JACKPOT THE TRUE COST OF AMERICA'S TORT SYSTEM JUSTICE

Lawrence J. McQuillan Hovannes Abramyan Anthony P. Archie

> with Jeffrey A. Johnson and Anna Erokhina

Foreword By

The Honorable Haley Barbour Governor of the State of Mississippi



LACKPOT THE TRUE COST OF AMERICA'S TORT SYSTEM JUSTICE

Lawrence J. McQuillan Hovannes Abramyan Anthony P. Archie

> with Jeffrey A. Johnson and Anna Erokhina

Foreword by The Honorable Haley Barbour Governor of the State of Mississippi



Jackpot Justice The True Cost of America's Tort System

Lawrence J. McQuillan, Hovannes Abramyan and Anthony P. Archie With Jeffrey A. Johnson and Anna Erokhina Foreword by The Honorable Haley Barbour, Governor of the State of Mississippi

ISBN-13: 978-1-934276-00-6 ISBN-10: 1-934276-00-6 March 2007 | U.S. \$24.95 Pacific Research Institute 755 Sansome Street, Suite 450 San Francisco, CA 94111 Tel: 415-989-0833 / 800-276-7600 Fax: 415-989-2411 Email: info@pacificresearch.org www.pacificresearch.org

Additional print copies of this study may be purchased by contacting us at the address above, or download the PDF version at www.pacificresearch.org

Nothing contained in this report is to be construed as necessarily reflecting the views of the Pacific Research Institute or as an attempt to thwart or aid the passage of any legislation.

©2007 Pacific Research Institute. All rights reserved. No part of this publication may be reproduced, stored in a retrieval system, or transmitted in any form or by any means, electronic, mechanical, photocopy, recording, or otherwise, without prior written consent of the publisher.

All things in excess bring trouble to men.

Titus Maccius Plautus (254 BC-184 BC) Playwright of Ancient Rome

CONTENTS

- vi Foreword by The Honorable Haley Barbour, Governor of the State of Mississippi
- vii Preface by Sally C. Pipes
- viii Acknowledgements
- x Executive Summary

1 Chapter 1. Civil Justice and Torts

- 1 What the Study Measures and Does Not Measure
- 2 Criminal Law versus Civil Law
- 3 What Is Tort Law?
- 3 The Goal of Tort Law

6 Chapter 2. The Civil-Litigation Process

- 6 Civil-Case Procedure Before Trial
- 7 Civil-Case Trial Procedure
- 8 The Lawsuit Industry as a Probability Game

12 Chapter 3. U.S. Tort Costs

- 13 The Social Cost of Taxation: The Static Conceptual Framework
- 15 The Annual Static Social Cost of the U.S. Tort System
- 15 Tort Transfer Costs
- 16 Deadweight Costs
- 16 Rent-Seeking and Rent-Avoidance Costs
- 17 The Static Social Cost and Static Accounting Cost
- 17 Adding Dynamic Elements to the Static Framework
- 17 Accidental Deaths
- 19 Health Care Expenditures
- 20 Reduced Access to Health Care
- 21 Innovation
- 28 The Annual Social Cost and Accounting Cost of the U.S. Tort System
- 29 The Long-Term Social Cost and Accounting Cost of the U.S. Tort System

30 Chapter 4. Excess U.S. Tort Costs

- 30 What Are Excess Tort Costs?
- 31 How Do We Measure Excess Tort Costs?
- 31 Relative Tort Costs in Industrialized Countries
- 34 Total Excess Tort Costs in the United States

36 Chapter 5. Stockholder Wealth Effects and Asbestos Bankruptcy Effects

- 36 The Effect of Tort Litigation on Stockholder Wealth
- 38 Asbestos Bankruptcy Effects on Displaced Workers
- 40 The Cost of Job Displacements
- 40 The Cost of Human Capital Losses
- 41 The Cost to Employee Pensions
- 43 The Total Indirect Costs to Displaced Workers
- 44 Endnotes
- 49 Contributors
- 52 About PRI

Tables And Figures

- 9 Figure 1. The Lawsuit Industry
- 14 Figure 2. The Costs of Taxation
- 16 Table 1. Where Tort Costs Go
- 21 Table 2. U.S. Health Expenditures and the Uninsured, 2000–2004
- 24 Table 3. Excess Tort Liability, Research and Development, and Lost Sales of New Products
- 28 Table 4. 2006 Tort Cost Breakdown
- 29 Table 5. Long-Term Cost of the U.S. Tort Liability System
- 32 Table 6. Tort Costs as a Percentage of GDP, 11 Industrialized Countries, 2003
- 34 Table 7. 2006 Excess Tort Cost Breakdown
- 43 Table 8. Indirect Costs to Displaced Workers from Asbestos-Related Bankruptcies

FOREWORD



America's state civil justice systems play an indispensable role in the success and prosperity of our country by serving as the primary forum in which disputes can be resolved fairly within the rule of law.

However, as this Pacific Research Institute (PRI) study points out, state civil justice systems create huge costs, many previously unexamined, that burden our state and national economies. The scope of these costs is so great that they threaten to undermine our future national prosperity and quality of life as we have known it.

Even without the specific dollar quantifications provided by PRI, many of us in leadership roles have known intuitively that state civil justice systems should not be allowed to unnecessarily burden economic growth. In Mississippi, we have enacted laws and implemented programs to strengthen our civil justice system. These initiatives have resulted in better financial and legal outcomes for both consumers and businesses.

Thanks to this in-depth economic analysis provided by PRI, everyone with a stake in state civil justice systems will now be able to consider more specifically what costs are generated by civil justice policies. These costs can now be viewed in light of their actual impact on state economic and social priorities including quality of medical care, availability of health insurance, consumer safety, job creation, and the attraction of investment capital.

As a nation, our goal should be to strengthen state civil justice systems to ensure they deliver fair and appropriate outcomes at a level of cost to plaintiffs, defendants, and taxpayers that is reasonable and sustainable over the long term. I hope that this PRI study will stimulate vigorous public discussion and debate as to the most appropriate ways to achieve this goal.

1 Shey Shame

The Honorable Haley Barbour Governor State of Mississippi

PREFACE

The California-based Pacific Research Institute develops and promotes public-policy solutions that empower individuals to solve problems through voluntary association and exchange in free markets. Through its research, commentary, and outreach, PRI educates the public on policy solutions that strengthen and preserve individual freedom.

Jackpot Justice: The True Cost of America's Tort System measures the direct and indirect costs to the economy of the U.S. tort system and determines how much of that total is excessive. This seminal report is an important tool, grounded in thought-provoking analysis and rigorous economic study, and a synthesis of PRI's mission to research and educate. By presenting the costs of America's tort system in terms that matter to individual consumers and families, Jackpot Justice encourages both public discussion and legislative debate over the preventable effects of a currently inefficient tort system.

As the report shows, the economic drag of the American tort system costs billions, lowering the standard of living for ordinary citizens nationwide. Meaningful reforms to the legal system would result in stronger economic growth, more affordable products and services, and higher personal income. Consumers would also benefit from a system that encourages innovation in safety and convenience. In the absence of such reform, costs will continue to be excessive and opportunities for growth will be lost.

I thank several people who made this report possible, beginning with the authors. Dr. Lawrence J. McQuillan, director of Business and Economic Studies at PRI, artfully guided every step of the project's research, organization, and writing. Hovannes Abramyan and Anthony P. Archie, public policy fellows in Business and Economic Studies at PRI, Jeffrey A. Johnson, graduate student at Claremont Graduate University, and Anna Erokhina, undergraduate student at the University of California at Berkeley, provided, among other things, outstanding library research, data collection, and writing.

With 28 years of leadership, advocacy, and groundbreaking research to its credit, PRI is more committed than ever to promoting a wide discussion of important policy issues. Greater knowledge, more analytic thinking, and a national debate will contribute to reasoned and informed policy decisions. PRI plays a prominent role in this process, and *Jackpot Justice* is an important contribution. It is a role we will continue to fill as long as America's founding principles of life, liberty, and the pursuit of happiness resonate in a single heart.

Jally 6. Kpp

Sally'C. Pipes President and Chief Executive Officer Pacific Research Institute

ACKNOWLEDGEMENTS

A project of this magnitude is never completely the work of the listed authors. Many others made important conceptual and concrete suggestions that improved the product.

Special thanks go to Michael L. Carpenter, partner with Carpenter Hawkins L.L.C., who first saw the need for a study of this kind and suggested several years ago to co-author Dr. Lawrence J. McQuillan that PRI conduct this analysis. Mike's foresight and insights were invaluable.

Many people gave us suggestions for studies to read, helped us locate studies, data, or people, answered questions on their research study, or gave us conceptual ideas. These people included Sam Ackerman, summer policy intern, PRI; Kristin Armshaw, director of the Civil Justice Task Force, American Legislative Exchange Council (ALEC); Sarah Baker and Cindy Snyder, reference librarians, Claremont Colleges; Nichole Batts, telesales supervisor, Insurance Services Office; Michael F. Blake, data specialist, A. M. Best Company; Tom Campbell, dean, Haas School of Business, University of California at Berkeley; Dan Cole, director of research, Judy Diamond/FreeERISA.com; Vincent Conti, customer-service representative, Insurance Services Office; Carl D. Densing, University of California at Berkeley; John R. Graham, director of Health Care Studies, and Diana Ernst, policy fellow in Health Care Studies, PRI; Peter Gregory, research assistant, Institute for Justice; Dr. Robert Hartwig, chief economist and senior vice president, Insurance Information Institute; Michael Hawkins, partner, Carpenter Hawkins L.L.C.; Paul Hinton, vice president, NERA Economic Consulting; Robert B. Dorigo Jones, president, Michigan Lawsuit Abuse Watch (M-LAW); Damien Josefiak, senior writer in public affairs, American Insurance Association; Dr. Daniel P. Kessler, senior fellow, Hoover Institution, Stanford University; Dr. Michael J. Moore, visiting professor, University of Virginia, and principal, Chicago Partners, L.L.C.; Michelle Muccio, research assistant for the federal budget, Thomas A. Roe Institute for Economic Policy Studies, Heritage Foundation; Jonathan Orszag, managing director, and Peter Orszag, senior director, Sebago Associates; reference librarians at Boalt Hall School of Law library, University of California at Berkeley; Jack Rogers, managing director, Health Policy Economics, PriceWaterhouseCoopers; Kristyn Shayon, director of communications services, American Justice Partnership (AJP); Dr. George B. Shepherd, professor of law, Emory University; Dr. Joseph E. Stiglitz, professor of economics, Columbia University; Frederick T. Stocker, vice president and counsel, Manufacturers Alliance; Dave Unnewehr, vice president of policy development and research, American Insurance Association; Marc Vinyard, reference librarian, Pepperdine University; Dr. W. Kip Viscusi, professor of law, economics, and management, Vanderbilt University; and Michael Warner, vice president of marketing, Conning Research and Consulting. We are grateful for their generous assistance.

Co-author Jeffrey A. Johnson's work on this project was underwritten by the Charles G. Koch Summer Fellowship Program at the Institute for Humane Studies at George Mason University in Fairfax, Virginia. Jeffrey thanks Justine Lam, director of the Charles G. Koch Summer Fellowship Program, and Debi Chakrabarty, office manager at the Institute for Humane Studies.

Many other people helped in the study's design and marketing. These people included Steven B. Hantler, assistant general counsel at the DaimlerChrysler Corporation and chairman of AJP; Stephen E. Nowlan, managing partner of Agincourt; Kristyn Shayon, director of communications services, AJP; Rowena Itchon, vice president of marketing at PRI; Susan Martin, marketing manager at PRI; and Denise Tsui, graphic design manager at PRI.

Special thanks go to Joshua S. Treviño, vice president of public policy at PRI, and to Sally C. Pipes, president and chief executive officer at PRI. Each helped at critical moments, from inception to completion, particularly in the areas of communication, networking, and fundraising, to make this report a reality and make it a better product. Their counsel and assistance were invaluable and greatly appreciated.

Although it would be convenient to blame potential sins of commission and omission on others, good parenting will not allow this abridgement of responsibility. The project is ours, and nothing of this kind is ever perfect. We invite comment and criticism so that we can continually improve it.

Our goal is enlightenment, which we think comes from dedication and hard work based on sound principles. We tried at every turn to prevent subjectivity and bias from entering the analysis and, instead, to let the objective data do the talking. No one is likely to agree, or disagree, with all we have done. But in the end, we trust the market and its accumulation of knowledge, and so we pause now to let others digest our work.

Lawrence J. McQuillan Hovannes Abramyan Anthony P. Archie Jeffrey A. Johnson Anna Erokhina

EXECUTIVE SUMMARY

What is tort law?

A tort, French for "wrong," is best defined as wrongful conduct by one individual that results in injury to another. A tort has been committed when someone has suffered injury caused by the failure of another person to exercise a required duty of care. The actor is to blame and the injured party is entitled to recover damages. The function of tort law is to provide the injured party with a remedy, not to punish the actor. Chapter 1 defines tort law. The study covers torts, including medical malpractice, products liability, and class actions. It does not cover other areas of civil law such as employment law, securities law, the Americans with Disabilities Act (ADA), family law, or contract law.

Tort law is enforced through civil litigation. Chapter 2 explains how the civil-litigation process works from beginning to end and depicts the lawsuit industry as a probability game of gambles and payoffs.

What is the goal of the study? What do we hope to accomplish?

The goal of *Jackpot Justice* is to arrive at a fuller accounting of the true cost of the U.S. tort liability system. The study provides a conservative first approximation of the total costs, both direct and indirect, and the total excess cost of the U.S. tort system.

Our study starts where others, notably Tillinghast-Towers Perrin, end. We used Tillinghast's information as our starting point, then extended its analysis to look at the effect that tort litigation has on areas such as health care expenditures, innovation, and stockholder wealth, to name a few.

We look at the negative spillover effects — the ripple effects — that tort litigation imposes on the economy to arrive at a fuller cost calculation of the U.S. tort liability system. To our knowledge, no one has collected these cost data within one cover before.

Why should people care about tort liability or this study?

A thriving free-enterprise economy depends on an efficient tort system that provides proper incentives to businesses to produce safe products in a safe environment and ensures that truly injured people are fully compensated for their injuries. An efficient tort system produces greater trust among market participants through the fair and systematic resolution of disputes, thereby encouraging more production and exchange, creating a higher standard of living for individuals within a society.

A poor tort system, however, acts as a burdensome tax that weighs down the standard of living for ordinary citizens. Everyone pays for an excessively costly tort system through lower wages and less productivity, lost jobs in certain sectors of the economy (see the asbestos section in Chapter 5), fewer innovations and new products, higher prices, and a lower standard of living for everyone. These costs are not obvious or transparent.

Excessive tort costs act as a drag on the U.S. economy and make it harder for American businesses to compete in global markets. We all pay the price for excessive tort litigation. *Jackpot Justice* rings up the true cost of the U.S. tort liability system.

How did we calculate the cost of the U.S. tort liability system?

At its core, the tort system is a massive transfer system, taking resources from those judged to have caused harm and transferring the resources to those judged to have been harmed. The rentseeking theory of transfers from economic science can be used to measure the cost of the tort transfer system.

Rent-seeking theory is often applied to taxation, tariffs, monopolies, and government spending. In this study, we apply it to torts. We also include dynamic elements in our analysis to develop a fuller accounting of the true cost of the tort system. Chapter 3 explains fully the conceptual framework.

Our cost calculation relies on the best available scholarly studies by top economists and legal scholars. Whenever possible, the studies reflect the "consensus view" among those who have studied these factors. When selecting which study to rely on, our first choice was to base our calculations on statistically significant results in the most prestigious academic publications. We gave preference to more recent studies over older studies whenever possible, since recent studies tend to use more up-to-date data and more advanced statistical techniques.

What is the general outcome of the study?

The table below itemizes the annual costs of the U.S. tort liability system. Chapter 3 explains fully each cost component.

