond liability affect deterrence. These include joint and several liability, vicarious liability, settlement, class actions, rules of evidence, the damage rules, and the role of the decision-maker. Experimental economics has enhanced this interest in the information and institutional context by focusing attention on both the limits of human decision-making and the impact of institutional structure—for example lawyers—on the quality, and the rationality, of people's decisions.

While information economics has motivated increased attention to the institutional and informational context of accidents and litigation, empirical legal studies has provided evidence on the causes of accidents, operation of the tort system, and the effect of changes in tort liability on underlying behavior. This evidence has undermined many widely-held preconceptions about the causes of accidents and the operation of the tort system. It has inspired changes in economic models of accidents and litigation. It also has transformed the debate over tort reform. Many traditional tort reforms were enacted in response to claims that the tort system is dominated by litigation-hungry plaintiffs pursuing innocent defendants in quest of the enormous (often punitive) damage awards that plaintiff-friendly juries regularly impose. Empirical analysis has provided evidence that undermines these claims, painting a picture of the tort system that differs from the one that induced most tort reforms. Indeed, in some areas empirical analysis reveals that the central goal of reform should be to expand liability and not restrict it.

This book pulls together leading scholars on tort liability to present an institutionally-rich, empirically-grounded economic analysis of the tort system. Consistent with the premise of this book—that economic analysis of tort liability must attend carefully to information structures and institutions—the theoretical chapters in this volume focus on the role of liability in specific contexts. This is most evident in the chapters on medical malpractice and products liability. Yet other chapters, such as those on proximate cause and regulation, also highlight the importance of context to the economic analysis of optimal deterrence. The chapters in this book also expand the analysis beyond the traditional two-party model and examine multiple-party litigation, organizational liability, the role of insurance, the settlement process, procedural rules, juries, damage rules, tort reform, and alternatives to tort liability. Recognizing that theoretical models, as well as tort reform policy, should reflect the actual operation of the tort system, this book presents extensive empirical evidence, including analysis of state court trials and settlements, class actions, medical error, juries, damage awards, tort reform, and experimental analysis of settlements.

OVERVIEW OF THIS VOLUME

This book is divided into six parts: Overview of Tort Litigation; Economic Analysis of Liability; Economic Analysis of Multi-Party Litigation; The Litigation Process; Damages; and Reform of, and Alternatives to, the Tort System.

In Part I, Michael Heise presents an overview of tort trials in state courts in his chapter, *Empirical Analysis of Civil Litigation: Tort Trials in State Courts*. Heise finds that jury trials for automobile accidents are the leading source of tort trials. Malpractice cases constitute the next most common type of tort to go to trial. Thus, most tort trials involve individual defendants, not corporate defendants. Nevertheless, most of the non-motor vehicle cases involve organizational defendants (businesses or hospitals). Heise also finds that plaintiffs win slightly more than half the cases overall, as Priest-Klein predicts, but plaintiff win rates, mean and median awards, and case disposition time vary tremendously across case types. Plaintiffs lose the majority of the products liability cases (non-asbestos). The median award for these cases is around \$500,000. By contrast, for tort cases generally, the overall final median award is just under \$24,000. Moreover, punitive damages are rarely awarded. Evidence shows that the mean disposition time for products liability (non-asbestos) and medical malpractice is almost three years (33 months).

Part II presents six chapters on the economic analysis of liability focusing on accidents involving individual injurers. These chapters highlight the importance of attending to information structures and institutional context when evaluating the effect of liability rules on underlying behavior. They also show the importance of considering causation, duty, and insurance when assessing the deterrent effect of tort liability.

The first chapter in this section, Chapter 2, *Economic Analysis of Medical Malpractice Liability and Its Reform*, by Jennifer Arlen, presents an economic analysis of negligence liability applicable to both medical malpractice and many accidents involving strangers. This chapter first outlines the traditional economic model of torts and its conclusions (Shavell 1980). It then shows that this traditional model is not necessarily applicable to situations like medical malpractice where injurers can be negligent accidentally. In such contexts, in order to optimally deter, liability must both induce injurers to want to take due care and induce them to invest in the information and systems needed to determine and comply with the due care standard. This chapter focuses on the implications of this analysis for medical malpractice liability, showing how it alters conclusions concerning optimal damages, the validity of contractual liability, and the optimal scope of institutional liability.

