

Data Watch

Tort-uring the Data

Eric Helland, Jonathan Klick and
Alexander Tabarrok

This section will offer a description of data sources that may be of interest to economists. The purpose is to describe what data are available from those sources, what questions can be addressed because of the unique features of the data and how an interested reader can gain access to the data. Suggestions for data sources that might be discussed here (or comments on past columns) can be sent to Katharine G. Abraham, c/o Data Watch, *Journal of Economic Perspectives*, Joint Program in Survey Methodology, University of Maryland, 1218 Lefrak Hall, College Park, Maryland 20742-8241.

Introduction

Tort reform is hotly debated in Congress, the national media, and academia with those who perceive a “tort crisis” (for example, Huber, 1988; Olson, 1991) jousting with those who argue that such a crisis is only a myth (Jost, 1992; Galanter, 1996). Expenditures on the tort system are substantial, about \$250 billion a year, and some estimates suggest that indirect costs through “defensive medicine” and other responses to the threat of lawsuits are even more costly (Tillinghast-Towers Perrin, 2003; Kessler and McClellan, 1996). Attempts to illuminate these issues with systematic analysis of tort data can be frustrating. We know very little about the

■ *Eric Helland is Associate Professor of Economics, Claremont-McKenna College, Claremont, California. Jonathan Klick is Assistant Professor, College of Law, Florida State University, Tallahassee, Florida. Alexander Tabarrok is Associate Professor of Economics, George Mason University, Fairfax, Virginia. Names are in alphabetical order. Their e-mail addresses are <eric_helland@mckenna.edu>, <jklick@law.fsu.edu> and <Tabarrok@gmu.edu>, respectively.*

number of incidents that give rise to torts (auto accidents excepted). We know something about cases that are filed, but very little about the cases that are dropped and very little about cases that are settled. We have reasonable information on trials, but trials are not a random sample of cases and so inferences from trial data must be drawn with caution. Most of the data on torts has not been collected for research purposes and so analysis often requires cobbling together information from several incomplete sources.

This article will discuss data available for researchers interested in the U.S. civil justice system and will illustrate the uses of the various datasets with some interesting findings. Our focus is on torts, defined as an injury to person or property that is not covered by contract and for which civil liability may be imposed. The most common tort is the result of an auto accident. We discuss data useful for analyzing trends, data that are useful for cross-sectional research and finally data covering only a specific type of civil litigation such as medical malpractice. Table 1 summarizes the major data sets we discuss. We conclude by discussing the limitations of all civil litigation data.

Data Sets for Research on Trends

One fundamental question is whether tort awards are rising. Figure 1 graphs raw data on the mean trial award (winning cases only) by year from two of the longest data sets on tort awards, one using federal data and one using state data. Tort awards in both series are in year 2000 dollars. The state awards are graphed against the left axis and the federal awards, which on average are about 2.5 times as large, against the right axis. Both series show a dramatic increase in mean awards in the 1980s. From 1980 to 1990, the mean inflation-adjusted award increased by an average of 8.2 percent a year in the state data and 17.4 percent a year in the federal data.

At least at first glance, the timing of this increase challenges some conventional wisdom. The roots of the “tort crisis” have traditionally been traced to the 1960s and 1970s, when tort law shifted from a standard where damages were only owed after negligence was proven to “strict liability,” where no proof of negligence was needed (Priest, 1991; Henderson and Eisenberg, 1988). If this change in tort law caused the increase in tort awards, one needs to explain why the impact of the change waited until the mid-1980s.

The Federal data in Figure 1 is from the largest data set in this field. It is assembled by the Administrative Office of the U.S. Courts and contains information on every case filed since 1970 in federal district court and every appeal filed since 1970 in the twelve nonspecialized federal appellate courts. There are millions of cases in these files, including patent, antitrust and inmate cases as well as tort cases. The data are easily available at the website of the Inter-University Consortium for Political and Social Research at <http://www.icpsr.umich.edu/>. Some variable definitions have changed over time; therefore it is important to consult the extensive codebooks especially that associated with ICPSR 8429. In Figure 1, we focus on personal injury cases such as product liability, medical malpractice, premises lia-