Cost Category		A	Amount (billions of 2006 dollars)			
Deadweight Costs			36			
Rent-Seeking and						
Rent-Avoidance Costs:			164			
	Administrative Costs	59				
	Claimants' Attorney Fees	53				
	First-Party Defense Costs	39				
	Miscellaneous	13				
Total Rent-Seeking						
and Rent-Avoidance Costs		164				
Static Social Cost			200	200	200	
Tort Transfer Costs			<u>128</u>		128	
Static Accounting Cost			328			
Dynamic Costs:						
	Accidental Deaths	7.51				
	Health Care Expenditures	124.00				
	Reduced Access to Health Care	38.78				
	Lost Sales of New Products					
	from Less Innovation	<u>367.08</u>				
Total Dynamic Costs		537.37		<u>537.37</u>	537.37	
Total Annual Social Cost				737.37		
Total Annual Accounting Cost					865.37	

Source: Pacific Research Institute

The dynamic costs are \$537.37 billion. Adding this amount to the static social cost of \$200 billion yields a total annual social cost of \$737.37 billion. Adding in the compensatory tort transfers, as done by Tillinghast, results in a total accounting cost of \$865.37 billion. Comparing "apples to apples," the true annual cost of America's tort system is more than three times the estimate by Tillinghast of \$279 billion. Tillinghast underestimates the true cost of America's tort system because it does not include deadweight costs, all transition costs, or negative-spillover costs; but to be fair, this wasn't Tillinghast's objective.

To put the annual social cost of the U.S. tort system into perspective, it is equivalent to an eight-percent tax on consumption, a 13-percent tax on wages, the combined annual output of all six New England states (Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, and Vermont), or the total annual sales of the U.S. restaurant industry. The annual price tag, or "tort tax," for a family of four in terms of costs and forgone benefits is \$9,827.

The above totals for social costs and accounting costs represent only one year. But these costs will occur every year in perpetuity in the absence of further tort reform. If we assume that the yearly social and accounting costs will remain constant, the long-term social cost is \$14.2 trillion and long-term accounting cost is \$16.6 trillion.

Chapter 5 shows that the total annual wealth loss to U.S. stockholders from tort lawsuits is \$684 billion. To put this into perspective using output terms, stockholder loss is equivalent to losing all U.S. supermarket sales for an entire year or the output of Florida each year. Or the equivalent of losing the combined output of 15 smaller states: Alaska, Delaware, Hawaii, Idaho, Maine, Montana, Nebraska, New Hampshire, New Mexico, North Dakota, Rhode Island, South Dakota, Vermont, West Virginia, and Wyoming. If tort filings against publicly traded companies continue at the present rate and the equity loss per filing remains constant into perpetuity, the long-term wealth loss to U.S. stockholders will be \$13.2 trillion. This number is likely an underestimate since both filings and losses per filing are trending upwards.

How did we measure "excess" tort costs? How much of the total U.S. tort costs are excessive?

Not all tort costs are "excessive" or "wasteful." Some tort costs are necessary as part of a thriving free-enterprise economy operating under the rule of law. To determine the percentage of U.S. tort costs that are excessive, we compared the percentage of gross domestic product (GDP) that is consumed by the tort system in the United States to the percentage of GDP consumed by tort systems in other industrialized countries.

The United States spends 2.2 percent of GDP on direct tort costs. Other advanced countries spend an average of 0.9 percent of GDP on direct tort costs. The difference of 1.3 percentage points is the best estimate of the excessive costs of the U.S. tort system; it measures how much more expensive the U.S. tort system is relative to the tort systems in comparable countries. This comparative international approach yields the result that 59 percent of U.S. direct tort costs are excessive (1.3 percent of the 2.2 percent is excessive).

If we apply this percentage to the appropriate tort costs and add the figures (chapter 4 explains fully the process), the results show that America wastes \$589 billion each year from excessive tort litigation. This is roughly equivalent to losing the entire annual output of the state of Illinois. It is equivalent to a seven-percent tax on consumption or a 10-percent tax on wages. The annual price tag, or "excess tort tax," for a family of four in terms of costs and forgone benefits is \$7,848. The capitalized value of the waste, assuming it continues at its current level into perpetuity, is \$11.32 trillion. America cannot waste this huge amount of resources and expect to remain competitive with other countries.

How can excess tort costs be reduced? How would the United States benefit from tort reforms?

Tort reforms can reduce and eliminate excess U.S. tort costs. The U.S. Tort Liability Index: 2006 Report, coauthored by Dr. Lawrence J. McQuillan and Hovannes Abramyan of the Pacific Research

Institute, lists more than two dozen tort reforms that states have adopted, or have at their disposal, to reduce direct tort costs. The *U.S. Tort Liability Index* also summarizes scholarly studies that have quantified the secondary or spillover benefits of tort reform such as increased productivity, better state economic performance, greater innovation, higher national output and personal income, and saved lives. Given these profound and sweeping benefits, ordinary citizens and state lawmakers would be wise to promote and enact legal reforms that curb excessive tort costs.

If tort reforms that eliminate waste are enacted in the United States, the U.S. economy will approach its full productive potential. Today, resources are spent on the unnecessary and unproductive redistribution of wealth through excessive litigation, making society poorer in the process.

If reforms are enacted that eliminate waste, these freed resources would enable the creation of new productive companies, new productive jobs, new capital investments, and new innovative products. U.S. businesses would be better able to compete in global markets. The standard of living for ordinary Americans would rise more rapidly.

How could this study be improved in the future?

Our results reflect a preliminary accounting based on the best research and evidence available today. As more data and studies emerge, results will be refined in future editions. We encourage readers to tell us about new data and studies as they are released.

1 | CIVIL JUSTICE AND TORTS

[Lawsuits] often have their greatest effect on people who are neither parties to the litigation nor even aware that it Is going on.

Derek Bok President Emeritus of Harvard University and former law school dean

A thriving free-enterprise economy depends on an efficient tort system that provides proper incentives to businesses to produce safe products in a safe environment and ensures that truly injured people are fully compensated for their injuries. Tort law has the goal of efficiently deterring wrongdoers and fully compensating unjustly injured victims. When this goal is achieved, meritless litigation and excessive awards are eliminated.

An efficient tort system produces greater trust among market participants through the fair and systematic resolution of disputes, thereby encouraging more production and exchange, creating a higher standard of living for individuals within a society.

A poor tort system, on the other hand, acts as a burdensome tax that weighs down the standard of living for ordinary citizens. In fact, the President's Council of Economic Advisers has applied the conceptual framework of taxation to examine the tort system.¹ We likewise apply this framework in our study.

At its core, the tort system is a massive transfer system that takes resources from those judged to have caused harm and transfers the resources to those judged to have been harmed. We apply the rent-seeking theory of transfers from economic science to measure the cost of this tort transfer system. Rent-seeking theory is often applied to taxation, tariffs, monopolies, and government spending. In this study, we apply it to torts. We also include dynamic elements in our analysis to develop a fuller accounting of the true cost of the tort system.

What the Study Measures and Does Not Measure

The goal of *Jackpot Justice* is to arrive at a fuller accounting of the true cost of the U.S. tort liability system. The study provides a conservative first approximation of the total costs, both direct and indirect, and the total excess costs of the U.S. tort system.

Our study starts where others end; specifically, Tillinghast-Towers Perrin tracks annual direct U.S. tort costs for judgments, settlements, attorney fees, and administrative expenses.²

The goal of *Jackpot Justice* is to arrive at a fuller accounting of the true cost of the U.S. tort liability system.

We used this information as our starting point, then extended its analysis to look at the effect that tort litigation has on areas such as health care expenditures, innovation, and stockholder wealth, to name a few. We look at the negative spillover effects — the ripple effects — that tort litigation imposes on the economy to arrive at a fuller cost calculation of the U.S. tort liability system. To our knowledge, nobody has collected these cost data within one cover before. To be fair, Tillinghast acknowledges that it does not track these costs nor is it the objective of its study to do so.

Our cost calculation relies on the best available scholarly studies by top economists and legal scholars. Whenever possible, the studies reflect the "consensus view" among those who have studied these factors. When selecting which study to rely on, our first choice was to base our calculations on statistically significant results in the most prestigious academic publications. We gave preference to more recent studies over older studies whenever possible, since recent studies tend to use more up-to-date data and more advanced statistical techniques.

All dollar amounts are expressed in constant 2006 dollars unless otherwise noted; therefore, we often had to update a study's calculations or conclusions in order to express the cost in 2006 dollars. All of our calculations are explained either in the text or in the endnotes. Because all costs are in 2006 dollars, unless otherwise noted, they might not equal the costs reported in the original studies we used.

Our results reflect a preliminary accounting based on the best research and evidence available today. As more data and studies emerge, results will be refined in future editions. Our report quantifies the costs of America's tort system; we do not explore the benefits, of which there are many.

We begin by defining the scope of the study, specifically the boundaries of civil law and tort law.

Criminal Law versus Civil Law

Criminal law relates to a wrong committed against society as a whole. Local, state, and federal governments proscribe criminal acts by ordinances, statutes, and administrative-agency regulations. Governments prosecute and punish the criminal.

Civil law spells out duties that exist between individuals. Contract law, for example, covers mutual promises and their enforcement and is part of civil law. Tort law, which covers the infringement by one person of the legally recognized rights of another, is also part of civil law.

What Is Tort Law?

A tort, French for "wrong," is best defined as wrongful conduct by one individual that results in injury to another. A tort has been committed when someone has suffered injury caused by the failure of another person to exercise a required duty of care. The actor is to blame and the injured party is entitled to recover damages. The function of tort law is to provide the injured party with a remedy, not to punish the actor.

Part of doing business today, and indeed part of everyday life, is the risk of being sued. Liability insurance to protect against lawsuit costs is an ever-increasing operating expense for businesses. An employee, allegedly injured on the job, sues his or her employer for having an unsafe working environment. A consumer, allegedly injured while using a product, sues the product manufacturer for making a defective product. A patient who allegedly received negligent treatment sues the physician. The issue at the core of all of these cases is the alleged wrongful conduct by one person that injures another. The law of torts covers such wrongful conduct.

American tort law originated in early English common law, also known as case law or judge-made law. The history and circumstances of the U.S. states differ, producing differences in the common law in each state. Even today, when most areas of the law have been codified in statutes such as the Uniform Commercial Code, tort law is found primarily in court opinions. Torts are constantly changing and evolving with society through the common law. There are three major categories of torts.

Intentional torts include assault, battery, false imprisonment, infliction of mental distress, defamation, misrepresentation, invasion of right to privacy, trespass against land and personal property, conversion, nuisance, and infringement on trademarks, patents, and copyrights.

Negligence torts are best thought of as a way of committing a tort — through negligence — rather than a distinct category of torts. In such cases, a person's conduct created a foreseeable risk of consequences that resulted in the injury of another person. Medical-malpractice lawsuits often allege a negligent act on the part of a physician or a hospital.

The third category of torts is strict liability or liability without fault. Workers' compensation and areas of products liability apply the principle of strict liability.

This study covers torts, including medical malpractice, products liability, and class actions. It does not cover other areas of civil law such as employment law, securities law, the Americans with Disabilities Act (ADA), family law, or contract law.

The Goal of Tort Law

The common-law goal of tort law is to efficiently deter wrongdoers and fully compensate unjustly injured victims. The injury loss is calculated in court, and compensation is awarded through

A Litigation Nightmare

In 1971, hard-working Mitchell Bankston accomplished his dream of building and operating a pharmacy in Fayette, Mississippi. At the time, his store, Bankston Drugstore, was the only pharmacy in Jefferson County. For years, Mitchell and his wife, Hilda, provided their patients with honest service, treating each with caution and care.

Then, in 1999, Bankston Drugstore was named as a defendant in a national class-action lawsuit against the manufacturer of Fen-Phen, a Food and Drug Administration – approved drug for weight loss. At that point, the small pharmacy went from serving its community's needs to becoming prey to money-driven litigants and the attorneys representing them. Though the drugmaker was based in New Jersey, the plaintiffs' attorneys named the Bankstons in the lawsuits so the case could be kept in Jefferson County — a known plaintiff-friendly jurisdiction that, between 1995 and 2000, had twice the number of plaintiffs as actual residents. The Bankstons' offense? Filling a legal prescription for the drug.

Three weeks after being informed of the lawsuit, the previously healthy Mitchell Bankston died of what his wife described as a massive heart attack. Mrs. Bankston was left to untangle the twisted knot of paperwork, records, and testimonies — only to be forced to sell the pharmacy a year later. The only drugstore in the community, and the business that the Bankston family had put its life's work into, was sold.

In the end, the Bankstons were sued more than one hundred times for actions most would consider no fault of their own. The lawsuits undoubtedly made a pretty penny for the attorneys involved, but it also tore apart a family and hurt a community.

The common-law goal of tort law is to efficiently deter wrongdoers and fully compensate unjustly injured victims.

economic and noneconomic compensatory damages equal to the actual loss incurred by the individual.

Increasingly, however, civil law has moved beyond this goal to award punitive damages that are meant to punish rather than compensate. Civil courts also give awards to individuals who have not suffered actual injuries and are thus not deserving of compensation.³ Also, awards — whether for legitimate injuries or not — vary unpredictably from jurisdiction to jurisdiction. The same set of circumstances often yields different verdicts and vastly dissimilar awards depending on the venue. These courtroom outcomes ultimately ripple outward to shape settlements.

These changes to tort systems have produced outcomes that many states and the federal government determined to be intolerable: meritless litigation, excessive awards and settlements, and unpredictable verdicts. In an effort to restore balance and predictability to their tort systems, many states and the federal government have enacted reforms targeted at fixing the problems they believe have created the excesses.⁴

Tort law is enforced through civil litigation. Chapter 2 explains how the civil-litigation process works from beginning to end and depicts the lawsuit industry as a probability game of gambles and payoffs. The lawsuit industry generates costs, which are measured in Chapters 3, 4, and 5.

2 | THE CIVIL-LITIGATION PROCESS

Litigation is the basic legal right that guarantees every corporation its decade in court.

David Porter (1813–1891) American naval officer

The American system of civil justice is adversarial, pitting plaintiffs against defendants in a legal process that is often very costly in terms of time and money. Chapter 2 explains how the civil-litigation process works from beginning to end and depicts the lawsuit industry as a probability game of gambles and payoffs. The lawsuit industry generates the costs that we measure in later chapters.

Civil-Case Procedure Before Trial⁵

A lawsuit begins when a plaintiff files a complaint with the proper court. The complaint identifies all parties involved in the case and describes, in short and plain sentences, the nature of the grievance and the remedy sought. A copy of the complaint is served to each of the defendants along with a summons. The summons states that the defendant must respond to the complaint in a given number of days.

The defendant responds to the complaint by filing an answer in the same court within the required time period. The defendant must either admit or deny the allegations in the complaint, or state that he has insufficient knowledge to admit or deny them. If no answer or other responsive pleading is filed within the time allowed by law, the court may enter a default judgment in favor of the plaintiff.

The next stage in a civil case is discovery, allowing all parties to inform themselves fully of the relevant facts in the lawsuit. Typical discovery includes obtaining information from party and non-party witnesses through written questions (interrogatories) or through oral questions under oath (depositions), and reviewing documents obtained by subpoena or by a request for production of documents.

Interrogatories are used to get information about the theories of the opponent's claims and/ or defenses, and to discover potential witnesses and documents. The opposing party, under oath, must answer them within a set number of days.

Approximately 95 percent of civil cases do not go to trial.

Depositions are oral interrogatories — questions asked in person of individuals who might know something about the subject matter of the lawsuit. Depositions are generally taken under oath before a certified court reporter. The deposition is the sworn testimony of the deponent and may be used in court.

After a plaintiff files a complaint, the defendant may, instead of filing an answer, file pretrial motions, which are responses to the complaint but do not constitute an answer. Many of these responsive motions must either be filed before the answer or be included within the answer, or they are waived.

The plaintiff and the defendant may reach a settlement without going to trial, or reach a settlement at any time before the verdict. Approximately 95 percent of civil cases do not go to trial. If all issues in a lawsuit have not been resolved either by settlement or by motion, and have not been dropped, the remaining issues must be decided by trial.

Civil-Case Trial Procedure

Depending on the type of action, a case may be tried before a judge (bench trial) or before a jury with a judge presiding. Whether a judge or a jury tries the case, the procedure is essentially the same.

At the trial's beginning, the clerk calls a panel of prospective jurors. The judge, or in some cases the lawyers, asks the potential jurors questions about their background and general beliefs to determine any biases or prejudices. This process is called *voir dire*. If any attorney or judge feels that a juror is not qualified for the case, the juror is excused "for cause." There is no limit to a party's challenges for cause. Both sides are also entitled to a limited number of "peremptory challenges," which means they may excuse some prospective jurors without stating any reasons (unless the motive appears racial).

When the jury has been impaneled, attorneys for each side make opening statements to inform the court and jurors of the nature of the case, the evidence they will present, and the facts they expect to prove. The defense may choose to wait to make an opening statement until after the plaintiff has rested his or her case, or it may choose not to make an opening statement at all.