Chapter 3, *Economic Analysis of Products Liability: Theory*, by Andrew F. Daughety and Jennifer F. Reinganum, provides a theoretical economic analysis of products liability. This chapter examines various liability rules, highlighting the effect of market structure. The chapter also examines the effect of informational differences between producers and consumers that arise over the life of a product, and also considers endogenously-determined costs, such as those that arise from investment in care. It also evaluates contractual versus mandatory liability.

Chapters 4 and 5 address the intersecting issues of actual cause and proximate cause. In Chapter 4, *Causation in Tort Law: A Reconsideration*, Keith N. Hylton presents a new framework for categorizing and then analyzing causation issues. His chapter isolates key elements of the causation cases and introduces a “causation tree” that highlights the role

of information. The framework Hylton introduces helps resolve the arguments between consequentialist and duty-oriented tort theorists, and reconciles conflicting causation models within the consequentialist school. In Chapter 5, *Causation and Foreseeability*, Mark F. Grady presents an economic analysis of proximate cause. Grady first provides an in-depth critique of Steven Shavell's classic economic analysis of proximate cause (Shavell 1980b). He then describes his own positive theory, which entails his account of why the doctrine is efficient and how its purposes are served by two apparently distinct conceptions of proximate cause—the foreseeability doctrine and the direct consequences doctrine.

In Chapter 6, *Fault Lines in the Positive Economic Analysis of Tort Law*, Mark A. Geistfeld evaluates whether classic economic models plausibly describe actual tort law rules. He concludes that the representation of the negligence rule incorporated into most economic models of tort law differs from the rule actually applied by courts. Among other limitations, he notes the failure of most analyses to address the concept of duty, which lies at the core of negligence liability and has been formulated by courts in a manner that fundamentally diverges from the requirements of allocative efficiency.

Chapter 7, *The Law and Economics of Liability Insurance: A Theoretical and Empirical Review*, by Tom Baker and Peter Siegelman, examines the effect of liability insurance on injurers' and victims' caretaking and risk-spreading under different liability regimes. Understanding the incentive effects of insurance is critical to evaluating the incentive effects of tort liability as almost all tort cases are affected by, and affect, insurance companies for both injurers and victims.

Part III focuses on situations involving multiple defendants (Chapters 8 and 9) or multiple plaintiffs (Chapters 10 and 11). Chapter 8, *Economic Analysis of Joint and Several Liability*, by Lewis A. Kornhauser, examines the optimal imposition of liability when two different defendants can properly be said to be responsible for an accident, focusing on the different incentives created by several-only liability and joint and several liability.

In Chapter 9, *Economic Policy and the Vicarious Liability of Firms*, Reinier Kraakman provides an economic analysis of vicarious liability. Economic analysis of vicarious liability is vital to a full understanding of the incentive effects of tort liability. Excluding automobile accidents, many, if not most, tort cases involve organizational defendants who directly affect, and are affected by, the incentives to take care provided by tort liability. Chapter 9 explores the complexities that arise from imposing vicarious liability in organizational settings where evidence is illusive and firms are strategic. This line of inquiry also leads to the question of how to define the boundaries of firms for purposes of tort liability.

Chapters 10 and 11 provide economic analyses of tort cases that involve multiple plaintiffs. In Chapter 10, *Group Litigation in the Enforcement of Tort Law*, Geoffrey Miller provides a primarily theoretical economic analysis of group litigation, focusing on both the incentives effects and administrative costs of class actions and other forms of group litigation. In Chapter 11, *The Socio-Economics of Mass Torts: What We Know, Don't Know and Should Know*, Deborah R. Hensler provides an in-depth empirical analysis of group litigation, presenting evidence on the number, type, scope of, and trends concerning mass tort lawsuits, as well as employing case studies and anecdotal data to identify the factors that produce mass tort litigation and shape its evolution. Both chapters highlight

how inefficiencies in the litigation process—including agency costs—can affect the ability of the tort system to optimally deter.