Table 1
Summary Information for Litigation Data Sets

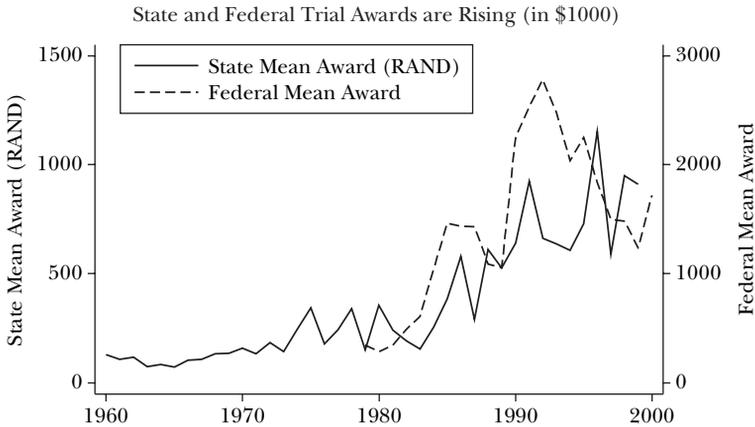
<i>Name</i>	<i>Location</i>	<i>Stages of litigation covered</i>	<i>Coverage and update frequency</i>	<i>Comments</i>
Federal Court Cases (Federal Data)	ICPSR 8429, 3415, 4026	Filed cases through appeals although settlement amounts are not generally included	1970–2000, 2001, 2003, annual data	Spotty during first decade especially for awards. See Eisenberg and Schlanger (2003) for a useful description and references.
RAND Data	ICPSR 6232	Only disputes that result in trials	1960–1985 from Cook County and all California Counties, annual data	Public version of a longer dataset put together by RAND and discussed in Seabury, Pace and Reville (2004).
Jury Verdicts Research (or other court reporters)	(http://www.juryverdictresearch.com/). A similar data set is on Westlaw, (LRPJV).	One sample of disputes that result in trials and a second sample of settled cases.	1988–present, updated annually or monthly	\$1,000 and not easy to import into database format. Similar dataset available on Westlaw in Jury Verdict and Settlement Summaries (LRPJV).
The Civil Justice Survey of State Courts	ICPSR 6587, 2883, 3957	In 1992 two samples one including settled cases (but not amounts) the other trials. Post 1992 trials only	1992, 1996, 2001, updated roughly every four years	Professional Random sample. Does not cover all states. Useful description in a series of BJS publications.
National Center for State Courts, State Court Statistics	ICPSR 9266	Contains a count of filings	1985–2003, annual data	Provides a count of filing and limited information on disposition.
Florida Closed Claims Medical Malpractice	Florida, Department of Financial Services, Document Processing Section, Tel. 850-413-2633	All disputes including some information on appealed cases	1975–present, updated as new cases are added	\$150. More variables after 1985. New format after mid-July 1999.
The National Practitioner Data Bank Public Use File	U.S. Department of Health and Human Services, (http://www.npdb-ipdb.com/publicdata.html)	Only cases with payments are included; most are settled, but some trial judgments also.	1990–present, updated quarterly	Also contains information on adverse actions such as revocation of license, DEA actions, exclusion from Medicare (since 1999), etc.
Insurance Research Council Auto Injury Claims	(http://www.ircweb.org/IRCPProducts/Databases.htm)	A sample of disputes involving auto insurance claims.	1977, 1987, 1992, 1997, 2002, updated irregularly	The data set is expensive, \$15,000 per survey.

bility and injuries resulting from auto accidents, which are the types of cases that are the focus of current tort reform efforts.

The “Federal data set,” as we will call it, has some shortcomings. Information from the 1970s is spotty. In many years the information on awards is clearly incorrect; for example, award amounts are coded in \$1,000s and every award in 1972 in our subset of cases is coded 1. Indeed, until fiscal 1979, the data do not even indicate whether the plaintiff or defendant won the case.

The Federal data set also has some peculiar conventions left over from an earlier age of expensive data storage. Award amounts have a top code of 9999—that

Figure 1

State and Federal Trial Awards are Rising*(awards expressed in thousands of year 2000 dollars)*

is, an award of \$9,999,000. Over time, inflation and the growth in tort awards have pushed more cases against the upper constraint. Adding confusion to the matter, repeated 9s are used elsewhere in the Federal data as special codes, thus raising the possibility that 9999 may not mean an award of \$10 million or higher. Award information in the Federal data can be compared with docket information available under the auspices of PACER, the federal judiciary's *Public Access to Court Electronic Records* project. PACER data may be more accurate than the Federal data set, but it is in narrative form and only available on a case-by-case basis. Eisenberg and Schlanger (2003) laboriously examined a sample of PACER cases and concluded that the 9999 award codes are often inaccurate. They suggest cross-checking these top-coded awards against PACER.

If coding errors do not vary systematically across time or space, however, then studies that look at changes in trial awards across time or space can be informative even if sample means differ from population means. Researchers should consult Eisenberg and Schlanger (2003), in any case, before using the Federal data as they provide useful background material and practical advice.

Finally, the Federal data are designed and collected to help with court administration, not to conduct research on tort reform. As a result, variables relating to case type and process appear to be more accurately coded than outcome variables. For example, the Federal data set contains extensive information on where and when the case was filed, the nature of the case and case disposition. If you want to track the number of cases filed under the Clean Air Act, or Habeas Corpus, or the Twenty-Eight Hour Law of 1877, the Federal data will let you do that—see, for example, Schlanger (2003) on inmate litigation, Galanter (2001) on contracts and Dunworth and Rogers (1996) on corporate litigation. Aside from more descriptive studies, economists have used the Federal data to test theories of how selection determines a relationship between trial rates and win rates (Waldfogel, 1995), how

repeated play enhances the development of reputation (Johnston and Waldfogel, 2002) and how the bargaining environment affects the nature and timing of out-of-court settlements (Fournier and Zuehlke 1989, 1996)—to give just three examples.