Each side makes its case based on testimony from witnesses and physical evidence. The plaintiff calls his witnesses for direct examination to state what they know about the alleged injury. The defense may ask questions of the same witnesses (cross-examination). Then the plaintiff may re-examine those witnesses (redirect). Physical evidence such as documents, pictures, and other exhibits is introduced at this time.

The civil-litigation process...can also be viewed as a probability game.

After the plaintiff has rested his case, the defense may call witnesses to give testimony to disprove the plaintiff's case and to establish the defendant's case. The plaintiff may cross-examine the witnesses. The defense may then re-examine those witnesses.

When the defense has presented all its witnesses, the plaintiff may again call witnesses to rebut any new information introduced by defense witnesses. The judge may allow surrebuttal (a rebuttal to the rebuttal) by the defense.

Before closing arguments, the judge instructs jurors carefully as to what law they are to follow. In civil cases, the jury must determine that a preponderance of the evidence favors one party — unlike criminal cases where the defendant must be found guilty beyond a reasonable doubt to be convicted.

After jury instructions are given, both attorneys summarize the evidence and testimony in an effort to persuade the judge or jury to decide the case in favor of their client. The plaintiff makes his closing argument first, then the defense, and then the plaintiff responds to the defense's closing argument. Either side may waive closing arguments. After closing arguments, the court orders the jury to retire to the jury room for deliberations.

A verdict is reached if a certain percentage of the jurors agree to a verdict. In criminal trials, the verdict must be unanimous, but in civil trials, the verdict can be less than unanimous, depending on the rules in each jurisdiction. The number of jurors needed to reach a verdict and the jury size vary depending on the state. If the jury cannot reach a verdict, the judge may declare a "hung" jury and declare a mistrial. In civil cases, two types of verdicts are rendered: general and special. In general verdicts, the jury decides the case in favor of either the defendant or the plaintiff. In special verdicts, a general decision is not announced. Rather, the jury answers certain factual questions, leaving the "total" decision up to the judge.

After the verdict, or after the court has decided the facts in a bench trial, a judgment is rendered. If it is in favor of the plaintiff, the court will award money damages or injunctive relief. Appellate and supreme courts may review trial-court judgments. The civil-litigation process described above can also be viewed as a probability game.

The Lawsuit Industry as a Probability Game

Figure 1 depicts the lawsuit industry as a probability game. A company is shown at the top of the diagram. The company can either self-insure or purchase insurance to protect itself against the risk

of various liabilities and lawsuits. For example, it could have workers' compensation insurance, products liability insurance, general liability insurance for such things as "slip and fall," and automobile insurance.

Next in Figure 1 is the pool of potential plaintiffs. This pool includes customers, employees, suppliers, and neighbors. **P1** is the probability that one of these individuals will file a lawsuit. If a lawsuit is filed, there are three possible outcomes. Either the lawsuit is dismissed or dropped, a settlement is negotiated before the case goes to trial, or the case goes to trial. There is a probability, **P2** through **P4**, respectively, associated with each possibility.



If the case is settled before trial, a remedy is negotiated between the plaintiff and the defendant (company) that might include the defendant paying the plaintiff economic and noneconomic damages. If the case proceeds to trial, one of three outcomes is possible.

Either the case is settled before a verdict is reached (**P5**), the defendant wins in a jury or judge trial or the case is dropped (**P6**), or the defendant loses in a trial (**P7**) and the plaintiff is awarded economic, noneconomic, and, possibly, punitive damages.

If the company loses, there is a probability (**P8**) that it will appeal the verdict. If appellate courts review the case, there is a possibility (**P9**) that the verdict or award will be overturned or modified, ultimately affecting the final award after all judicial reviews and corrections. This is the lawsuit industry in a nutshell depicted as a probability game of gambles and payoffs.

Each of the probabilities, **P1** through **P9**, is affected by the legal rights, legal procedures, monetary gains, and legal costs that determine the costs and benefits (incentives) of moving from one stage in the lawsuit to the next. The lawsuit industry generates direct and indirect tort costs, which are measured in Chapter 3.

Decades of Litigation Based on Bad Science

In 1943, Dow Corning was formally established as a joint ownership of Dow Chemical Company and Corning, Inc., with the purpose of exploring the capabilities of silicone. The company developed revolutionary technologies, including silicone grease that allowed for high-altitude aviation and silicone rubbers that advanced electrical operations. But another product of Dow Corning, silicone breast implants, brought the company to its knees after decades of litigation based on poor science.

The first lawsuit against Dow Corning for its silicone implants garnered a \$170,000 settlement in 1977 when a Cleveland woman claimed ruptured implants and corrective operations caused her pain and suffering. Through the 1980s and 1990s, tens of thousands of lawsuits were filed against the company, claiming that the breast implants it manufactured led to the development of autoimmune diseases, neurological issues, and sometimes even breast cancer. Though a number of courts found in favor of the plaintiffs, ordering Dow Corning to pay millions in compensation and punitive damages, study after study found no link between the silicone breast implants and the alleged health complications.

In June 1994, a Mayo Clinic study, published in the *New England Journal of Medicine,* found that silicone implants caused no increased risk of connective-tissue disease or a number of other issues alleged by plaintiffs. The following year, the American College of Rheumatology issued a statement saying that available evidence suggested the absence of a link between silicone implants and autoimmune disease. In June 1995, the Harvard Nurses Epidemiology Study was published in the *New England Journal of Medicine* with a finding of no increased risk of connective-tissue disease or other alleged issues in women with silicone breast implants. By year's end, more than 20 studies had been released, all showing no connection between the implants and autoimmune disease.

Despite the fact that study showed no link between Dow Corning's silicone breast implants and the alleged health problems, on the basis of this evidence, did not prevent the company from going bankrupt in May 1995 as a result of litigation. The company lost billions of dollars on the basis of bad science, and still faced thousands of pending lawsuits at the time of its bankruptcy.

3 | U.S. TORT COSTS

Transfers themselves cost society nothing, but for the people engaging in them, they are just like any other activity, and this means that large resources may be invested in attempting to make or prevent transfers.

Gordon Tullock Professor of Law and Economics George Mason University

At its core, the tort system is a massive transfer system, taking resources from those judged to have caused harm and transferring the resources to those judged to have been harmed. There are two conceptual approaches to measuring the total costs associated with this system.

One approach would be to measure each cost directly, item by item, and total the costs. Unfortunately, this approach is not possible because there are not sufficient resources to measure each item separately. For example, court administrative expenses for tort cases are paid through federal, state, and county budgets. The computational costs to collect this cost information from all jurisdictions and allocate the budgeted dollars between tort caseloads and criminal caseloads would be prohibitive. Fortunately, there is another approach used by economists to measure the costs associated with transfers when these costs are unobservable.

The rent-seeking theory of transfers from economic science can be used to measure the cost of the tort transfer system. Rent-seeking theory is applied to taxation, tariffs, monopolies, and government spending. In this study, we apply it to torts. We also include dynamic elements in our analysis to develop a fuller accounting of the true cost of the tort system. The President's Council of Economic Advisers has applied the conceptual framework of taxation to examine the tort system.⁶ We apply this framework in our study.

The rent-seeking theory of taxation translates well to tort litigation. The tort system is intended to be a vast transfer system. The transfers are supposed to fully compensate truly injured individuals for their losses. Taxes are also a transfer mechanism; thus, economic models of taxation translate well to torts.

Most torts also arise during the course of the trading process, whether the stage is production, distribution, consumption, or investment. The more economic activity or output, the more torts. Conceptually, for each unit of output, a certain amount of money must be set aside, or reserved, to pay for tort costs; this is the per-unit "tort tax." The "tort tax revenue" is then transferred to plaintiffs, ideally full compensation for true injuries. As is the case with taxes, ultimately a tort judgment or settlement can be enforced using the coercive police powers of the state. The rent-seeking theory of excise taxation, therefore, translates well to tort litigation.

Every product we sold – for example, lawn mowers, ladders, hammers – there's a dollar amount built into those products from the manufacturers [to pay for liability and legal costs].

Bernie Marcus Co-founder of The Home Depot

The Social Cost of Taxation: The Static Conceptual Framework

Figure 2 illustrates the standard supply-and-demand analysis of imposing a tax on each unit of a product sold in the marketplace. Economists call this analysis "static" because we assume the supply and the demand curves are stationary or static in their current positions. Before the tax, the market-clearing equilibrium price is P_1 , with Q_1 being produced by suppliers and bought by consumers.

Taxes act as a wedge between the price paid by consumers and the price received by suppliers, and taxes change production and consumption decisions. The imposition of a tax per unit equal to "t" will reduce quantity demanded from the original market equilibrium quantity Q_1 to the post-tax quantity Q_2 . After the tax, suppliers produce fewer products and consumers buy fewer products. The price that buyers pay increases from P_1 to P_3 , and the price that sellers receive falls from P_1 to P_2 . The difference between P_3 and P_2 is the amount of the per-unit tax t.

A per-unit tax of t raises tax revenue equal to the amount represented by rectangle T, which is the amount of money transferred to the government in tax revenue. The government then redistributes T throughout society using various government programs.

The "deadweight loss" of the tax is represented by the triangle D, which represents a loss to society in the form of reduced consumer and producer surplus due to fewer trades. The amount D is also known as "allocative inefficiency."

The first attempt to measure the deadweight-loss triangle was conducted by University of Chicago economics professor Arnold C. Harberger in 1954.⁷ It has since become known as the Harberger triangle. The static social cost of taxation, however, does not stop at area **D**.

In 1967, University of Virginia economics professor Gordon Tullock concluded that area **D** underestimates the true static social cost of taxation.⁸ If the government raises revenues of **T** and redistributes this money to others throughout society, individuals will spend money both to capture the transfer, being its beneficiary, and to avoid being the victim of the transfer. Economists call these expenditures rent-seeking costs and rent-avoidance costs. These costs are largely unobservable by an outsider. To use a tort example, if you see two people having lunch, you don't know if they are old friends catching up or a lobbyist and a politician hammering out a new law that will make it easier to file class-action lawsuits. Because of this lack of transparency and observability, economists use an indirect method of measuring these rent-seeking and rent-avoidance costs.



The standard assumption is that individuals will spend T collectively to capture a transfer equal to T. This is called "perfect rent dissipation." Resources dissipated in quest of the transfer are equal to the value of the transfer.⁹ In other words, if two people are competing for a transfer of \$100 (T), each person will spend \$50 trying to influence the decision-makers to transfer the \$100 to himself or herself. Therefore, \$100 is spent to capture \$100 of transfers. T is spent to capture T — complete rent dissipation.¹⁰

Studies have also shown that consumers and producers will spend money to prevent D from being taken away from them. They will spend D to lobby government not to impose the tax and to avoid being a victim of the tax. D is spent to preserve D.

All told, the static social cost of taxation equals (T+D)+D, the total amount spent in rent seeking and rent avoidance plus the deadweight loss — in total, an amount greater than the transfer itself. Again, as noted in Chapter 1, we do not examine the benefit side. An additional **T** is transferred to the government in tax revenues and redistributed throughout society in various programs. This redistribution of **T** is technically not a social cost.¹¹ This framework for measuring the static social cost of taxation can be applied to the U.S. tort system.

The U.S. tort system returns less than 50 cents of every tort-cost dollar to injured claimants, those it was designed to help.

The Annual Static Social Cost of the U.S. Tort System

We can calculate the annual static social cost of the U.S. tort system by applying the rentseeking theory of transfers to the available data. Again, all costs are in 2006 dollars, unless otherwise noted, and thus might not equal the costs reported in the original studies we used. For convenience, Table 4 provides a breakdown of the tort costs tallied here, which might provide further clarity.

According to Tillinghast-Towers Perrin, which compiles the most frequently cited study on tort costs, direct U.S. tort costs were \$260 billion in 2004 (\$279 billion in 2006 dollars).¹² Tillinghast's measure of direct U.S. tort costs includes three components.

The first component is insurance costs consisting of: (1) benefits paid to third parties or their attorneys alleging injury or damages caused by insured persons or companies, excluding medical malpractice; (2) benefits paid to first-party insureds in the form of claims-handling and legal-defense costs; and (3) insurance company administrative costs.

The second component is self-insured costs, excluding medical malpractice. Some individuals and companies choose to self-insure rather than purchase insurance from an insurance company. When tort costs are paid by self-insurance, these individuals and companies engage in some form of internal forecasting and reserving to pay their tort expenses.

Finally, the third component of Tillinghast's direct U.S. tort costs is medical-malpractice costs, both insured and self-insured.

Tort Transfer Costs

Table 1 shows the cost breakdown. Only 22 cents of every tort-cost dollar go to injured parties to compensate them for actual economic losses. Twenty-four cents go to noneconomic payments, including punitive damages. The U.S. tort system returns less than 50 cents of every tort-cost dollar to injured claimants, those it was designed to help. If every time you pumped gas, half of it spilled to the ground, you would demand a better system for pumping gas. Nevertheless, this is how inefficiently the tort system works in America today.

Fourteen cents of every tort-cost dollar pay for the defense costs of first-party insureds. Nineteen cents pay for plaintiffs' or claimants' attorney fees. And 21 cents go to administrative costs.



Using this breakdown, the total amount of tort transfers (area T in Figure 2) is 46 percent of \$279 billion, or \$128 billion.

Deadweight Costs

To determine the deadweight cost (area **D** in Figure 2), we relied on recent estimates by Professor Dale Jorgenson of Harvard University.¹³ The President's Council of Economic Advisers also relied on the Jorgenson study.¹⁴ Dr. Jorgenson found that when the government increases the corporate income tax rate proportionally, the burden to the economy in excess of the tax revenue is 27.9 cents per dollar of extra tax revenue. The deadweight cost **D**, therefore, is 27.9 percent of the transfer **T**. Applying this formula to the data, the deadweight cost of the tort-transfer system is 27.9 percent of \$128 billion, or \$36 billion.

Rent-Seeking and Rent-Avoidance Costs

We know from the analysis that rent-seeking and rent-avoidance costs equal **T+D**, or \$164 billion. Using the Tillinghast tort-cost breakdown, we can calculate that of this \$164 billion, \$59 billion is for administrative costs, \$53 billion is for claimants' attorney fees, and \$39 billion is for first-party

defense costs, and these are all pure transaction costs of moving resources, or attempting to move resources, from defendants to plaintiffs.

The remaining \$13 billion pays for the tort-specific costs associated with judges, juries, and court systems; lobbyists to help change tort laws; campaigns to elect specific politicians and judges deemed favorable; and reorganizing operations to avoid tort lawsuits such as changing production processes, product designs, or product labeling.¹⁵

The Static Social Cost and Static Accounting Cost

The annual static social cost of the U.S. tort system is the deadweight cost plus the rent-seeking and rentavoidance costs (D+(T+D)), or \$200 billion. If we include the compensatory tort transfers themselves as a "cost," as Tillinghast does, we arrive at an annual static accounting cost of \$328 billion per year, which is significantly greater than Tillinghast's figure of \$279 billion. Focusing only on the static analysis and comparing "apples to apples," Tillinghast underestimates the cost of America's tort system. The underestimate is greater after factoring in dynamic negative spillover effects, which we examine next.

Adding Dynamic Elements to the Static Framework

The conceptual framework developed in Figure 2 is a "static" analysis, meaning the demand and supply curves are assumed to be stationary or static. But some effects of litigation and tort liability actually shift the position of the demand and supply curves from where they would have been in the absence of tort-liability effects. These shifts introduce dynamic elements into the analysis. We examined some of the larger effects for which solid scholarly research exists.

Both the supply curve and the demand curve are susceptible to changes. Changes in labor supply shift the supply curve. For example, reductions in the supply of labor shift the supply curve to the left, resulting in less output. Less research and development keeps new demand curves (new products) from emerging, resulting in less output and consumer satisfaction. Changes in preferences shift the demand curve. For example, an increased preference by physicians for tests and procedures shifts the demand curve to the right. Below we look at the effect of tort liability on factors that have shifted the curves.

Accidental Deaths

A 2006 study by Paul H. Rubin and Joanna M. Shepherd demonstrated that tort reforms passed in the states between 1981 and 2000 prevented approximately 22,000 net accidental deaths from occurring during that time frame.¹⁶ The researchers argued that an overly expensive liability

Tort reforms passed in the states between 1981 and 2000 prevented approximately 22,000 net accidental deaths from occurring.

system increases the cost of many risk-reducing products and services, making them less accessible, and in some cases unavailable, to consumers. Because many states reformed their tort systems to rein in liability costs, these reforms allowed consumers to reduce the risk of accidental death and were responsible for saving, on net, 22,000 lives between 1981 and 2000.