Part IV provides an economic analysis of the litigation process and focuses on two distinct issues. First, how procedural rules and institutional structures involving the process of litigation affect litigants' decisions to bring a claim, their decision to settle, the accuracy of claims filing and resolution, and the magnitude of recovery. Second, the effect of different litigation processes on the parties' investment in care to avoid accidents.

In Chapter 12, *Law, Economics, and the Burden(s) of Proof*, Eric L. Talley examines the effect on litigation outcomes and underlying caretaking behavior of changes in evidentiary rules. The ability of tort liability to optimally deter risk-taking depends critically on ensuring accurate decision-making by courts, which requires that courts obtain accurate evidence about the accident. This chapter explores why achieving these two simple goals can be so difficult, as well as the distortions produced by existing rules, both for the litigation process and for underlying care-taking behavior.

Chapters 13 and 14 both explore the effect of the settlement process on underlying care-taking, claims filing, and litigation outcomes. Chapter 13, *Law and Economics of Settlement*, by Abraham L. Wickelgren, employs neoclassical economics to examine settlement, focusing on models of settlement bargaining between one plaintiff and one defendant under situations of symmetric and asymmetric information. The chapter then examines whether and when the settlement process makes strike suits a significant problem and how settlement affects the underlying ability of the tort system to effectively regulate behavior. Chapter 14, *Bounded Rationality in the Settlement Process: Empirical Evidence on the Causes of Settlement Failure in Litigation*, by Linda Babcock and Joshua Furgeson, considers how various behavioral biases can impede parties from entering into mutually beneficial, cost-reducing, settlements. A common theme of both of these chapters is that (1) we cannot understand the social welfare consequences of tort liability without giving due consideration to the settlement process, and (2) we cannot determine the effect of settlement on claiming behavior, litigation costs, litigation outcomes, and the effect of tort liability on primary behavior (care) without attending carefully to the nature of the information available to each party, the process of settlement, and any biases affecting the parties' decisions.

Chapter 15, *Contingent-Fee Contracts in Litigation: A Survey and Assessment*, by Eric Helland and Seth A. Seabury surveys the theoretical literature on contingent fees as well as the available empirical literature on fee structures in the legal system and discusses their implications for the policy debate over the use of contingent fees.

In Chapter 16, *Empirical Analysis of Juries in Tort Cases*, Shari Seidman Diamond and Jessica M. Salerno examine the empirical literature relating to jury decisions in tort cases. They show that jurors attempt to achieve multiple goals beyond the economic goal of optimal care. They present evidence on juries' ability to accurately determine liability, evaluate expert testimony, and assess damages, as well as explanations for the differential treatment of corporate defendants. They also evaluate reforms with the potential to improve the jury's performance.

These chapters reveal that the litigation process is as important an area of study for scholars interested in optimal deterrence as are the substantive liability rules themselves. They also reveal how many important and interesting questions remain open for future research.

Tort liability cannot hope to provide optimal incentives unless damage rules are efficient. Part V provides a theoretical and empirical analysis of tort damage rules. Additional analysis is presented in discussions of tort reform in Part VI.

In Chapter 17, *Damages for Incompensable Harm*, Robert Cooter and David DePianto review the economic analysis of economic damages, and highlight the paradoxes produced by the economic analysis of non-economic damages, including recovery for non-pecuniary losses associated with death and serious permanent injury. The authors then evaluate three damage measures — value of statistical life (VSL), happiness equivalent, and Hand Rule Damages (HRD).

In Chapter 18, *Empirical Analysis of Tort Damages*, W. Kip Viscusi examines the economic rationale for different damages components, the procedures for determining damages in tort cases, and the empirical characteristics of these damages. This chapter uses data by case type from the Civil Justice Survey of State Courts to provide assessments of total damages, non-economic damages, and trends in damages from 1992 to 2005. It also presents data on damages by type of personal injury, as well as estimates of tort litigation costs. The chapter also considers efforts to boost damages through the use of hedonic damages and efforts to restrain damages through tort reform policies.