Federal court cases are not a representative sample of civil justice in the United States. In 2002, for example, 254,000 cases were filed in the U.S. District Courts. Meanwhile, 96.2 million cases were filed in the state courts; approximately 16 million of these were civil cases and 700,000 were tort cases (Ostrom, Kauder and LaFountain, 2003). Federal courts deal with a different range of cases than the state courts, different law often applies, procedural rules are different, juries are drawn from different pools and federal judges are appointed for life—unlike state court judges who often are elected (Helland and Tabarrok, 2002).

None of the state court data sets approach the comprehensiveness of the Federal data. The longest time series was put together by researchers at the RAND Institute for Civil Justice (Seabury, Pace and Reville, 2004). The RAND data cover 1960–1999, but come from only two counties, San Francisco County, California, and Cook County, Illinois. In addition, this data set is available at the current time only to RAND researchers. A shorter data set covering 1960–1984 but including all California counties for 1980–1984, is available at the ICPSR website (Dunworth and Pace, 1994; ICPSR 6232).

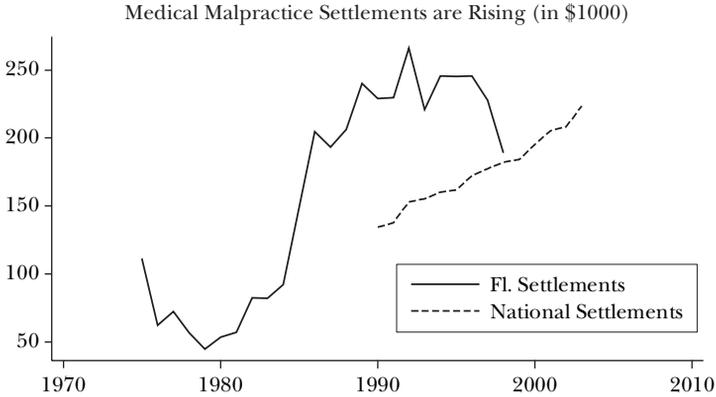
The RAND data set is a coding of data originally collected in more narrative form by jury verdict reporters. Jury verdict reporters are private publications/databases that collect information on case characteristics for sale to lawyers and litigants.¹ The quality of verdict reporters varies. Some merely collate information from legal newspapers, others collect data directly from court documents, and some also survey lawyers—which allows collecting some data on cases settled out of court. RAND uses two of the larger and better-quality verdict reporters, whose procedure is to identify all disputes reaching verdict from public records and then to contact the attorneys involved for further information which is reconciled and cross-verified (Peterson and Priest, 1982; Moller, Pace and Carroll, 1999). Historically, these reporters have high reliability and cover 80 to nearly 100 percent of the total population of cases (Peterson and Priest, 1982).

All trial data, whether federal or state, must be treated with some caution because most cases settle, so trial awards represent a selected subset of all cases originally filed. Furthermore, the bases of selection change over time. The number of filings, for example, increased dramatically in the 1980s before declining again in the 1990s (National Center for State Courts, 2001), and at the same time, the number of trials has been declining (Galanter, 2004; Hadfield, 2004).² Numerous econometric methods exist for dealing with this sample selection problem, but all

¹ For two early uses of verdict reporter data, see Wittman (1986) and White (1989).

² The National Center for State Courts produces a data set, “State Court Statistics,” which it uses in two annual publications: “State Court Caseload Statistics” and “Examining the Work of State Courts.” The data are available for 16 states from 1975 to the present and for a larger sample in more recent years—but they contain little information on case disposition.

Figure 2

Medical Malpractice Settlements are Rising*(settlements expressed in thousands of year 2000 dollars)*

Source: The Florida series is from The Florida Department of Financial Services Closed Claims File. The national series is single payment settlements from the National Practitioner Data Bank.

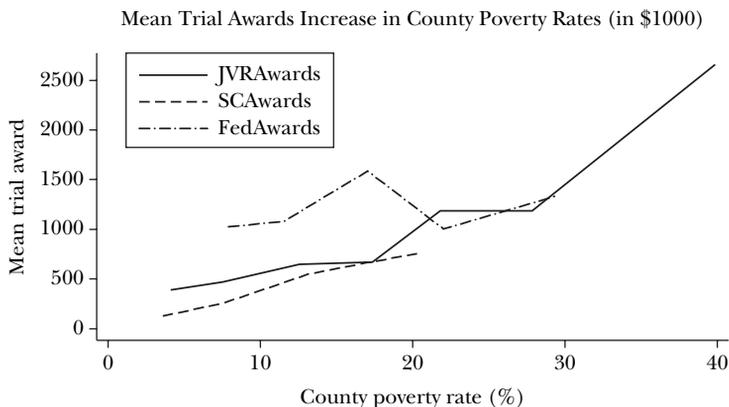
require data on various stages of litigation (for example, Priest and Klein, 1984; Eisenberg, 1990; Waldfogel, 1995; Farber and White, 1994). Kessler and Rubinfeld (2004) survey empirical studies of litigation.

In one type of case, however, good settlement data do exist. Insurance firms have been required to report information on settlements in medical malpractice cases in Florida since 1975 and nationally since 1990. Figure 2 shows that medical malpractice settlements increased from about \$75,000 in 1980 to more than \$250,000 in 1990 (both figures in 2000 dollars), with a mild decline in the late 1990s. At the national level, awards also increased during the 1990s, by approximately 40 percent. We emphasize that Figure 2 shows settlements, not trial awards, and is not therefore subject to the argument that higher trial awards are due to a changing selection of what cases go to trial. We discuss medical malpractice data sets at greater length below.