Using data from the Rubin and Shepherd study regarding the average number of lives saved annually in each state from each of several reforms, we were able to construct a "ghost workforce" — a population that would have been alive and working as of 2004, but was not, due to inefficiencies in the tort system that discouraged or prevented risk-reducing behavior. Taking into consideration the size of this ghost workforce, we were also able to estimate the value of output lost because of the reduced number of employees in the workforce.

First, it was necessary to calculate the number of net accidental deaths that tort reforms could have prevented nationwide had they been enacted as of 2004. This was done by determining whether a state had a particular reform on the books as of 2004. The reforms that we considered were those that resulted in a statistically significant change in the number of lives saved in the Rubin and Shepherd study. These calculations concluded that, on net, 2,700 accidental deaths were not prevented in 2004 due to a failure to enact reforms. We then repeated the process for the year 2000, finding that 2,867 accidental deaths were not prevented due to an absence of certain tort reforms in that year. Notice that the 2004 number is lower than the 2000 number — this is to be expected since more lives were saved as more states adopted reforms.

The average annual rate of change in accidental deaths that were not prevented each year during the five-year span of 2000 to 2004 was approximately 1.51 percent.¹⁷ The rate is positive, showing that the number of accidental deaths not prevented increases each year going backwards. We used this rate to calculate accidental deaths that were not prevented annually back to 1981, the first year Rubin and Shepherd tracked data.¹⁸ This assumes that reforms were passed at a constant rate from 1981 to 2004. The annual "ghost workforce" figures were added together to produce a total ghost workforce of 77,419 individuals.

The ghost workforce that we calculate is more likely an underestimate than an overestimate. Our figure takes into account accidental deaths that occurred only within the 24-year period of 1981 to 2004. An individual who needlessly died in 1975 at the age of 20, for example, would still likely have been in the workforce in 2004. But we do not take these earlier years into consideration in our estimate. We believe that limiting our data period to exclude accidental deaths before 1981 eliminates the likelihood of overestimation from our other assumption — that all lives saved are employees in the workforce as of 2004.

Medical-liability concerns have prompted health care providers to order more tests, referrals, and procedures than they would have done otherwise.

The U.S. Bureau of Economic Analysis reports that the value of output per employee in 2004 was \$90,236.¹⁹ Applying this average to the 77,419 ghost workers yields forgone output equal to \$6.99 billion in 2004 dollars (\$7.51 billion in 2006 dollars) — an additional tort cost to society.

Health Care Expenditures

Medical-liability concerns have prompted health care providers to order more tests, referrals, and procedures than they would have done otherwise. The U.S. tort liability system has shifted physician demand curves for health care output to the right. This is the finding of Daniel Kessler and Mark McClellan in a study published in the *Quarterly Journal of Economics*.²⁰

Kessler and McClellan looked at how much hospital expenditures decreased for elderly patients hospitalized with serious heart disease following medical-malpractice tort reforms that cut liability risks. They found that hospital expenditures fell between five and nine percent in response to lower liability risks. In other words, liability concerns had prompted additional hospital costs of five to nine percent.

PriceWaterhouseCoopers generalized the Kessler and McClellan findings beyond hospital costs to all personal health care costs.²¹ When this was done, medical-liability concerns increased personal health care expenditures by \$115 billion in 2004 (\$124 billion in 2006 dollars).

We are not prepared to say the entire \$124 billion is "waste." A portion of these additional expenditures may have yielded valuable diagnostic information or treatment protocols that proved beneficial. Even two of the most popular definitions of "defensive medicine" — a phrase often used to describe the increased use of tests, referrals, and procedures — leave open the possibility that a portion of the additional spending might be beneficial. For example, the U.S. Office of Technology Assessment defined defensive medicine as occurring when "doctors order tests, procedures, or visits, or avoid high-risk patients or procedures, primarily (*but not necessarily solely*) to reduce their exposure to malpractice liability" (emphasis added).²² Likewise, Kessler and McClellan defined defensive medicine as administering "precautionary treatments with *minimal expected medical benefit* out of fear of legal liability" (emphasis added).²³ Notice that the expected medical benefit need not be zero for the treatments to be considered defensive.

Rising health care costs attributable to liabilitydriven medical expenditures have contributed to the increase in the number of uninsured Americans.

For our purposes, it is not necessary to know what, if any, factors other than liability entered into the decision to order the extra tests or, after the fact, how often something beneficial resulted from them. The scholarly studies show that \$124 billion in health care expenditures was initially and primarily driven by medical-liability concerns. This is in addition to the direct tort costs for medical malpractice of \$28.7 billion in 2004 reported by Tillinghast.²⁴

Reduced Access to Health Care

The link between rising health care costs and the decline in insurance coverage is well established.²⁵ As the cost of care increases, insurance premiums also increase. If the growth rate of insurance premiums exceeds the growth rate of income, fewer individuals will be able to afford insurance. For this reason, it is no surprise that the poor and the near-poor are at greatest risk of being, and becoming, uninsured.²⁶ Rising health care costs attributable to liability-driven medical expenditures have contributed to the increase in the number of uninsured Americans.

Compared to the insured, the uninsured tend to have higher mortality rates due to a lack of, or reduced rate of, certain types of care. According to a 2004 report by the Kaiser Commission on Medicaid and the Uninsured, the uninsured generally receive "less preventative care, are diagnosed at more advanced disease states, and once diagnosed, tend to receive less therapeutic care."²⁷ As a consequence, the uninsured are more likely to die prematurely due to untreated illnesses. They also are less productive members of the workforce due to "absenteeism" — fewer or shorter paid workdays — and "presenteeism" — reduced productivity at work attributable to poorer health.

Table 2 shows that in 2004, when health expenditures in the United States were 16 percent of GDP, there were 45.8 million uninsured Americans. If we subtract the additional costs to health care associated with liability concerns (\$115 billion in 2004 dollars), health expenditures would be a full percentage point less when compared to GDP. The difference in the total number of uninsured when health costs were 15 percent of GDP, as opposed to 16 percent of GDP, is 3.4 million. The increase in health expenditures due to liability concerns, therefore, has added 3.4 million Americans to the rolls of the uninsured.²⁸ This figure is supported by an estimate by the U.S. Department of Health and Human Services that savings from the elimination of defensive medicine would allow an additional 2.4 million to 4.3 million Americans to obtain health insurance.²⁹

	2000	2001	(middle)	2002	2003	2004
U.S. health expenditures as a percentage of GDP	13.8	14.6	15	15.4	15.9	16
Uninsured (in millions)	39.8	41.2	42.4	43.6	45	45.8

Table 2. U.S. Health Expenditures and the Uninsured, 2000-2004

Sources: Centers for Medicare and Medicaid Services, U.S. Department of Health and Human Services, http://www.cms.hhs.gov/NationalHealthExpendData/01_Overview.asp; and U.S. Bureau of the Census, http://www.census.gov/population/pop-profile/dynamic/HealthInsurance.pdf

As with accidental deaths discussed earlier, premature deaths due to lack of health coverage eliminate individuals from the workforce and result in less overall economic output. The Institute of Medicine estimates that 18,000 uninsured individuals between the ages of 25 and 64 die prematurely each year, based on data on the uninsured in 2000.³⁰ This translates to one premature death of a working-age individual for every 2,211 uninsured each year. Applying this ratio to the 3.4 million uninsured due to liability-driven expenditures in 2004 results in 1,538 premature deaths each year that can be attributed to liability concerns.

Creating a "ghost workforce," as we did earlier for accidental deaths, made up of these individuals who would have been alive and working in 2004, yields 36,912 ghost workers. Had these individuals been alive, they would have produced annual output equal to \$3.58 billion.³¹

The value of forgone output by working uninsured individuals due to "absenteeism" and "presenteeism" is almost 10 times greater than forgone output from premature deaths. Individuals without health insurance are much more likely to suffer from a number of acute and chronic diseases and conditions, and are more likely to leave these untreated.³² A 2005 report on the effects of chronic health conditions estimated that the cost of poor health was a 10.7-percent reduction in worker productivity.³³ Multiplying 10.7 percent of the average employee output (or \$9,655) by 3.4 million people — the number of Americans who are without health insurance due to additional health care expenditures from liability concerns — yields lost output totaling \$32.8 billion in 2004 (\$35.2 billion in 2006 dollars). Adding together the costs of premature deaths and lost productivity due to reduced access to health care from liability-driven rising health care expenditures yields total costs of \$38.78 billion.

Innovation

W. Kip Viscusi and Michael J. Moore examined the effects of product-liability costs on product and process research and development (R&D) and new-product introductions by manufacturing companies.³⁴ Liability costs have two competing effects.

Doctors on Defense

On November 28, 2005, *The Olympian* newspaper in Washington State featured an op-ed by an emergency-room doctor describing the department's bout with the widespread practice of defensive medicine.

According to the doctor, one afternoon the department received a patient who had fallen off a construction-site scaffolding and suffered a broken jaw. Despite clear initial findings that the young man had suffered only a broken jaw and a mildly tender upper back and shoulder, various medically unnecessary tests were performed. These included a CAT scan of the head, neck, and abdomen. The surgeons and specialists involved in making the decision to perform these excess tests admitted their reasoning: If they missed something, they were certain they would get sued. All test results, as expected, came back normal.

Before allowing the practice to go any further — allowing a spine specialist to perform an MRI of the neck to detect a potentially rare ligament injury — the ER doctor stepped in and assumed full liability for the patient. This act immediately halted all suggestions of excess tests, and the patient was discharged with only the care he needed.

The cost of the additional tests this patient received was estimated to be about \$20,000. According to the doctor, hospitals all over the country are being strangled in a similar fashion by a fear of litigation. First, products liability ideally should promote efficient levels of product safety by inducing companies to internalize the external costs imposed on people harmed using their products. This will spur producers to invest more in safety-related product improvements and introduce new products with safer technologies. This response increases R&D.

On the other hand, misdirected or excessive liability costs cause companies to spend resources on lawsuit settlements, damage awards, insurance, lawyers, and legal-defense costs that would have been spent on product and process improvements. It also causes companies to withdraw or withhold products from the market because of a lack of resources or a fear of lawsuits. These effects decrease R&D. Viscusi and Moore looked at these two competing responses using data on manufacturers.

Writing in the *Journal of Political Economy*, the researchers reported the results of their statistical analysis: "At very low liability-cost levels, firms have incentives to invest in product-safety research in order to reduce these costs, yet still introduce the product to the market."³⁵ When businesses operate in a low-liability-cost environment, they respond to increased liability burdens by investing in product-safety improvements and new technologies that will lessen their exposure to safety-related lawsuits. This response increases R&D.

In contrast, when businesses operate in a high-liability-risk environment, they respond to increased liability burdens by eliminating investments in product novelty because novel products have more uncertain safety characteristics. Think of it this way: In high-liability-risk environments, businesses are already doing all they can to produce inherently risk-free products to shield themselves from safety-related lawsuits — it would be irrational to act otherwise. If liability burdens increase, their only option at this point is to withdraw products from the market or not introduce new products and spend yet more resources on legal defense. These responses decrease R&D, so there is a tipping point at which greater liability burdens result in less, not more, innovation.

Viscusi and Moore's econometric results demonstrate that, on average, product R&D is maximized when bodily-injury premiums equal five percent of sales or when bodily-injury losses equal six percent of sales. Process R&D is maximized when bodily-injury premiums equal 35 percent of sales or when bodily-injury losses equal four percent of sales. Beyond these tipping-point percentages, R&D investments begin to fall.

Table 3, Column 1, lists the 13 industries that exceeded the tipping point in 1984. In other words, these are the industries where the liability burdens reduced innovation.³⁶ Our objective in this section is to calculate annual lost sales of new products due to decreased product R&D and decreased process R&D resulting from excessive liability.

First, because of the lack of current premium and loss data broken down by industry, we assumed that the industries beyond the tipping point in 1984 are the same industries beyond the tipping point today.³⁷ These industries are listed in the first column of Table 3. There are two factors that strongly support this assumption.

Table 3. Excess Tort Liability, Research and Development, and Lost Sales of New Products

1	2	3	4	5	6	7
Industry	Standard Industrial Classification (SIC) System Code, 1987	North American Industry Classification System (NAICS) Code, 2002	Sales (thousands of 2002 dollars)	Bodily-Injury Losses/Sales Ratio	Bodily-Injury Premiums/ Sales Ratio	Effect of Reduction in Excess Liability on Product R&D Intensity (percentage increase)
Composition Goods	5033	423330	15,454,832	0.14		356
Miscellaneous Chemical Products	289	325182, 325199, 325510, 325520, 325910, 325920, 325998	95,533,732	0.1		88.4
Rubber Products	306	3262	32,981,373	0.1		88.4
Pottery and Related Products	326	32711	3,329,011	0.1		88.4
Miscellaneous Fabricated Metal Products	349	3329	50,407,188	0.1		88.4
Metalworking Machinery	354	3335	25,442,220	0.1		88.4
Special Machinery	355	332410, 333111, 333210, 333220, 333291, 333292, 333293, 333294, 333295, 333298, 335999	55,492,723	0.1		88.4
Electrical Industrial Apparatus	3629	335312, 335314, 335991	20,733,836	0.1		88.4
Laboratory Apparatus	339	339111	4,604,554	0.1		88.4
Miscellaneous Manufacturing	39	316110, 326192, 326199, 332211, 332212, 332999, 334518, 335121, 335211, 336991, 337127, 339911, 339912, 339913, 339914, 339920, 339931, 339932, 339941, 339942, 339943, 339944, 339950, 339992, 339931, 339932, 339941, 339942, 339943, 339944, 339950, 339992, 339993, 339994, 339995, 339999	171,618,129		0.0601	6.52
Machine Bolt and Screw	3452	332722	7,789,758	0.1		88.4
Construction	15	23	1,196,555,587	0.1		88.4
Apparel and Other Textile Products	23	315	44,521,126		0.0702	26.81

Total

8	9	10	11	12
Total Sales Supported by New Total Product R&D (thousands of 2002 dollars)	Sales of New Products Resulting from Increased Product R&D (thousands of 2002 dollars)	Effect of Reduction in Excess Liability on Process R&D Intensity (percentage increase)	Total Sales Supported by New Total Process R&D (thousands of 2002 dollars)	Sales of New Products Resulting from Increased Process R&D (thousands of 2002 dollars)
55,019,201.00	3,334,164	136.4	36,535,223	2,214,035
179,985,551	10,907,124	49.2	142,536,328	8,637,702
62,136,907	3,765,497	49.2	49,208,209	2,982,018
6,271,857	380,075	49.2	4,966,884	300,993
94,967,142	5,755,009	49.2	75,207,525	4,557,576
47,933,142	2,904,748	49.2	37,959,792	2,300,363
104,548,290	6,335,626	49.2	82,795,143	5,017,386
39,062,547	2,367,190	49.2	30,934,883	1,874,654
8,674,980	525,704	49.2	6,869,995	416,322
182,807,631	11,078,142	N/A	N/A	N/A

14,675,904	889,360	49.2	11,622,319	704,313
2,254,310,726	136,611,230	49.2	1,785,260,936	108,186,813
56,457,239	3,421,309	N/A	N/A	N/A
	188,275,178			137,192,175

Sources: W. Kip Viscusi and Michael J. Moore (1993); Frederick T. Stocker (2003); U.S. Census Bureau; and Pacific Research Institute

U.S. Tort Costs | 25

First, Tillinghast's measures of direct tort costs clearly show that costs have risen since 1984, both absolute tort costs and tort costs as a percentage of GDP. Second, the 13 industries make some of the most highly litigated products such as asbestos, chemicals, fireworks, tires, safety valves, power tools, welding equipment, saws and slicers, electrical equipment, book matches, lighters, and homes. It is reasonable to assume that for these industries liability burdens/threats have not been significantly reduced since 1984.

The Standard Industrial Classification (SIC) System codes for these 13 industries, as of 1984, are listed in Column 2. After ratification of the North American Free Trade Agreement, the SIC codes were integrated into the North American Industry Classification System (NAICS) in 1997. The NAICS was updated in 2002. Column 3 lists today's NAICS codes that correspond to the earlier SIC codes. These new codes were used to find current sales data from the U.S. Census Bureau for each of the 13 industries. Column 4 lists the sales data in 2002 dollars. For example, the composition-goods industry had sales of \$15.455 billion.