In Chapter 19, *Economic Analysis of Punitive Damages: Theory, Empirics, and Doctrine*, Catherine M. Sharkey assesses economic rationales for punitive damages in light of contemporary empirical analysis and judicial doctrine. The chapter identifies optimal deterrence (or loss internalization) as the primary prescriptive economic justification for supra-compensatory damages. It then observes that this rationale has largely been rejected by the U.S. Supreme Court, which appears to favor the competing retributive punishment rationale. Sharkey argues that the contemporary expansion of punitive damages into reckless indifference (most prominently in products liability cases) suggests additional room for expansion of the loss internalization rationale, with both descriptive and prescriptive payoffs.

Part VI presents empirical analyses of tort reform as well as theoretical assessments of two leading alternatives to the tort system, no fault compensation systems and regulation.

In Chapter 20, *The Empirical Effects of Tort Reform*, Theodore Eisenberg surveys the empirical literature on tort reforms, focusing on the effect of reforms to punitive damages, medical malpractice, and products liability. Eisenberg concludes that there is little evidence to suggest that punitive damages reform affects the ratio between punitive and compensatory damages. He concludes that evidence of the effect of tort reform in the medical malpractice field is mixed. Evidence suggests that caps on non-economic damages have reduced costs, which appears to have reduced hospitals' incentives to improve care. Yet there is no consistent evidence of the effect of caps on physician behavior or supply. As for products liability, evidence exists that plaintiffs are achieving less success over time.

In Chapter 21, *Do Damage Caps Reduce Medical Malpractice Insurance Premiums? A Systematic Review of Estimates and the Methods Used to Produce Them*, Kathryn Zeiler and Lorian Hardcastle encourage readers to approach the existing evidence on the effect of tort reform with caution. They provide a systematic assessment of empirical studies on the effect of damage caps for malpractice liability and detail significant methodological variations in the studies that employ regression analysis to estimate the impacts of caps on medical malpractice insurance premiums. Using a theory-driven framework to develop a set of best practices, they conclude that little weight can be put on any one study due

to broad methodological shortcomings. The chapter provides a valuable framework for both scholars seeking to evaluate the merits of existing studies as well as those seeking to design new ones.

The last two chapters examine alternatives to tort liability. Both chapters echo the general theme of this book that there is no one-size-fits-all solution to the problem of tortious accidents. Context matters—largely because informational limitations and asymmetries, as well as institutional structure, matters. This is apparent in the last two chapters which examine no fault systems and regulation. In Chapter 22, *No Fault Accident Compensation Systems*, Michael Trebilcock and Paul-Erik Veel provide both a theoretical and empirical assessment of no fault insurance schemes, focusing on no fault automobile insurance and workers' compensation. They find that no fault schemes are a reasonably effective low cost method of compensating victims relatively quickly, albeit at lower levels. They also do not find empirical support for the view that even well-designed no fault schemes increase accidents. In Chapter 23, *Alternatives and Complements: Liability and Regulation as Remedies for Physical Injury*, Richard A. Epstein, evaluates the use of liability and regulation to control excessive risk-taking. He finds that the central challenge is not to choose between liability and regulatory regimes, but rather to find the optimal mix of liability and regulation, assuming that some version of each is employed. Moreover, he concludes that one cannot answer that question in the abstract. Rather one must attend to the specific context of the risky activity in need of control.

The chapters in this book reveal how much we have learned about the tort system since the early days of economic analysis of torts scholarship. We have a deeper understanding of the causes of accidents, the effects of liability rules, the role of organizations, and the distortions created by multi-party liability, insurance, and the litigation process. We also understand more clearly the problems with many of the reforms that legislatures have adopted or considered as solutions to perceived problems associated with the tort system. Yet much remains to be explored. The chapters in this book can help guide future scholarship both by providing a theoretical and empirical foundation and highlighting particularly promising avenues for future research.

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