Data Sets for Cross-Sectional Research

There are three especially useful sources for cross-sectional research on tort cases: 1) the Federal data set (already discussed); 2) Jury Verdict Research (JVR); and 3) the Civil Justice Survey of State Courts, 1992, 1996, 2001 (State Court). Helland and Tabarrok (2003a) use all three of these data sets to examine the “Bronx effect,” a term coined by Tom Wolfe who, in the *Bonfire of the Vanities*, describes a plaintiffs’ lawyer who files malpractice claims in the poor, minority dominated community of the Bronx, stating: “The Bronx jury is a vehicle for redistributing the wealth.” Figure 3 graphs mean tort awards by county circa 1990 against 1990 county poverty rates (exact years vary by dataset). Tort awards increase

Figure 3

Mean Trial Awards Increase in County Poverty Rates*(awards expressed in thousands of dollars)*

Source: Helland and Tabarrok (2003).

dramatically in the JVR and State Court databases, rising from about \$500,000 in a county with a poverty rate of less than 10 percent to over \$2 million in a county with a greater than 30 percent poverty rate. The correlation is not so clear in the Federal data set, although further analysis suggests a correlation is present (Helland and Tabarrok, 2003a).

A few facts about these data sets can be inferred from Figure 3. The JVR data set covers the most counties and, thus, has the greatest cross-sectional variation in poverty rates. The variation in the state court data is much less, but over the comparable range, the change in tort awards with respect to poverty is similar to the JVR data. Although the Federal data cover the nation, the county-level variation in the Federal data is not as large, because federal courts draw juries from “trial units,” which are larger areas than counties. Thus, in a cross-sectional analysis using the Federal data set, other demographic data like the poverty rate must also be aggregated up from counties, a quite complex process that diminishes some of the variation (for details, see Helland and Tabarrok, 2003a; Eisenberg and Wells, 2002).

Jury Verdict Research’s Personal Injury Verdicts and Settlements on CD-ROM is a composition of regional verdict reporters containing information on over 200,000 trials, settlements and arbitrations beginning around 1988. The data used in Figure 3 end in 1997, but current versions extend the data through the present. The JVR data contain information on cases drawn from every state and covering a wide variety of personal injury cases. In addition to basic information about awards, the JVR data include information on the plaintiff’s injuries, age, gender, lawyers involved, expert witnesses, date of the injury, trial or settlement and the outcome of the case.

As a research tool, the Jury Verdict Research data set suffers two main defects. First, as with any data based on verdict reporters, the data collection methods are

not well documented and may vary in nonrandom ways across regions. A recent comparison of 42 jury verdict reporters and the Civil Justice Survey of State Courts (discussed below) found wide variation in the comprehensiveness of the court reporters. On average, about half of the cases in the State court data were in the jury verdict reporter from the relevant county. However, some areas had significantly lower percentages, while in other jurisdictions the reporters were even more comprehensive than the Civil Justice Survey, which is designed to capture all cases. Also, the distribution of jury verdict reporters is skewed toward larger awards, although the size of the skew varies greatly by jurisdiction.³

Second, the Jury Verdict Research data set is expensive, currently \$1,000, and it does not come in an easily accessible format. In keeping with the purposes for which the verdict reporter data are collected, it does not come in database format, but rather with a front end designed to help lawyers who want to assess the value of their particular case. Researchers who want information on the universe of cases will find that exporting the relevant data requires considerable effort. A very similar data set can be accessed more easily through Westlaw (Jury Verdict and Settlement Summaries Westlaw database Identifier: LRP-JV).

The Civil Justice Survey of State Courts provides one of the few data sets in this field to be created by and for professional researchers. It is a product of the Bureau of Justice Statistics of the U.S. Department of Justice and the National Center for State Courts, an independent nonprofit organization. The data sets are slightly broader than the Jury Verdict Research data: They cover tort, contract and real property trials. The data cover one year of trials (not necessarily a calendar year) drawn from 45 counties (46 in 2001) chosen to represent the 75 most populous counties in the nation, which account for about half of all civil filings. Each survey covers about 6,500 jury trials. In the larger counties, the data are a random sample capturing a high proportion of all trials; in other countries, the data cover all trials completed in that county in that time period. Data collected in all survey years include the type of case, the type of litigants, compensatory and punitive damages awarded and various measures of case processing time.

The Civil Justice Surveys are becoming more useful as more dates and variables are added. The 1996 and 2001 surveys add information on the plaintiff's injuries in medical malpractice and product liability trials and include about 2000 judge trials in addition to jury trials. New variables in 2001 follow cases for 18 months after an initial verdict has been granted—for example, indicating whether a new trial was requested and granted and whether the award was reduced or increased by the judge. A future release will track cases even further through the appeals process.