Columns 5 and 6 list the ratio of bodily-injury losses to sales and the ratio of bodilyinjury premiums to sales, respectively, for the 13 industries. Viscusi and Moore stated that the composition goods industry had the highest bodily injury losses-to-sales ratio, 14 percent. This is listed in Column 5 of Table 3. We also know from their study that a ratio of six percent is optimal, meaning there is no reduction of product R&D when the ratio is six percent. Beyond this tipping point, product R&D falls. Viscusi and Moore did not give the exact ratio of bodily-injury losses to sales for any industry except composition goods. Therefore, we assigned a ratio of 10 percent, the midpoint, to the other industries, with two exceptions — miscellaneous manufacturing and apparel and other textile products.

Frederick T. Stocker (cited earlier in Endnote 36) lists the exact ratio of bodily-injury premiums to sales for miscellaneous manufacturing and apparel and other textile products. These two ratios are listed in Column 6. Both industries exceed the product R&D maximization level of bodily-injury premiums equaling five percent of sales. Columns 5 and 6 essentially show how much liability burdens exceed the optimal level; they show excessive liability as it relates to R&D.

Column 7 shows how much product R&D intensity would increase if liability burdens went from their current, excessive levels to the optimal level. For example, in composition goods, the ratio of bodily-injury losses to sales is 14 percent. If this ratio fell to the optimal level of six percent, product R&D intensity (product R&D expenditures relative to sales) would increase 356 percent. Column 7 shows the change for each industry, ranging from 356 percent to 6.52 percent.³⁸

Viscusi and Moore showed that, on average, a dollar of sales is supported by 1.5 cents of product R&D. This is the optimal product R&D intensity on average. Assuming efficient capital markets, sufficient technological gains, and perfect competition, increasing product R&D in each industry by the percentage listed in Column 7 would support an equal percentage increase in sales in order to maintain the optimal product R&D intensity of 1.5 cents per dollar of sales.

Overall, the suppression of product R&D and process R&D due to excessive liability results in lost sales of new products each year equal to \$367.08 billion.

Column 8 lists for each industry the total sales supported by the new total product R&D expenditures if liability burdens fell to the optimal level.

Viscusi and Moore also showed that, on average, 6.06 percent of total sales are due to new products from R&D. Applying this percentage to the total sales figures in Column 8 yields the new-product sales that would result from increased product R&D if excess liability were eliminated. Column 9 reports these figures, which total \$188.28 billion in 2002 dollars (\$212.35 billion in 2006 dollars). This number represents the lost sales of new products that would have emerged from product R&D had it not been for excessive liability.

We applied the same methodology to calculate the lost sales of new products that would have emerged from process R&D had it not been for excessive liability. Column 10 shows how much process R&D intensity would increase if liability burdens went from their current, excessive levels to the optimal level. For example, in composition goods, if the bodily injury losses-to-sales ratio fell from 14 percent to the optimal level of four percent, process R&D intensity (process R&D expenditures relative to sales) would increase 136.4 percent. Column 10 shows the change for each industry, ranging from 136.4 percent to 49.2 percent.

Notice that the two industries with data on bodily injury premiums relative to sales are listed as "not applicable" (N/A) because neither of these two ratios exceeded the optimal ratio of premiums to sales for process R&D, which was 35 percent.

Viscusi and Moore showed that, on average, a dollar of sales is supported by 0.43 cents of process R&D. This is the optimal process R&D intensity on average. Assuming efficient capital markets, sufficient technological gains, and perfect competition, increasing process R&D in each industry by the percentage listed in Column 10 would support an equal percentage increase in sales in order to maintain the optimal process R&D intensity of 0.43 cents per dollar of sales. Column 11 lists for each industry the total sales supported by the new total process R&D expenditures if liability burdens fell to the optimal level.

Again, Viscusi and Moore showed that, on average, 6.06 percent of total sales are due to new products from R&D. Applying this percentage to the total sales figures in Column 11 yields the new-product sales that would result from increased process R&D if excess liability were eliminated. Column 12 reports these figures, which total \$137.19 billion in 2002 dollars (\$154.73 billion in 2006 dollars). This represents the lost sales of new products that would have emerged from process R&D had it not been for excessive liability.

Overall, the suppression of product R&D and process R&D due to excessive liability results in lost sales of new products each year equal to \$367.08 billion. Viscusi and Moore stated

that their findings "identify a strong relationship between liability and innovation that has made the courts a major player in the product innovation process."³⁹ We assigned a value to it.

The Annual Social Cost and Accounting Cost of the U.S. Tort System

Table 4 itemizes the annual costs of the U.S. tort system. The dynamic costs are \$537.37 billion. Adding this amount to the static social cost of \$200 billion yields a total annual social cost of \$737.37 billion. Adding in the compensatory tort transfers, as Tillinghast does, results in a total annual accounting cost of \$865.37 billion. Comparing "apples to apples," the true annual cost of America's tort system is more than three times the estimate by Tillinghast of \$279 billion. Tillinghast underestimates the true cost of America's tort system because it does not include deadweight costs, all transaction costs, or the negative-spillover costs; but to be fair, this wasn't Tillinghast's objective.

To put the annual social cost of the U.S. tort system in perspective, it is equivalent to an eight-percent tax on consumption, a 13-percent tax on wages, the combined annual output of all six New England states (Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, and Vermont), or the total annual sales of the U.S. restaurant industry.⁴⁰ The annual price tag, or "tort tax," for a family of four in terms of costs and forgone benefits is \$9,827.

Cost Category			Amount (billion	s of 2006 dollar	rs)
Deadweight Costs			36		
Rent-Seeking and					
Rent-Avoidance Costs:			164		
	Administrative Costs	59			
	Claimants' Attorney Fees	53			
	First-Party Defense Costs	39			
	Miscellaneous	<u>13</u>			
Total Rent-Seeking					
and Rent-Avoidance Costs		164			
Static Social Cost			200	200	200
Tort Transfer Costs			<u>128</u>		128
Static Accounting Cost			328		
Dynamic Costs:					
	Accidental Deaths	7.51			
	Health Care Expenditures	124			
	Reduced Access to Health Care	38.78			
	Lost Sales of New Products				
	from Less Innovation	<u>367.08</u>			
Total Dynamic Costs		537.37		<u>537.37</u>	537.37
Total Annual Social Cost				737.37	
Total Annual Accounting Cost					865.37

Table 4. 2006 Tort Cost Breakdown

Source: Pacific Research Institute

The stock market does an excellent job of accounting for the long-term costs of tort litigation.

The Long-Term Social Cost and Accounting Cost of the U.S. Tort System

The above totals for social costs and accounting costs represent only one year. But these costs will occur every year in perpetuity in the absence of further tort reform. Next, we calculate the long-term cost of the U.S. tort liability system.

To determine the long-term cost, we applied the standard formula from business finance to calculate the present value of a perpetuity.⁴¹ A perpetuity is an annuity whose payments go on forever.

The present value of an unending stream of constant payments, called a no-growth perpetuity, is equal to C/r, where C is the constant payment amount and r is the discount rate. The U.S. Office of Management and Budget specifies a discount rate of 5.2 percent to be used for benefit-cost analyses of federal programs and regulation-impact analyses; therefore, we used 5.2 percent as our discount rate.⁴² If we assume that the yearly social and accounting costs will remain constant, we can apply the no-growth perpetuity formula to arrive at the long-term totals in Table 5: \$14.2 trillion for social costs and \$16.6 trillion for accounting costs. It will be evident in Chapter 5 that the stock market does an excellent job of accounting for the long-term costs of tort litigation.

Table 5. Long-Term Cost of the U.S. Tort Liability System

Cost Category	Trillions of 2006 Dollars
Total Social Costs in Perpetuity	14.2
Total Accounting Costs in Perpetuity	16.6

Source: Pacific Research Institute

Having calculated the annual and long-term costs of the U.S. tort liability system, in the next chapter we assess how much of these costs are excessive.

4 | EXCESS U.S. TORT COSTS

Use, do not abuse; neither abstinence nor excess ever renders man happy.

Voltaire (1694-1778) French philosopher and writer

The civil-justice system of a U.S. state or a country has important effects on people's lives. A poor civil-justice system acts as a burdensome tax that weighs down the standard of living for ordinary citizens. An efficient civil-justice system creates a favorable business climate in which to invest human, physical, and financial capital, the ingredients for self-sustaining economic growth and personal prosperity.⁴³

A thriving free-enterprise economy depends on an efficient tort system that provides proper incentives to businesses to produce safe products in a safe environment and ensures that truly injured people are fully compensated for their injuries.

An efficient tort system produces greater trust among market participants through the fair and systematic resolution of disputes, thereby encouraging more production and exchange, creating a higher standard of living for individuals within a society.⁴⁴ As noted by Friedrich A. von Hayek, 1974 Nobel laureate in economic sciences, "There is probably no single factor which has contributed more to the prosperity of the West than the relative certainty of the law which has prevailed here."⁴⁵

Not all tort costs, therefore, are "excessive" or "wasteful." Some tort costs are necessary as part of a thriving free-enterprise economy operating under the rule of law.

What Are Excess Tort Costs?

In Chapter 1, we noted that a tort has been committed when someone has suffered injury caused by the failure of another person to exercise a required duty of care. The actor is to blame and the injured party is entitled to recover damages from the responsible party commensurate with his or her fault. The function of torts is to provide the injured party with timely compensation that makes him or her "whole," not to punish the actor. We can use this definition to highlight the elements of excess.

The first element of excess is providing an award to someone who has not truly suffered injury. The second element of excess is providing compensation to a truly injured party in an amount greater than the value of the injury incurred. All punitive damages, which are meant to punish, not compensate, fall into this category, as do double payments for the same injury.

The third element of excess is providing an award to a person even though the other party exercised the required duty of care; in other words, the accused was not negligent. Notice that this

All litigation and attendant costs that emerge from these five elements of excess are, by definition, excessive.

element varies from state to state since states use different negligence standards. A negligent act or omission in one state is not necessarily negligent in another state.

The fourth element of excess is holding actors responsible for damages that exceed their degree of fault. The fifth element of excess is failure to achieve a timely resolution of the dispute. As British politician William Gladstone noted more than 100 years ago, "Justice delayed, is justice denied." This applies to both parties.

All litigation and attendant costs that emerge from these five elements of excess are, by definition, excessive. And the costs are much greater than just the direct litigation and transfer costs. The indirect costs of litigation — the negative spillovers — are significant, as we showed in Chapter 3.

How Do We Measure Excess Tort Costs?

One approach to measuring the amount of tort costs that are excessive would be to look at econometric studies that examine the impact of tort litigation on economic growth or personal income. The relationship between litigation and growth is an inverted U shape. Initially, litigation promotes growth and prosperity through the positive effects mentioned earlier. Beyond an optimal point, litigation reduces growth and prosperity — litigation rent seeking consumes resources that are better spent on productive activities.

Given an econometric model of this kind, it is possible to calculate the optimal point. Litigation and its attendant costs, beyond the optimal point, would be excessive. Unfortunately, we are not aware of any such study. Another approach is required.

An alternative approach, used by many legal scholars, is to compare the percentage of GDP that is consumed by the tort system in the United States to the percentage of GDP consumed by tort systems in other industrialized countries. This approach allows as near an "apples to apples" comparison as possible, since we are comparing many countries, all having high levels of personal income and economic activity.

Relative Tort Costs in Industrialized Countries

The Tillinghast study *U.S. Tort Costs and Cross-Border Perspectives* examines direct tort costs in 11 industrialized countries (see Table 6).⁴⁶ Tillinghast found that U.S. tort costs exceed other countries' by a sizable margin, when tort costs are measured as a percentage of economic output.

The United States had a 2.2-percent ratio of tort costs to GDP, compared with Germany (1.1 percent), Japan (0.8 percent), and the United Kingdom (0.7 percent). Aside from Italy (1.7 percent), the other countries examined in the study have tort costs comparable to historic levels observed in the United States in the 1960s and 1970s.



"Our comparison of international tort costs was somewhat surprising, since we had been hearing anecdotally that tort-cost trends in the U.S. were making their way overseas," said Steve Lowe, leader of the firm's global property/casualty insurance consulting practice.⁴⁷ "We saw a greater disparity in tort costs than we were expecting between the U.S. and other countries. Tort costs in the U.S. far surpass those of the other countries we examined, partly a result of different health care systems and legal systems. However, this difference may raise the issue of competitiveness of U.S. products in a global marketplace."

International comparisons are never perfect because of differences in data availability and data standards across countries. Tillinghast corrected for problems as best it could. But this approach does show, using the best available data, the wide range of relative tort-cost burdens across industrialized countries. It also shows that it is possible to achieve a high standard of living with much lower tort burdens than exist in the United States.

Businesses Can't Compete with High Tort Costs

In 1995, IBM became the target of an onslaught of "toxic tort" lawsuits involving microelectronics, starting when a former employee alleged he contracted cancer due to chemical exposure at an IBM manufacturing facility in East Fishkill, New York. That claim was followed by more than 200 lawsuits against IBM, and the chemical manufacturer, by former employees or their survivors.

It was not until 2004 that the first of these cases went to trial. It involved two ex-employees who claimed "systematic chemical poisoning" from more than a decade of work at a San Jose, California, manufacturing plant. They claimed that IBM's medical staff ignored their symptoms, blaming them on causes unrelated to their work environment, and left them untreated. The result, they alleged, was the development of cancer several years later.

Although the attorneys representing the plaintiffs believed that, among cases of this type, theirs were among the most promising, a jury found unanimously in favor of IBM. Not only had the plaintiffs failed to convince the jury of poisoning, but the defense actually presented evidence showing that the plaintiffs suffered from a number of health problems (among them diabetes, smoking, and obesity) that were likely to have contributed to the development of cancer in the plaintiffs.

Though successful in defense of its case, IBM faces a potential loss of millions, if not billions, of dollars in defense costs for all the cases that have gone, and will go, to trial. The imposition of heavy defense costs that increase the cost of doing business is not limited to IBM. According to a report by Jeremy A. Leonard, *How Structural Costs Imposed on U.S. Manufacturers Harm Workers and Threaten Competitiveness*, prepared for the National Association of Manufacturers, tort costs have reduced American manufacturers' competitiveness by at least 3.2 percent. It is no wonder that in recent years IBM has built manufacturing plants in cheaper locations, such as China and Ireland, to cut costs.

The U.S. tort system is the most expensive in the industrialized world.

The U.S. tort system is the most expensive in the industrialized world. The United States spends 2.2 percent of GDP on direct tort costs. Other advanced countries spend an average of 0.9 percent of GDP on direct tort costs. The difference of 1.3 percentage points is the best estimate of the excessive costs of the U.S. tort system; it measures how much more expensive the U.S. tort system is relative to the tort systems in comparable countries.

Total Excess Tort Costs in the United States

The comparative international approach yields the result that 59 percent of U.S. direct tort costs are excessive (1.3 percent of the 2.2 percent is excessive). Turning to Table 4, this percentage can be applied to the deadweight cost, the rent-seeking and rent-avoidance costs, and the tort transfer cost. Regarding the dynamic costs, we applied the percentage to health care expenditures and reduced access to health care. This assumes that health care expenditures that are driven by liability concerns will fall proportionately as liability risks fall. We cannot assume all of the health care expenditures are waste since some may prove medically beneficial. Furthermore, as health care expenditures fall, access to health care will increase proportionately.

The remaining two dynamic costs — accidental deaths and lost sales — are pure waste since they would, by definition, vanish in the absence of excess tort liability. These costs are included, in total, as excess.

Table 7 reports the results after crunching the numbers for excess annual and long-term social and accounting tort costs.

Cost Category	Amount (billions of 2006 dollars)	
Excess Annual Social Cost	588.63	
Excess Annual Accounting Cost	664.15	
Excess Long-Term Social Cost	11,320	
Excess Long-Term Accounting Cost	12,772	

Table 7. 2006 Excess Tort Cost Breakdown

Source: Pacific Research Institute

America wastes \$589 billion each year from excessive tort litigation. This is roughly equivalent to losing the entire annual output of the state of Illinois.

America wastes \$589 billion each year from excessive tort litigation. This is roughly equivalent to losing the entire annual output of the state of Illinois. It is equivalent to a seven-percent tax on consumption or a 10-percent tax on wages. The annual price tag, or "excess tort tax," for a family of four in terms of costs and forgone benefits is \$7,848. The capitalized value of the waste, assuming it continues at its current level into perpetuity, is \$11.32 trillion.⁴⁸ Americans shoulder this burden through higher prices, lower wages, decreased returns on investments and land, and less innovation. America cannot waste this huge amount of resources and expect to remain competitive with other countries.

If tort reforms that eliminate waste are enacted in the United States, the U.S. economy will approach its full productive potential. Today, resources are spent on the unnecessary and unproductive redistribution of wealth through excessive litigation, making society poorer in the process.

If reforms are enacted, these freed resources would enable the creation of new productive companies, new productive jobs, new capital investments, and new innovative products. U.S. businesses would be better able to compete in global markets. The standard of living for ordinary Americans would rise more rapidly.

The U.S. Tort Liability Index: 2006 Report, co-authored by Dr. Lawrence J. McQuillan and Hovannes Abramyan of PRI, lists more than two dozen tort reforms that states have adopted, or have at their disposal, to reduce direct tort costs.⁴⁹ The report also summarizes scholarly studies that have quantified the secondary or spillover benefits of tort reform such as increased productivity, better state economic performance, greater innovation, higher national output and personal income, and saved lives. Given these profound and sweeping benefits, ordinary citizens and state lawmakers would be wise to promote and enact legal reforms that curb excessive tort costs.

Through tort reform, the United States can become a more favorable place to invest human, physical, and financial capital — the ingredients for self-sustaining economic growth and a rising standard of living for all Americans.

5 STOCKHOLDER WEALTH EFFECTS AND ASBESTOS BANKRUPTCY EFFECTS

Harmony seldom makes a headline.

Silas Bent (1882-1945) American writer

The media love a good fight, and nothing provides better material for stories than the adversarial American legal system. In recent years, two areas of civil litigation have received increasing media attention: asbestos lawsuits and stock-price effects of litigation. "Toxic tort" asbestos class actions have captured headlines, so in this chapter, we examine their costs in greater detail. Similarly, the business media have closely followed stockholder effects of litigation, and we will analyze the costs in this chapter.

One strategy of plaintiff lawyers is to file a lawsuit against a publicly traded company, driving down its stock price and forcing the company to the bargaining table to settle the case in order to stop the bleeding. Since this is a common strategy, we decided to isolate the impact of tort lawsuits on stockholder wealth to better understand the phenomenon. Keep in mind that all of the costs discussed in this chapter are already included in the total costs reported earlier. Chapter 5 simply spotlights certain areas and provides more detail. All costs are in 2006 dollars, unless otherwise noted, and thus might not equal the costs reported in the original studies we used.

The Effect of Tort Litigation on Stockholder Wealth

If the economic costs associated with tort claims are real and significant, these costs will lower investors' expectations of a sued company's future profitability and will decrease the company's stock price. The total tort costs listed in Table 5, therefore, will fall partially on stockholders. In order for tort claims to affect a company's stock price, there must be an unanticipated event that conveys new tort-claim information to potential purchasers of the stock that alters their assessment of the company's value. Economists have examined the impact of litigation on stock prices using "event analysis."

After an extensive literature review, we concluded that four studies have received the most peer recognition for their efforts to measure the effect of civil litigation on stockholder wealth. W. Kip Viscusi and Joni Hersch examined 77 events regarding 29 products-liability lawsuits. They reported that, on average, stock prices fell 2.12 percent on the date of the initial announcement of the lawsuit.⁵⁰ Nancy D. Ursel and Marjorie Armstrong-Stassen looked at 84 events regarding age-discrimination lawsuits against 46 exchange-traded companies. They reported that, on average, stock prices fell 2.43 percent on the date of the initial filing of the lawsuit.⁵¹ Though both studies are well

conducted, we believe neither result reflects the overall stock-price effect of tort litigation because each looked at only one type of lawsuit that has a disproportionate stock-price effect. Also, they examined only initial announcement effects. The following two studies correct for these limitations.

Sanjai Bhagat, John Bizjak, and Jeffrey L. Coles examined 618 lawsuit filings involving a wide spectrum of legal issues. They reported that, on average, stock prices of publicly traded companies fell 0.97 percent on the date of the lawsuit filing.⁵² Notice that this stock-price effect is smaller than in the two studies discussed above. This is likely due to the larger, more diverse, and more representative sample. This is confirmed by Bhagat et al. since their stock-price decline for products-liability lawsuits is 1.46 percent — larger than the overall decline and closer to the result reported by Viscusi and Hersch. The stock-price effect for products-liability lawsuits alone is not representative of the overall effect.

Finally, Jonathan M. Karpoff and John R. Lott Jr. examined 351 events involving a similarly wide spectrum of legal issues. They reported that, on average, stock prices fell 0.45 percent after all announcements for cases in which plaintiffs sought punitive awards from 235 publicly traded companies.⁵³ Notice that this study uses a large, representative sample. Also, the study tracks all announcements, specifically, the initial lawsuit filing, verdict or settlement, and post-verdict adjustments. For these reasons, we believe that stock-price loss estimate is the most reliable and generalizable. The stock-price decline reported by Karpoff and Lott for the initial announcement of a lawsuit (1.02 percent) is strikingly close to the effect reported by Bhagat et al. (0.96 percent), lending further credibility to the Karpoff and Lott results. Across all companies, the median loss in the market value of equity due to a lawsuit was \$2.9 million (\$3.86 million in 2006 dollars).⁵⁴

These studies show that plaintiffs damage defendant companies with a lawsuit. The evidence also shows that plaintiffs gain far less than defendants lose. In other words, the civil-justice system, which is intended simply to transfer wealth from defendants to injured plaintiffs, consumes far more resources in the process of making the transfer. This supports our application of the rent-seeking theory of transfers developed in Chapter 3. The additional losses to companies beyond the mere transfer include legal costs, lost customers, lost high-skilled workers, management time devoted to the lawsuits, potential "follow-on" lawsuits, and damaged company reputation.

To calculate the total loss of market value of equity due to tort lawsuits we multiplied \$3.86 million by the number of tort lawsuits against publicly traded companies. Tort claims can be filed in state or federal court. The National Center for State Courts reports in its Court Statistics Project that 530,455 tort cases were filed in 2004 in state courts across the country.⁵⁵ Tort filings in federal district courts totaled 2,536 in a one-year period ending March 31, 2004, according to the federal judiciary's caseload statistics.⁵⁶ The total number of tort filings, therefore, equaled 532,991 in 2004, the most recent year with complete statistics.

How many of these tort filings were against publicly traded companies? This number is not easily determined. As noted by Bhagat et al., "Even so rudimentary a statistic as the total number of lawsuits filed each year against the major exchange-listed firms is unknown."⁵⁷ The percentage of state-court tort

cases filed against corporations, however, is available from the *Civil Justice Survey of State Courts*, which is conducted by the National Center for State Courts for the U.S. Bureau of Justice Statistics.⁵⁸ Of the total cases in the survey, 5,451 were tort cases. Sorting the sample of tort cases by defendant type, we found that 1,812 were filed against corporations. In other words, 33.24 percent of tracked tort cases were filed against corporations. We used this as a proxy for the percentage of tort filings against publicly traded companies.⁵⁹ Applying this percentage to the total tort filings in state and federal courts of 532,991, we concluded that 177,166 tort cases were filed against publicly traded companies in a year.

Finally, we multiplied the 177,166 tort cases by \$3.86 million, the median loss in stockholder equity due to a lawsuit, to arrive at the total annual wealth loss to U.S. stockholders of \$684 billion. To put this into perspective using output terms, stockholder loss is equivalent to losing all U.S. supermarket sales for an entire year or the output of Florida each year, or the equivalent of losing the combined output of 15 smaller states: Alaska, Delaware, Hawaii, Idaho, Maine, Montana, Nebraska, New Hampshire, New Mexico, North Dakota, Rhode Island, South Dakota, Vermont, West Virginia, and Wyoming.

If tort filings against publicly traded companies continue at the present rate and the equity loss per filing remains constant into perpetuity, the long-term wealth loss to U.S. stockholders will be \$13.2 trillion.⁶⁰ This number is likely an underestimate since both filings and losses per filing are trending upward.

Asbestos Bankruptcy Effects on Displaced Workers

Litigation acts as a tax on businesses. How each business reacts to such a tax is dependent on the market factors facing the company. These factors determine whether or not a company can withstand the increased burden of litigation. Some companies can never recover from the additional costs and file for bankruptcy. While bankruptcies are costly to the businesses through filing, accounting, legal, and credit restructuring costs — estimated to be between \$367 million and \$1.92 billion⁶¹ — the most obvious consequence of bankruptcies is the resulting unemployment and lost output from a closure. Indeed, it is a sad truth that workers are hurt by asbestos-related bankruptcies.

This reality was clearly shown in 2002 by Nobel laureate economist Joseph E. Stiglitz, who partnered with Jonathan M. Orszag and Peter R. Orszag to conduct an independent analysis of companies that filed for bankruptcy after losing asbestos-liability lawsuits.⁶² They found that asbestos-related bankruptcies, 61 so far, produced significant losses to the economy, and that much of the loss fell on the employees of these businesses. The costs included the loss of income from job displacements, the loss in future wages from reduced human capital, and the loss in benefits from reduced pension portfolios. Taken cumulatively, these indirect costs are estimated to range from \$111 million to \$128 million annually. This is in addition to direct insured losses from asbestos tort claims of \$5 billion in 2004.⁶³

Stock Depression Submission

In 2005, the pharmaceutical company Merck became the main course of a litigation feast after a single study indicated that its FDA-approved pain reliever, Vioxx, could possibly cause an increase in the risk of a heart attack.

Immediately after the study's release, Merck responsibly pulled the painkiller off the market. Not passing up the opportunity to cash in on the events, trial lawyers began recruiting prospective clients for suits against the drug maker.

In the first Vioxx case to be heard, a widow was awarded \$250 million. Her lawyers, however, have prevented her from receiving payment. Realizing that the award will be severely cut after it is registered, the plaintiff's lawyers prefer instead to continue to exploit the \$250 million headline in order to attract other clients and pressure Merck to settle cases. The effect on Merck's share price of constant media focus on the filings is clear. As Steven B. Hantler stated in *Investor's Business Daily*, "Investors have clearly been pricing litigation risks into Merck's share price" (April 10, 2006). As billions are wiped away in shareholder value, trial lawyers are earning leverage.

But Merck is not willing to play the lawyers' game. The drug company has decided to take every lawsuit to court and defend itself, since it believes it has acted responsibly in every step of the process. In fact, it took a federal jury less than four hours to decide that there was no evidence Merck hid any information about the drug from the FDA during the approval process.

The Vioxx suits are estimated by Wall Street analysts to cost the company billions of dollars — money that could be used for research and development of new, lifesaving pharmaceuticals. Instead, the money is being spent to fight the larger losses that the trial lawyers hope to claim. With nearly 10,000 more lawsuits to go, Merck can expect that this will be a bitter and costly fight.

The Cost of Job Displacements

Stiglitz et al. looked at 31 companies that filed for bankruptcy before September 2002 where asbestos-related liabilities "played a significant role" in the company's decision to file. The researchers then looked at the employment data for the 31 companies, starting from the first news of a potential asbestos liability to the actual bankruptcy. They used the "first news" as a starting point in the employment data because from that point forward, the asbestos-related litigation was an influential factor in the internal decisions of the 31 companies. The employment data covered the five-year period following the first news of litigation because, on average, the bankruptcies occurred around the fifth year. Any reductions in employment reflect the companies' willingness to sacrifice their workforces in order to remain solvent and competitive.

By comparing the change in employment for these 31 companies during the fiveyear period to the change in employment of nonbankrupt companies (data provided by the U.S. Department of Labor), Stiglitz et al. determined that 51,970 jobs were lost because of asbestosrelated bankruptcies.

Having calculated the total number of jobs lost, Stiglitz et al. then measured the total economic loss to employees due to the job displacements. Using U.S. Bureau of Labor Statistics data, they determined that the median displaced worker who had been employed for at least three years was subsequently unemployed for six weeks. With this information, Stiglitz et al. decided to use a rather conservative estimate of one-month displacement for their calculation. Assuming that the average displaced worker earned \$40,000 a year in 2002 dollars (\$3,333.33 per month), the economic cost of the 51,970 asbestos-related displacements was about \$173 million.

Stiglitz et al. admitted that the data on the 31 companies captured only 87 percent of the total employment at the bankrupt companies. Therefore, if the same pattern of losses occurred with the remaining workers, Stiglitz estimated that an additional 8,000 workers would be displaced due to the bankruptcies. Adding these to the previous total brings the number of displaced workers to roughly 60,000. Under this scenario, the total economic cost of displacements was \$200 million in 2002 dollars (\$226 million in 2006 dollars).⁶⁴ Since the 60,000 displacements occurred over a five-year period, the average number of displacements per year was 12,000. It follows that the total annual cost of job displacements was \$40 million in 2002 dollars (\$45 million in 2006 dollars).⁶⁵

The Cost of Human Capital Losses

Next, the researchers calculated the economic cost of the cumulative loss in human capital resulting from the job displacements. Based on the 2001 findings of Henry Farber, a professor at Princeton University, displaced workers tend to find new employment at lower wages. Farber estimated that the loss in earnings ranges from five percent to 10 percent of previous wages.⁶⁶

Assuming that the average displaced worker was 45 years of age and had 20 years until retirement, and assuming that the average annual salary for the 60,000 displaced workers was \$40,000 in 2002 dollars, the present value of lost wage income would range between \$1.2 billion (five-percent lost wages) and \$2.8 billion (10-percent lost wages) at a five-percent real discount rate. The lost wage income in 2006 dollars is between \$1.35 billion and \$3.16 billion, respectively.

Each worker would lose between \$25,000 and \$50,000 in income over his or her career. For an average 45-year-old worker, that amounts to between \$1,410 and \$2,820 per year, in 2006 dollars. Thus, the annual cost of human capital losses for the 12,000 displaced workers per year ranges from \$17 million to \$34 million, depending on the percentage of lost wages.

The Cost to Employee Pensions

Stiglitz et al. also examined the bankruptcies' impact on displaced employees' pensions. They found that employees tended to invest heavily in their employer, and thus suffered when the stock price declined due to the bankruptcy. Stiglitz et al. found stock-price data for 13 of the 31 companies. The data covered a 10-year period from five years before the bankruptcy was filed to five years after the bankruptcy was filed.

After measuring the stock prices of these 13 companies against a control group of nonbankruptcy-filing companies within the same industry (as identified by the three-digit SIC code), the researchers found that all 13 of the bankrupt companies underperformed relative to the control group. The control group saw an increase in stock value during the time period, but it lagged behind the overall stock-market index. The bankrupt companies did the worst during the period, experiencing a whopping 92-percent average decline in stock prices.

Of the 13 companies, six had detailed information on the percentage of employee-owned assets that was reinvested in the employer company. All six of the companies provided a defined-contribution pension plan, in which the employee controlled the direction of the investments through a 401(k) savings account.

On average, an employee of the six companies had a 401(k) worth \$35,891 in 2002 dollars. Of that amount, \$9,098 — roughly 25 percent — was invested in the employer company five years before the company filed for bankruptcy. Surprisingly, this percentage is higher than the national average. The Employee Benefit Research Institute found that, on average, just 19 percent of 401(k) assets are invested in employer stocks.⁶⁷

Putting the two pieces together, the researchers determined that average 401(k) assets invested in the employer company declined from \$9,098 to just \$401. This decline was composed of two parts: (1) an industry average decline of \$436 (employees in the nonbankrupt companies within that industry lost \$436 on average over the same period); and (2) the bankruptcy-related portion of \$8,261. In other words, while the total overall average decline in assets for the workers in the bankrupted companies was \$8,697 per worker, the bankruptcy itself was responsible for \$8,261

Excessive Asbestos Litigation: The Story of Crown Cork & Seal

When Crown Cork & Seal, a Philadelphia-based packaging company, purchased one of its competitors in 1963, no one could have predicted the legal tidal wave that would engulf it for the next four decades. But the company's experience has made it a clear example of how our current tort liability system is hurting America's economy.

Crown Cork & Seal was founded in the 1890s by the inventor of the bottle cap. Over the past 100 years, the company has been a pioneering manufacturer of beverage and food packaging, currently employing about 27,000 people. Although Crown has remained successful in a competitive market, excessive litigation has plagued the company for years. The troubles started in 1963 with the purchase of Mundet Cork, another bottle-cap maker.