The 1992 Civil Justice Survey is more extensive than its successors in one respect. The 1992 sample consists of two parts, the Civil Jury Trial Cases Data—which is the survey extended in 1996 and 2001—and a larger sample of 30,000 cases called the Tort, Contract, and Real Property Rights Data. The latter does not contain information on awards, but it does have information on cases that are

³ Paula L. Hannaford-Agor, National Center for State Courts, personal correspondence.

settled or disposed of prior to trial. The latter sample could be used, for example, to compare the proportion of medical malpractice that settle with the proportion of auto cases that settle.

A limitation of the Civil Justice Survey data is that because it was constructed to examine large urban counties, it covers only 21–22 states (depending on year). For example, Alabama is not covered, even though it has a reputation for large tort settlements. Another limitation is that cell-sizes can become small when you drill down into the data. In 2001, for example, Florida had only 14 medical malpractice cases with positive awards. The Jury Verdict Research data cover more states and is often more extensive, if only because one can draw upon data in adjoining years.⁴

One research topic using these data is to compare whether judges or juries tend to award higher punitive damages. The raw data suggest that juries give much higher awards than judges, as Eisenberg, LaFountain, Ostrom, Rottman and Wells (2002) find using the 1996 Civil Justice Survey and Helland and Tabarrok (2002) find with the Jury Verdict Research data. However, since either party to a dispute usually has the right to request a jury trial, judge trials are highly selected. Controlling for type of case reduces the differences significantly; indeed, Eisenberg et al. conclude that after controlling for type of case, no significant differences exist in the awarding of punitive damages (compare with Hersch and Viscusi, 2004). In part, this finding is a result of the paucity of punitive damages in the data set. The 1996 sample includes only 121 punitive damage awards by juries and 55 by judges. But this sample is a significant fraction of the actual population, so the uncertainty is a true reflection of what there is to know and not simply a result of small sample size.

Data Sets on Specific Types of Civil Action

Most of the data sets on specific types of civil action deal with medical malpractice, although limited data are also available on auto accidents, product liability and certain other specific areas.⁵

Medical malpractice awards and insurance premiums increased greatly in the 1960s and early 1970s, resulting in a wave of legislation aimed at limiting awards in medical malpractice suits (Danzon, 2000). California's Medical Injury Compensation Reform Act of 1975 (MICRA), for example, capped non-economic damages

⁴ Some other limitations of the data could potentially limit its usefulness for certain studies. For example the data do not cover nongeneral civil trials—that is, those not covering torts, contract or personal property—and it does not contain cases from limited jurisdiction courts.

⁵ Some verdict reporters focus on specific types of cases. Securities Class Action Alert, for example, contains data on shareholder litigation. White (2003) uses *Andrew's Asbestos Litigation Reporter* and *Mealey's Litigation Reporter: Asbestos* to examine asbestos litigation. Eisenberg and Miller (2004) use *CCH™ Federal Securities and Trade Regulation Reporters* to examine attorney fees in class action litigation.

A number of jurisdictions let individuals purchase copies of their in-house data sets. As one example, it is possible to purchase several years of trial data, with reasonably detailed information on trial outcomes, from the Alabama courts. The data do not contain information on settlements.

(like damages assessed for pain and suffering or loss of consortium) at \$250,000, required disclosure to the jury of collateral sources of payment and put restrictions on contingency fees. For an evaluation of some of these reforms, see Danzon and Lillard (1983) and Danzon (1986). President George W. Bush and others have sought to pass national reforms modeled on MICRA. We discuss two important sources of information on medical malpractice suits.

Since 1975, the state of Florida has required insurance firms to submit data on all closed medical malpractice claims on doctors, dentists, hospitals, health maintenance organizations, abortion clinics, ambulatory surgical centers and crisis stabilization units—as long as they are professionally insured.⁶ (Most doctors are insured, but some of the largest health maintenance organizations self-insure.) The data are sparse for the first decade, but since 1985, the data set has quite good information on the defendant's characteristics (like the physician's specialty, board certification, whether a foreign graduate or not), information on the injured person (like age, sex, injury, preinjury wages) and adjudication information (like where and when the suit was filed, the court decision and the amount paid).

Research using the Florida data includes Sloan et al. (1993), who draw upon the Florida data extensively in a book-length study of medical malpractice. Sieg (2000) shows how some of the data can be simulated in a bargaining model. Helland and Tabarrok (2003b) study decisions to drop cases before and after Florida restricted contingency fees on medical malpractice suits in 1985.

A second useful data set on medical malpractice arose out of the Health Care Quality Improvement Act of 1986. The act was intended to make it more difficult for incompetent physicians and dentists to move from state to state without disclosure of their previous performance. The law requires that malpractice payers, state licensing agencies, hospital review boards, professional societies and other such groups report malpractice payments and adverse actions, such as revocation of licenses, suspension of clinical privileges and so forth, to the National Practitioner Data Bank (NPDB). When hospitals and other organizations hire physicians, they can (and in some cases must) query the NPDB. The NPDB cannot be queried by the public, but a public data file is available that strips out identifying information. Thus, although the purpose of the data bank is to flag potential problems, an unintended consequence has been the creation of a database on medical malpractice payments since 1990.

The vast majority of the payment amounts in the NPDB are settlements, a great improvement over data sets that contain only trials. For example, NPDB data show that medical malpractice payments per doctor vary widely by state, ranging from a low of \$5,174 in Wisconsin to \$30,841 in Pennsylvania. Nationally, about 2.5 percent of doctors make a malpractice payment in any given year and, among these, 75 percent of awards come from 25 percent of cases. Thus, to the extent that a crisis exists in medical malpractice insurance, it is due to a very small fraction of awards in a handful of states.

⁶ Texas has a similar program; see Black et al. (2005).

The NPDP does have some peculiarities. Beginning in February 2004, the data indicate total future payments, but in the past, they sometimes show only the first payment of a series. To preserve confidentiality, awards are not listed to the dollar but instead are grouped: payments between \$1,001 and \$2,000, for example, are coded as \$1,500. Since the NPDB was created to help monitor physicians, if the malpractice suit is against a company and no physician is named in the final settlement, then no report is made to the NPDB—as a result, some strategic gaming can occur to remove physician names from the settlement (GAO, 2000; Hallinan, 2004).

For tort cases involving auto accidents, the Auto Injury Claims data collected by the Insurance Research Council are very useful. The most recent version of these data contains information on over 70,000 closed claims files and provides detailed information on the case, especially with regard to medical costs. The survey has been conducted in 1977, 1987, 1992, 1997 and most recently 2002. Kessler (1995, 1996) estimates the impact of strict liability on case disposition using the Insurance Research Council auto injury claims data. However, the IRC data set is very expensive. Commercial users pay \$30,000 for each survey and even the half-price discount offered to academic researchers is too rich for most academic budgets.

Other insurance company data are sometimes available. Viscusi (1991), for example, uses closed claim data on product liability cases, and Yoon (2001) used a similar set of data on medical malpractice. Although these sorts of data are often not regularly updated, they can often be quite good—in particular, data from insurance companies can also contain information on cases that are never filed. However, acquiring such data requires persistence and luck.

Frontiers of Tort Data Research

In thinking about the coverage and completeness of the tort data discussed in this paper, it is revealing to compare tort data with crime data. Think of a “representative crime” working its way through the system. We have data from the time the crime is committed (National Crime Victimization Survey), through reporting and arrests (the Uniform Crime Reports of the FBI), sentencing (State Court Sentencing of Convicted Felons), imprisonment and time-served (National Corrections Reporting Program), probation (Survey of Adults on Probation) and recidivism (Recidivism of Prisoners Released in 1994). All of these data are professionally gathered and are available with detailed codebooks from the U.S. Department of Justice and the Bureau of Justice Statistics. Moreover, the sources mentioned here represent just a sample of what is available.

By comparison, our knowledge about the “representative tort” is very limited. Data collection in the civil justice system—from the incident, to filing a case, to whether the case is settled or dropped and on to a possible trial outcome—remains far behind that in the criminal justice system. In addition, we know very little about the players in the civil justice system, litigants, lawyers and judges, although Farber

and Eisenberg (1997) offer some work on plaintiffs, while Helland and Tabarrok (2002) present work on judges.

With good data we can start to examine some of the big questions of tort law. The tort system compensates victims and deters harmful events, but how well does it perform these goals and do better alternatives exist? The system is slow and sometimes haphazard in compensating victims; in addition, lawyer fees and other costs push administrative costs in the legal system to more than half of benefits paid to victims (Economic Report of the President, 2004; Hensler et al., 1991). Deterrence requires a clear linkage between those who cause harm and payments, but the Harvard Medical Practice Study (1990) finds that most patients injured by medical negligence do not sue, and most of those who sue and win are not injured by medical negligence. Asbestos tort litigation, to give another example, often bankrupts firms that have only the most attenuated connection with asbestos, also suggesting a weak role for deterrence (Stiglitz, Orszag and Orszag, 2002; White, 2004).

One possible answer to these problems is to abandon tort altogether. For example, Congress created the September 11 Victim Compensation Fund to avoid tort law. Nearly every family of an individual killed in the 9/11 attacks agreed that Congress had chosen wisely, and they participated in the fund, voluntarily giving up their rights in tort. Similar funds have been created for those few children injured by pediatric vaccines, and many states now have no-fault auto insurance. A less radical approach is to try to reform the tort system, perhaps by capping non-economic damages (Congressional Budget Office, 2004), by using judges rather than juries (Helland and Tabarrok, 2000, 2003a), by placing restrictions on contingency fees paid to lawyers (Helland and Tabarrok, 2003b; Danzon, 2000) or by enacting rules to reduce junk science in courtrooms (Foster, Bernstein and Huber, 1993; Bernstein, 2002).

Considerable work remains to be done both in establishing basic facts about the tort system and in understanding the tradeoffs of proposed reforms.