For \$7 million, Crown obtained a majority stock interest in Mundet. Before the purchase, Mundet had run a small side business manufacturing asbestos insulation. By the time Crown became involved with the company, Mundet had already shut down its insulation production, focusing solely on its bottle-cap production.

Within 93 days of Crown's obtaining its interest in Mundet, what was left of the Mundet insulation division — idle machinery, leftover inventory, and customer lists — was sold off to a New Jersey insulation company. With only its bottle-cap business remaining, Mundet was merged into Crown in 1966 when Crown acquired the remainder of the Mundet stock.

Although Crown never manufactured, sold, or distributed any asbestoscontaining products, its brief involvement with Mundet made it a target of asbestos-related lawsuits. Because of existing successor liability rules (which state that successor companies can be liable for the actions of the predecessor company), Crown has been hit with more than 300,000 asbestos tort claims during the past 40 years. Crown's initial \$7 million investment in Mundet has resulted in more than \$600 million in asbestos-related payments. Crown's corresponding investment in new plants and in new job creation has suffered enormously. Also, Crown's credit rating has been reduced and the company has been forced to pay higher interest rates on the money it borrows.

Crown is a poster child of the unfairness of the existing system of successor liability, which has a negative impact on companies like Crown, destroying our manufacturing base and eliminating good manufacturing jobs in the economy. of the decline in pension assets. Multiplying that figure across the 60,000 displaced workers resulted in a total asset-value loss of \$495.7 million in 2002 dollars (\$559 million in 2006 dollars).

Stiglitz et al. highlighted how these losses would impact an individual's wealth.⁶⁸ Assuming that the bankruptcy caused a 25-percent drop in the value of an employee's 401(k) savings account, and assuming a five-percent real rate of return on asset growth, Stiglitz et al. estimated that a 35-year-old worker would have \$946 less per year in retirement because of the bankruptcy. If that worker wanted to maintain the same level of retirement income, he or she would have to save \$272 more per year during the remaining years of employment.

A 45-year-old worker would be in worse shape. He or she would have lost \$1,410 per year in retire-ment and would have to save \$812 more per year before retirement. A 55-year-old worker would have lost \$1,059 per year in retirement and would have to save \$1,421 more per year before retirement.⁶⁹

Assuming that the 60,000 displaced employees are 45 years old, each worker would have to save an additional \$812 per year over the remaining 20 working years to recoup the lost retirement wealth and maintain the same level of retirement income. Multiplying \$812 by the 60,000 displaced workers, the total cost per year is \$49 million.

The Total Indirect Costs to Displaced Workers

As is true in any bankruptcy, workers are hurt. Stiglitz et al. clearly show that asbestos-related liability costs played an important role in companies' employment decisions, and the companies' bankruptcy-avoidance behavior led to sizable indirect costs on workers, as listed in Table 8. The total costs are estimated to be as high as \$3.95 billion. Annually, the costs range from \$111 million to \$128 million. The costs are likely to grow as lawsuits over silica, in addition to asbestos, increase. We will expand the analysis in future editions to include silica as the scholarly evidence emerges regarding this relatively new class of lawsuits.

Table 8. Indirect Costs to Displaced Workers from Asbestos-Related Bankruptcies

Category	Annual Cost Per Worker (2006 dollars) Annual Cost (millions of 2006 dollars)		Total Cost (billions of 2006 dollars)	
Job Displacements	3,759.49	45	0.226	
Human Capital Losses				
(5% & 10% Loss in Wages)	1,410 - 2,820	17 - 34	1.35 - 3.16	
Employee Pensions	812	49	0.559	
Total Indirect Costs to Workers	5,981.49 - 7,391.49	111 - 128	2.135 - 3.945	

Source: Stiglitz et al. (2002); and Pacific Research Institute

ENDNOTES

- ¹ President's Council of Economic Advisers, *Who Pays for Tort Liability Claims? An Economic Analysis of the U.S. Tort Liability System* (April 2002).
- ² Tillinghast-Towers Perrin, U.S. Tort Costs and Cross-Border Perspectives: 2005 Update (New York: Tillinghast-Towers Perrin, 2006).
- ³ An example of civil courts giving compensation to individuals who have not suffered actual injuries is California's workers' compensation system and its mill of doctors and lawyers lining their pockets at the expense of employers and truly injured employees. For a description of the recent problems in California, see Lawrence J. McQuillan and Andrew M. Gloger, *How to Fix California's Broken Workers' Compensation System* (San Francisco: Pacific Research Institute, 2003).
- ⁴ For a comprehensive list of recent state reforms, see Lawrence J. McQuillan and Hovannes Abramyan, U.S. Tort Liability Index: 2006 Report (San Francisco: Pacific Research Institute, 2006). At the federal level, President George W. Bush signed the Class-Action Fairness Act of 2005, which moves most large interstate class actions into federal courts, requires judges to consider the real monetary value of coupons and discounts so victims receive true compensation for their injuries, and demands that settlements and rulings be explained in plain English.

President Bush also signed the Protection of Lawful Commerce in Arms Act of 2005, which protects firearms dealers and manufacturers from a broad swath of civil-liability lawsuits, many of them filed by municipalities. The lawsuits, modeled after litigation against the tobacco industry, hinged on the notion that guns are a public nuisance and that their makers and dealers should take special precautions in selling them. Chicago blamed gun makers for making their products available to criminals, and New Orleans said the companies should be liable for not using better safety devices. The act proscribes such civil lawsuits against the gun industry.

- ⁵ The following two sections were adapted from www.utcourts.gov/howto/courtproc.htm.
- ⁶ President's Council of Economic Advisers, Who Pays for Tort Liability Claims?
- ⁷ Arnold C. Harberger, "Monopoly and Resource Allocation," *American Economic Review* 44 (1954), pp. 77–87.
- ⁸ Gordon Tullock, "The Welfare Costs of Tariffs, Monopolies and Theft," *Western Economic Journal* 5 (1967), pp. 224–32.
- ⁹ Rent-seeking costs and rent-avoidance costs within the tort system are the resources expended to capture a tort transfer or to avoid being the victim of a tort transfer, respectively. Both costs are pure transaction costs of making a tort transfer. These costs include attorney fees; insurance company administration expenses; tort-specific costs associated with judges, juries, and court systems; campaigns to elect or defeat specific politicians or judges; reorganizing company operations to avoid lawsuits; and wining and dining to help change tort laws.

Tort litigation can be viewed as a competitive game for a transfer that involves few contenders in any one case and where the successful contender will have made the largest outlay in seeking to influence the outcome in his or her favor. This type of game can result in perfect or complete rent dissipation. See Arye L. Hillman and Dov Samet, "Dissipation of Contestable Rents by Small Numbers of Contenders," *Public Choice* 54 (1987), pp. 63–82.

- ¹⁰ The theoretical rent-seeking literature has also studied the conditions under which "overdissipation" and "underdissipation" can occur. The factors that influence rent dissipation include risk aversion, asymmetric subjective valuation of the transfer, rent sharing, the public-good nature of shared rents, and different initial resource endowments or strengths of contenders. The standard assumption, however, is perfect or complete dissipation.
- ¹¹ Tillinghast-Towers Perrin includes compensatory tort transfers themselves as a "tort cost." We think it is best to think of these tort transfers as an accounting cost of the tort system, not a social cost.
- ¹² Tillinghast-Towers Perrin, U.S. Tort Costs and Cross-Border Perspectives.
- ¹³ Dale W. Jorgenson and Kun-Young Yun, *Investment, Vol. 3: Lifting the Burden: Tax Reform, the Cost of Capital, and U.S. Economic Growth* (Cambridge, Mass.: MIT Press, 2001).
- ¹⁴ President's Council of Economic Advisers, Who Pays for Tort Liability Claims? An Economic Analysis of the U.S. Tort Liability System (April 2002), p. 12.
- ¹⁵ Erik Pepke has noted, "Any society that needs disclaimers has too many lawyers." For an examination of product labeling see W. Kip Viscusi, *Product-Risk Labeling: A Federal Responsibility* (Washington, D.C.: AEI Press, 1993).
- ¹⁶ Paul H. Rubin and Joanna M. Shepherd, "Tort Reform and Accidental Deaths," *Emory Law and Economics Research Papers*, Nos. 05-17 (February 20, 2006).
- ¹⁷ We analyzed the years 2004 and 2000 because data from the American Tort Reform Association are most specific in terms of legislation dates after 2000. The annual rate of change was calculated using the following equation: A(1 + X)N = B, or $X = [(B/A)^{1/(N-1)}] - 1$. In this equation, A represents preventable deaths in 2004, B represents preventable deaths in 2000, N represents the number of years between A and B, and X represents the average annual change. Using data from the American Tort Reform Association and Rubin and Shepherd, "Tort Reform and Accidental Deaths," we arrived at an average annual rate of change of 0.015116723 or 1.51 percent.
- ¹⁸ The tort-reform movement picked up steam in the mid-1980s, with states enacting reforms in response to high insurance costs resulting from excessive litigation in the preceding years. For this reason, 1981 is our starting point. It is the starting point in Rubin and Shepherd's analysis as well.
- ¹⁹ See the Center for the Study of Innovation and Productivity at the Federal Reserve Bank of San Francisco, http:// www.frbsf.org/csip/data/charts/chart37a.cfm.
- ²⁰ Daniel Kessler and Mark McClellan, "Do Doctors Practice Defensive Medicine?" *Quarterly Journal of Economics* 111, No. 2 (1996), pp. 353–90.
- ²¹ PriceWaterhouseCoopers, *The Factors Fueling Rising Health Care Costs 2006* (Washington, D.C.: America's Health Insurance Plans, 2006).
- ²² U.S. Congress, Office of Technology Assessment, *Defensive Medicine and Medical Malpractice*, *OTA-H-6O2* (Washington, D.C.: U.S. Government Printing Office, July 1994), p. 13.
- ²³ Kessler and McClellan, "Do Doctors Practice Defensive Medicine?" *Quarterly Journal of Economics* 111, No. 2 (1996), p. 354.
- ²⁴ Tillinghast-Towers Perrin, U.S. Tort Costs and Cross-Border Perspectives, p. 10.
- ²⁵ Michael Chernew, David Cutler, and Patricia Seliger Keenan, "Increasing Health Insurance Costs and the Decline in Insurance Coverage," *ERIU Working Paper* 8 (Ann Arbor, Mich.: University of Michigan's Economic Research Initiative on the Uninsured, 2005).
- ²⁶ Kaiser Commission on Medicaid and the Uninsured, *The Uninsured: A Primer* (Washington, D.C.: Henry J. Kaiser Family Foundation, 2006).
- ²⁷ Kaiser Commission on Medicaid and the Uninsured, *The Cost of Care for the Uninsured: What Do We Spend, Who Pays, and What Would Full Coverage Add to Medical Spending?* (Washington, D.C.: Henry J. Kaiser Family Foundation, 2004), p. 4.
- ²⁸ These 3.4 million people are individuals who either lost insurance or could not afford insurance due to the increase in health care expenditures attributable to liability concerns. This number is not driven by an increase in undocumented immigrants who likely would not have insurance regardless of health care costs nor is it driven by an increase in legal immigrants. According to a study by the Kaiser Commission on Medicaid and

the Uninsured: "Because there are so many more native citizens than noncitizens [legal and illegal], it is not surprising that they 'bear the brunt' of most economic changes including changes in insurance. Immigration trends are not responsible, in large part, for the increase in the numbers of uninsured in this country. Indeed, noncitizens would have to fare dramatically worse than native citizens in terms of changes in health coverage rates to affect the overall numbers of uninsured." See John Holahan and Allison Cook, *Are Immigrants Responsible for Most of the Growth of the Uninsured?* (Washington, D.C.: Kaiser Commission on Medicaid and the Uninsured, 2005), p. 9.

- ²⁹ U.S. Department of Health and Human Services, *Confronting the New Health Care Crisis: Improving Health Care Quality and Lowering Costs by Fixing Our Medical Liability System* (Washington, D.C.: U.S. Department of Health and Human Services, 2002).
- ³⁰ Institute of Medicine, *Hidden Cost, Value Lost: Uninsurance in America* (Washington, D.C.: National Academy of Sciences, 2003).
- ³¹ Our ghost workforce includes individuals who died between 1981 and 2004, as did our ghost workforce of individuals who died from accidental deaths. As with accidental deaths, we used annual output per employee of \$90,236.
- ³² Institute of Medicine, *Care Without Coverage: Too Little, Too Late* (Washington, D.C.: National Academy of Sciences, 2002).
- ³³ James J. Collins, Catherine M. Baase, Claire E. Sharda, Ronald J. Ozminkowski, Sean Nicholson, Gary M. Billotti, Robin S. Turpin, Michael Olson, and Marc L. Berger, "The Assessment of Chronic Health Conditions on Work Performance, Absence, and Total Economic Impact for Employers," *Journal of Occupational and Environmental Medicine* 47, No. 6 (2005), pp. 547–57.
- ³⁴ W. Kip Viscusi and Michael J. Moore, "Product Liability, Research and Development, and Innovation," *Journal of Political Economy* 101, No. 1 (1993), pp. 161–84.
- ³⁵ Ibid., p. 175.
- ³⁶ The first 10 industries listed in Table 3 come from Viscusi and Moore, "Product Liability, Research and Development, and Innovation." In that article, they say there are 11 industries beyond the tipping point, but they list only 10. Despite repeated attempts by co-author Anthony P. Archie by telephone and e-mail, neither Viscusi nor Moore provided us with the 11th industry.

The machine-bolt-and-screw industry and the construction industry come from Footnote 23 in Viscusi and Moore, which cites an earlier study by them. The apparel-and-other-textile-products industry comes from Frederick T. Stocker, who summarized yet another earlier study by Viscusi and Moore. See Frederick T. Stocker, ed., *I Pay, You Pay, We All Pay: How the Growing Tort Crisis Undermines the U.S. Economy and the American System of Justice* (Arlington, Va.: Manufacturers Alliance/MAPI, 2003), p. 27.

³⁷ Viscusi and Moore originally obtained the insurance data from the Insurance Services Office (ISO), an insuranceindustry risk information center. The data covered the product-liability coverage purchased by companies for the years 1980 through 1984. The individual unit of observation for these data was individual company productliability insurance policies. Viscusi and Moore focused on bodily-injury and property-damage premiums and losses as they searched through the data.

The ISO data was divided into product categories. Viscusi and Moore aggregated this data into the Standard Industrial Classification (SIC) industry code groups, which paralleled the product categories. That way they could obtain for themselves a total product-liability premium and total product-liability loss for each three-digit industry code. The premium and loss data were divided by three-digit industry sales data from the U.S. Census Bureau's Census of Manufacturers.

In our attempt to find current insurance data that matched Viscusi and Moore's methodology, co-author Anthony P. Archie first contacted Michael F. Blake, data specialist at A. M. Best Company, the insurance rating and information company. He told Mr. Archie that A. M. Best did not break down insurance data by SIC code and that he thought it unlikely that any insurance information warehouse would break down insurance data in this manner. With that advice, Mr. Archie subsequently e-mailed and telephoned Vincent Conti at the ISO and received a similar response. Mr. Archie also received an e-mail from ISO's telesales supervisor, Nichole Batts, stating that the Commercial Lines area at ISO had "very limited information" to give.

Mr. Archie continued the quest by e-mailing the American Insurance Association, a property-and-casualtyinsurance trade organization. He received a response from Damien Josefiak, senior writer in public affairs. In his e-mail, Mr. Josefiak attached a response to him from Dave Unnewehr, assistant vice president of policy development and research. His response reads:

Liability losses never get to the specificity of individual standard industrial codes or the new NAICS system. Basically, the liability lines are divided up into the broad category of (1) "other liability," which spans all sorts of industry, business liability, professional liability, except for medical malpractice, (2) "medical malpractice," (3) "products liability" – this may be one of their best bets for getting at or close to a discrete portion of manufacturing liability related losses, and (4) "commercial multi-peril – liability only" (this is the liability coverage and loss data present in business multi-peril policies). Sometimes there are special studies on environmental/asbestos losses and D & O premiums and losses, both [of] which historically would be subsets of "other liability." However, environmental liability has emerged as a discrete line, and although A. M. Best doesn't track it apart from other liability, sometimes there are special studies available.

Next, Mr. Archie spoke on the telephone with Dr. Robert P. Hartwig, chief economist and senior vice president for the Insurance Information Institute. He echoed the message that insurance data are not broken down by NAICS codes.