■ *The authors wish to thank Thomas Cohen, Mark Galanter, Daniel Kessler, Scott Pace, Frank Sloan, Timothy Taylor and Michelle White, for helpful comments, and Paula L. Hannaford-Agor of the National Center for State Courts for providing us both comments and preliminary results from her comparison of NCSC and court reporter data, Seth Seabury for sending us summary statistics from the RAND data and Ted Eisenberg for providing some useful code.*

References

- Bernstein, D. E.** 2002. "Improving the Qualifications of Experts in Medical Malpractice Cases." *Law, Probability and Risk*. 1:1, pp. 9–16.
- Black, Bernard S., Charles M. Silver, David A. Hyman and William Matthew Sage.** 2005. "Stability, Not Crisis: Medical Malpractice Claim Outcomes in Texas, 1988–2002." Columbia Law and Economics Research Paper No. 270, March; Available at (<http://ssrn.com/abstract=678601>).
- Congressional Budget Office.** 2004. "The Effects of Tort Reform: Evidence from the States." Available at (<http://www.cbo.gov/showdoc.cfm?index=5549&sequence=0>).
- Danzon, Patricia M.** 1986. "New Evidence On the Frequency and Severity of Medical Malpractice Claims." R-33410-ICJ, RAND Corporation, Santa Monica.
- Danzon, Patricia M.** 2000. "Liability for Medical Malpractice," in *Handbook of Health Economics, Volume 1*. J. Newhouse and A. Culyer. Elsevier, eds. Amsterdam: Elsevier, pp. 1339–404.
- Danzon, Patricia M. and Lee A. Lillard.** 1983. "Settlement Out of Court: The Disposition of Medical Malpractice Claims." *Journal of Legal Studies*. June, 12, pp. 345–77.
- Dunworth, Terence and Nicholas Pace.** 1994. "Jury Verdicts Database for Cook County, Illinois and all counties in California, 1960–1984." ICPSR 6232.
- Economic Report of the President.** 2004. Washington, D.C.: United States Government Printing Office.
- Eisenberg, Theodore.** 1990. "Testing the Selection Effect: A New Theoretical Framework with Empirical Tests." *Journal of Legal Studies*. 19:2, pp. 337–58.
- Eisenberg, Theodore and Henry S. Farber.** 1997. "The Litigious Plaintiff Hypothesis: Case Selection and Resolution." *RAND Journal of Economics*. 28, pp. S92–S112.
- Eisenberg, Theodore and Geoffrey Miller.** 2004. "Attorneys Fees in Class Action Settlements: An Empirical Study." *Journal of Empirical Legal Studies*. 1:1, pp. 27–78.
- Eisenberg, Theodore and Martin T. Wells.** 2002. "Trial Outcomes and Demographics: Is There a Bronx Effect?" *Texas Law Review*. 80, pp. 1839–874.
- Eisenberg, Theodore, Neil LaFountain, Brian Ostrom, David Rottman and Martin T. Wells.** 2002. "Juries, Judges and Punitive Damages: An Empirical Study." *Cornell Law Review*. 87:3, pp. 743–82.
- Farber, Henry S. and Michelle J. White.** 1991. "Medical Malpractice: An Empirical Investigation of the Litigation Process." *RAND Journal of Economics*. 22:2, pp. 199–217.
- Farber, Henry S. and Michelle J. White.** 1994. "A Comparison of Formal and Informal Dispute Resolution in Medical Malpractice." *Journal of Legal Studies*. 23:2, pp. 777–806.
- Fournier, Gary M. and Thomas W. Zuehlke.** 1989. "Litigation and Settlement: An Empirical Approach." *Review of Economics and Statistics*. 71:2, pp. 189–95.
- Foster, Kenneth R., David E. Bernstein and Peter W. Huber.** 1993. *Phantom Risk*. Cambridge, Mass.: MIT Press.
- Galanter, Marc.** 1983. "Reading the Landscape of Disputes: What We Know and Don't Know (and Think We Know) About Our Allegedly Contentious and Litigious Society." *UCLA Law Review*. 31:4, pp. 4–71.
- Galanter, Marc.** 1996. "Real World Torts: An Antidote to Anecdote." *Maryland Law Review*. 55:14, pp. 1093–1160.
- Galanter, Marc.** 2001. "Contract in Court; or Almost Everything You May or May Not Want to Know About Contract Litigation." *Wisconsin Law Review*. 1, pp. 577–627.
- Galanter, Marc.** 2004. "The Vanishing Trial: An Examination of Trials and Related Matters in Federal and State Courts. Journal of Empirical Legal Studies." *Journal of Empirical Legal Studies*. 1:3, pp. 459–570.
- GAO.** 2000. "National Practitioner Data Bank: Major Improvements are Needed to Enhance Data Bank's Reliability." U.S. GAO-01-130.
- Hadfield, Gillian K.** 2004. "Where Have All the Trials Gone?" USC CLEO Research Paper No. C04-12.
- Harvard Medical Practice Study.** 1990. *Patients, Doctors and Lawyers: Medical Injury, Malpractice Litigation, and Patient Compensation in New York*. Cambridge, Mass.: President and Fellows of Harvard College.
- Hallinan, Joseph T.** 2004. "Attempt to Track Malpractice Cases is Often Thwarted." *Wall Street Journal*. August 27, pp. A1, A6.
- Helland, Eric and Alexander Tabarrok.** 2000. "Runaway Judges? Selection Effects and the Jury." *Journal of Economics, Law and Organization*. 16:2, pp. 306–33.
- Helland, Eric and Alexander Tabarrok.** 2002. "The Effect of Electoral Institutions on Tort Awards." *American Law and Economics Review*. 4:2, pp. 341–70.
- Helland, Eric and Alexander Tabarrok.** 2003a. "Race, Poverty, and American Tort Awards: Evidence from Three Datasets." *Journal of Legal Studies*. 32:2, pp. 27–58.

- Helland, Eric and Alexander Tabarrok.** 2003b. "Contingency Fees, Settlement Delay and Low-Quality Litigation: Empirical Evidence from Two Datasets." *Journal of Law, Economics and Organization*. 19:2, pp. 517–42.
- Hensler, Deborah R. et al.** 1991. *Compensation for Accidental Injuries in the United States*. Santa Monica: RAND.
- Hersch, Joni and W. Kip Viscussi.** 2004. "Punitive Damages: How Judges and Juries Perform." *Journal of Legal Studies*. 33:1, pp. 1–36.
- Huber, Peter W.** 1988. *Liability*. New York: Basic Books.
- Johnston, Jason Scott and Joel Waldfoegel.** 2002. "Does Repeat Play Elicit Cooperation? Evidence from Federal Civil Litigation." *Journal of Legal Studies*. 31:1, pp. 39–60.
- Jost, Kenneth.** 1992. "Tampering With Evidence: The Liability and Competitiveness Myth." *American Bar Association Journal*. April, 78, pp. 44–50.
- Karpoff, J. M. and J. R. J. Lott.** 1999. "On the Determinants and Importance of Punitive Awards." *Journal of Law and Economics*. 42:1, pp. 527–73.
- Kessler, Daniel.** 1995. "Fault, Settlement, and Negligence Law." *RAND Journal of Economics*. 26:2, pp. 296–313.
- Kessler, Daniel.** 1996. "Institutional Causes of Delay in the Settlement of Legal Disputes." *Journal of Law, Economics, and Organization*. 12:2, pp. 432–60.
- Kessler, Daniel and Daniel Rubinfeld.** 2004. "Empirical Study of the Civil Justice System," in *Handbook of Law and Economics*. A. Mitchell Polinsky and Steven Shavell, eds. North Holland.
- Moller, Erik K., Nicholas M. Pace and Stephen J. Carroll.** 1999. "Punitive Damages in Financial Injury Jury Verdicts." *Journal of Legal Studies*. 28:2, pp. 283–340.
- National Center for State Courts.** 2001. "State Court Statistics, 1995–2001." Computer File, ICPSR 9266.
- Olson, Walter K.** 1991. *The Litigation Explosion: What Happened When America Unleashed the Law-suit*. New York: Truman Talley Books
- Ostrom, Brian, Neal Kauder, Robert LaFountain, Richard Y. Schauffler and Shauna M. Strickland.** 2004. *Examining the Work of State Courts, 2003: A National Perspective from the Court Statistics Project*. Williamsburg, VA: National Center for State Courts.
- Priest, George L.** 1991. "The Modern Expansion of Tort Liability: Its Source, its Effect, and its Reform." *Journal of Economic Perspectives*. 5:3, pp. 31–50.
- Priest, George and Benjamin Klein.** 1984. "The Selection of Disputes for Litigation." *Journal of Legal Studies*. 13:1, pp. 1–56.
- Sieg, Holger.** 2000. "Estimating a Bargaining Model With Asymmetric Information: Evidence from Medical Malpractice Disputes." *Journal of Political Economy*. 108:5, pp. 1006–021.
- Simpson, Ruth.** 2003. "Extinguishing the Fuse on the 'Litigation Explosion' Myth." *Wisconsin Law Journal*. May 21; Available at: (<http://www.wislawjournal.com/archive/2003/0521/watl-05-21.html>).
- Sloan, Frank A. et al.** 1993. *Suing for Medical Malpractice*. Chicago: University of Chicago Press.
- Stiglitz, Joseph E., Jonathan M. Orszag and Peter R. Orszag.** 2002. "The Impact of Asbestos Liabilities on Workers in Bankrupt Firms." Report, Sebago Associates, December.
- Tillinghast-Towers Perrin.** 2003. "US Tort Costs: 2002 Update, Trends and Findings on the Costs of the US Court System."
- Waldfoegel, Joel.** 1995. "The Selection Hypothesis and the Relationship Between Trial and Plaintiff Victory." *Journal of Political Economy*. 103:2, pp. 229–60.
- White, Michelle J.** 1989. "An Empirical Test of the Comparative and Contributory Negligence Rules in Accident Law." *RAND Journal of Economics*. 20: 3, pp. 308–30.
- White, Michelle J.** 2004. "Asbestos and the Future of Mass Torts." *Journal of Economic Perspectives*. 18:2, pp. 183–204.
- White, Michelle J.** 2003. "Explaining the Flood of Asbestos Litigation: Consolidation, Bifurcation, and Bouquet Trials." NBER Working Paper Series No. W9362.
- Wittman, Donald.** 1986. "The Price of Negligence Under Differing Liability Rules." *Journal of Law and Economics*. 29:1, pp. 151–63.
- Yoon, Albert.** 2001. "Damage Caps and Civil Litigation: An Empirical Study of Medical Malpractice Litigation in the South." *American Law and Economics Review*. 3:2, pp. 199–227.