Mr. Archie sent another e-mail to Mark Warner of Conning Research & Consulting, an insurance-industry research company. Mr. Warner replied that the topic was "outside of Conning's scope" and recommended that PRI contact Marketstance, an insurance-industry analytical-resource center. Mr. Archie did not receive an e-mail reply or returned call from anyone at Marketstance.

The final group contacted was Judy Diamond Associates/FreeERISA.com, a publisher of health, welfare, pension, and executive compensation data. Mr. Archie received a response from Dan Cole, director of research, who said PRI's request was "beyond the scope of FreeERISA.com." He referred Mr. Archie to George Lindley at Judy Diamond, whom Mr. Archie e-mailed and telephoned, but received no reply.

- ³⁸ Footnote 19 in Viscusi and Moore provides the equation for determining the effect of a change in the ratio of bodily-injury losses to sales on product R&D intensity. Using Viscusi and Moore's statistical results, co-author McQuillan calculated the equations for the effect of a change in the ratio of bodily-injury premiums to sales on product R&D intensity; and the effect of a change in each of these ratios on process R&D intensity. These four equations are available on request.
- ³⁹ Viscusi and Moore, pp. 182–83.
- ⁴⁰ We examined the cost effects for which solid scholarly research exists. The tort system likely increases costs for state and federal government health and welfare safety are net programs, health care services such as in-home health care and emergency care, and other areas for which data are not currently available. Our cost totals, therefore, should be viewed as conservative underestimates.

Data on consumption, wages, and gross state product come from the U.S. Bureau of Economic Analysis at http://bea.gov/bea/newsrel/pinewsrelease.htm and http://bea.gov/bea/regional/gspmap/.

- ⁴¹ The formula is discussed in detail on Columbia University's MBA finance Web page at http://ci.columbia.edu/ci/ premba_test/c0332/s5/s5_4.html.
- ⁴² See http://www.whitehouse.gov/omb/circulars/a094/a94_appx-c.html.
- ⁴³ Ross Levine, "The Legal Environment, Banks, and Long-Run Economic Growth," *Journal of Money, Credit, and Banking* 30, No. 3, Part 2 (1998), pp. 596–613.
- ⁴⁴ Ying Huang, Robert E. McCormick, and Lawrence J. McQuillan, *U.S. Economic Freedom Index: 2004 Report* (San Francisco: Pacific Research Institute, 2004).
- ⁴⁵ Friedrich A. von Hayek, *The Constitution of Liberty* (Chicago: University of Chicago Press, 1960), p. 208.
- ⁴⁶ Tillinghast-Towers Perrin, U.S. Tort Costs and Cross-Border Perspectives.
- ⁴⁷ See http://www.towersperrin.com/tp/jsp/tillinghast_webcache_html.jsp?webc=Tillinghast/United_States/Press_ Releases/2006/20060313/2006_03_13.htm&selected=press
- ⁴⁸ Applying a discount rate of 5.2 percent to \$588.63 billion yields \$11.3198 trillion. See Chapter 3 for a description of the formula.
- ⁴⁹ McQuillan and Abramyan, *U.S. Tort Liability Index: 2006 Report.* The complete data set listing each state's tort reforms is available on PRI's Web site at http://www.pacificresearch.org
- ⁵⁰ W. Kip Viscusi and Joni Hersch, "The Market Response to Product Safety Litigation," *Journal of Regulatory Economics 2*, No. 3 (1990), p. 218.

- ⁵¹ Nancy D. Ursel and Marjorie Armstrong-Stassen, "How Age Discrimination in Employment Affects Stockholders," *Journal of Labor Research* 27, No. 1 (2006), p. 94.
- ⁵² Sanjai Bhagat, John Bizjak, and Jeffrey L. Coles, "The Shareholder Wealth Implications of Corporate Lawsuits," *Financial Management* 27, No. 4 (1998), p. 15.
- ⁵³ Jonathan M. Karpoff and John R. Lott Jr., "On the Determinants and Importance of Punitive Damage Awards," *Journal of Law and Economics* 42, No. 1, Part 2 (1999), p. 560.
- ⁵⁴ Ibid., 564.
- ⁵⁵ National Center for State Courts, Court Statistics Project, http://www.ncsconline.org/D_Research/csp/CSP_ Main_Page.html.
- ⁵⁶ U.S. Courts, Federal Judiciary Caseload Statistics, http://www.uscourts.gov/caseload2004/contents.html.
- ⁵⁷ Bhagat, Bizjak, and Coles, "The Shareholder Wealth Implications of Corporate Lawsuits," *Financial Management* 27, No. 4 (1998), p. 6.
- ⁵⁸ U.S. Department of Justice, Bureau of Justice Statistics, Civil Justice Survey of State Courts, 2001, http://webapp. icpsr.umich.edu/cocoon/ICPSR-STUDY/03957.xml.
- ⁵⁹ A more refined estimate of the percentage of tort filings against publicly traded companies was not available. The data sources that allowed us to determine the number of annual tort filings did not distinguish between those filed against publicly traded companies and those filed against closely held companies. Though we attempted to determine the percentage of corporations that are publicly traded in order to have a more precise number, we were unable to retrieve this statistic and have serious doubts that it exists. We checked numerous data sets within the Inter-University Consortium for Political and Social Research (ICPSR), including several data sets on changes in U.S. businesses and jobs, but were unable to find one that contained information that would assist us. Also, reference librarians at the Boalt Hall School of Law library and the Haas School of Business library at the University of California at Berkeley were unable to find data that would assist us in refining our estimate.
- ⁶⁰ Applying a discount rate of 5.2 percent to \$684 billion yields \$13.2 trillion. See Chapter 3 for a description of the formula.
- ⁶¹ Joseph E. Stiglitz, Jonathan M. Orszag, and Peter R. Orszag, *The Impact of Asbestos Liabilities on Workers in Bankrupt Firms* (Washington, D.C.: Sebago Associates, commissioned by the American Insurance Association, 2002), p. 40.
- ⁶² Ibid.
- ⁶³ Tillinghast-Towers Perrin, U.S. Tort Costs and Cross-Border Perspectives, p. 7.
- ⁶⁴ Multiplying \$3,333.33 by 60,000 displaced workers equals the \$200-million total cost of job displacements.
- ⁶⁵ Sixty thousand job displacements divided by five years equals 12,000 displaced workers per year. Multiplying the 12,000 displaced workers by \$3,333.33 per worker equals the \$40-million annual cost of job displacements.
- ⁶⁶ Henry Farber, "Job Loss in the United States, 1981–1999," *Princeton University Industrial Relations Working Paper* No. 453 (June 2001).
- ⁶⁷ Dallas Salisbury, testimony before the U.S. Senate Committee on Health, Education, Labor, and Pensions, February 7, 2002.
- ⁶⁸ The estimates are based on age, earnings, tax rates, real rates of return, and real-wage-growth assumptions constructed by the Office of the Chief Actuary at the Social Security Administration.
- ⁶⁹ A 55-year-old worker loses less than a 45-year-old worker because there is less time for the assets to accrue interest.

CONTRIBUTORS

Dr. Lawrence J. McQuillan is director of Business and Economic Studies and senior fellow in Political Economy at PRI, based in San Francisco, California. *Human Events* magazine describes him as a "distinguished conservative leader" in public policy.

Since joining PRI in 2001, Dr. McQuillan has specialized in tax, budget, and regulation issues with an emphasis on California. He created the quarterly *California Golden Fleece Awards*, exposing fraud and abuse in state government, cited in *The Nation* and the *Los Angeles Times*. These awards led to the overhaul of the California Victim Compensation Program, helped reform California's workers' compensation system, and stopped direct taxpayer funding of the Institute for Labor and Employment at the University of California.

Dr. McQuillan is co-author of the U.S. Economic Freedom Index: 2004 Report. Featured in editorials in the Wall Street Journal and Investor's Business Daily, and recommended by CNBC's Lawrence Kudlow, this report ranks the 50 states according to how friendly or unfriendly their state-government policies are toward free enterprise and consumer choice. Dr. McQuillan is also co-author of the U.S. Tort Liability Index: 2006 Report, which ranks the states on their relative tort burdens and reforms.

From 1998 until 2001, Dr. McQuillan was a research fellow at the Hoover Institution, Stanford University, where he specialized in international economics and the International Monetary Fund. He edited *The International Monetary Fund — Financial Medic to the World?* and wrote *The Case against the International Monetary Fund*, which Nobel laureate Milton Friedman reviewed as "excellent."

From 1993 until 1997, Dr. McQuillan was the founding publisher and contributing editor of *Economic Issues*, a national subscription newsletter based in Chapel Hill, North Carolina, that reviewed economic journal articles relevant to current public-policy issues.

Dr. McQuillan has been published in Forbes, the Wall Street Journal, USA Today, Los Angeles Times, Investor's Business Daily, Human Events, New York Post, Washington Times, Weekly Standard, Encyclopaedia Britannica, Sacramento Bee, San Francisco Chronicle, San Diego Union-Tribune, San Francisco Business Times, Orange County Register, California Journal, and La Opinión, and is a regular contributor to National Review Online. He has written on such topics as tax and spending limits, outsourcing, labor unions, public-sector pensions, economic freedom, and legal reform. His recent writings include "Fixing California's Broken Workers' Compensation System," "Limiting State Taxes and Spending," and "Live Free or Move."

Dr. McQuillan has appeared on NBC news and CNNfn, is a frequent guest on radio talk shows including the *Lars Larson Show* and the *Ron Insana Show*, and speaks regularly to civic and policy groups and to the print media. He has counseled governors and legislators, the Bush administration on economic freedom and the war on terror, and was a member of Governor Arnold Schwarzenegger's task force on a constitutional spending limit for California.

While in graduate school at George Mason University in Fairfax, Virginia, where he earned a doctorate in economics, Dr. McQuillan was a research assistant for Nobel laureate James M. Buchanan and received the H. B. Earhart Fellowship for research excellence. Dr. McQuillan received a bachelor's degree in economics and business administration from Trinity University in San Antonio, Texas.

Hovannes Abramyan is a public policy fellow in Business and Economic Studies at PRI. He is co-author of the U.S. Tort Liability Index: 2006 Report, which ranks the states on their relative tort burdens and reforms. His earlier work has included investigation of the U.S. immigration system, contemporary immigrant assimilation, and academic freedom in higher education. He has provided commentary for television and nationally syndicated radio talk shows, and has contributed opinion pieces for the Wall Street Journal, Human Events, Investor's Business Daily, New York Post, and other publications.

Mr. Abramyan earned a bachelor's degree in political science from the University of California at Berkeley, graduating with honors distinction. His senior thesis, *Structuring America:* An Outlook on America's Newcomers, examined the varying conditions of American immigration and their relative ability to predict economic, political, and educational integration and cultural assimilation.

Anthony P. Archie is a public policy fellow in Business and Economic Studies at PRI. He is a co-author of *Pension Intervention: Reforming California's Public Employee Retirement Systems*, a comprehensive study of California's outdated and costly pension systems, and *California 2005: Reform Agenda*, a free-market policy guide for California state legislators.

Mr. Archie is also author of *The Spirit of 76: Will Proposition 76 End California's Spending Spiral?*, a limited-government assessment of California's recent expenditure limitation initiative.

Mr. Archie has written many opinion editorials on federal and California policy issues, featured in such publications as the Los Angeles Daily News, Orange County Register, California

Policy Review, San Francisco Examiner, and *Silicon Valley Business Journal*. He has appeared on the FOX News Channel's *FOX Report with Shepard Smith*, KABC News in Los Angeles, and KGO News in San Francisco.

Mr. Archie holds a master's degree in public policy from Pepperdine University, specializing in economics and state/local policy. As part of his graduate work, he co-authored *Crisis in California: Reforming Workers' Compensation*, a proposal that drew praise from an esteemed panel of scholars and policy advisers. Mr. Archie also received a bachelor's degree in economics and political science from Pepperdine University.

Jeffrey A. Johnson was a Charles G. Koch 2006 summer fellow in free-market policy research at PRI. He is currently pursuing a master's degree in economics at Claremont Graduate University in Claremont, California. His studies emphasize applied econometric analysis, international finance, and market-based organization. Mr. Johnson earned a bachelor's degree in economics from Brigham Young University in Provo, Utah.

Anna Erokhina was an intern in Business and Economic Studies at PRI in 2006. She is an undergraduate student at the University of California at Berkeley, majoring in political economies of industrialized societies. Before joining PRI, Ms. Erokhina worked at the Hoover Institution at Stanford University, with an emphasis in foreign policy.

ABOUT PRI

PRI champions freedom, opportunity, and personal responsibility by advancing free-market policy solutions. It provides practical solutions for the policy issues that impact the daily lives of all Americans, and demonstrates why the free market is more effective than the government at providing the important results we all seek: good schools, quality health care, a clean environment, and economic growth.

Founded in 1979 and based in San Francisco, PRI is a nonprofit, nonpartisan organization supported by private contributions. Its activities include publications, public events, media commentary, community leadership, legislative testimony, and academic outreach.

Education Studies

PRI works to restore to all parents the basic right to choose the best educational opportunities for their children. Through research and grassroots outreach, PRI promotes parental choice in education, high academic standards, teacher quality, charter schools, and school-finance reform.

Business and Economic Studies

PRI shows how the entrepreneurial spirit — the engine of economic growth and opportunity — is stifled by onerous taxes, regulations, and litigation. It advances policy reforms that promote a robust economy, consumer choice, and innovation.

Health Care Studies

PRI proposes market-based reforms that would improve affordability, access, quality, and consumer choice. PRI also demonstrates why a single-payer, Canadian model would be detrimental to the health care of all Americans.

Technology Studies

PRI advances policies to defend individual liberty, foster high-tech growth and innovation, and limit regulation.

Environmental Studies

PRI reveals the dramatic and long-term trend toward a cleaner, healthier environment. It also examines and promotes the essential ingredients for abundant resources and environmental quality: property rights, markets, local action, and private initiative.

PRAISE FOR JACKPOT JUSTICE

The Pacific Research Institute has demonstrated once again the very real costs that America's perverse system of "jackpot justice" imposes on our economy. Manufacturers have to factor in potential litigation costs when making investment decisions or determining where to site facilities. (Mississippi, for example, competed successfully to become home to a new Toyota plant only after undertaking aggressive tort reform.) The excesses of our civil litigation system, detailed so rigorously by PRI, means those decisions are made with less attention toward keeping America's competitive edge — and that's a recipe for a second-class status in the global economy.

John Engler

President and CEO of the National Association of Manufacturers and former Governor of Michigan

Until now, no study has attempted to quantify the total cost of tort litigation in our country. PRI's ground-breaking report offers the fullest accounting to date of the tort burden on our economy, businesses, and families. At a price tag of nearly \$10,000 for a family of four, we can now begin to fully recognize its tremendous burden on the American people.

Bill Simon

Co-chairman, William E. Simon & Sons, LLC

Predatory lawsuits have become a multibillion-dollar-a-year industry. The litigation process in this country is broken and being taken advantage of by opportunistic personal injury lawyers. This report, *Jackpot Justice*, is an important tool in restoring common sense to a legal system run amok because it exposes the hidden damages to our economy brought on by these massive, unwarranted lawsuits and rash judgments.

Renee Giachino

Corporate Counsel and Senior Vice President Center for Individual Freedom

Jackpot Justice shows the debilitating annual costs of tort litigation on, among other things, America's health-care system and patient access to quality care. This report finally proves beyond any argument that lawsuit abuse has a long-term deteriorating influence on every facet of a community's life, be it medical, social, economic, or family value.

Nora Truscello Politically Active Physicians Association

The Pacific Research Institute has compiled a comprehensive review of the total costs of the U.S. tort system. The authors of *Jackpot Justice* found that we spend an astounding \$865 billion each year on our current tort system. By analyzing the total tort cost, including its dynamic, compensatory, and static components, PRI has provided a clear insight into the massive inefficiencies in our current tort system. This should be required reading for every policymaker who believes that a "tort tax" of almost \$10,000 a year on every American family is cause for concern. Combined with its *U.S. Tort Liability Index: 2006 Report*, PRI has taken the lead in exposing the tragic flaws in our current tort system.

Arthur B. Laffer, Ph.D.

Founder and Chairman, Laffer Associates and Member of President Reagan's Economic Policy Advisory Board

An eye-opening exposé of the true costs — direct and indirect — of the corrosive, extensive abuses, and misuses of the American tort liability system.

Steve Forbes

