

Data Watch: Tort-uring the Data

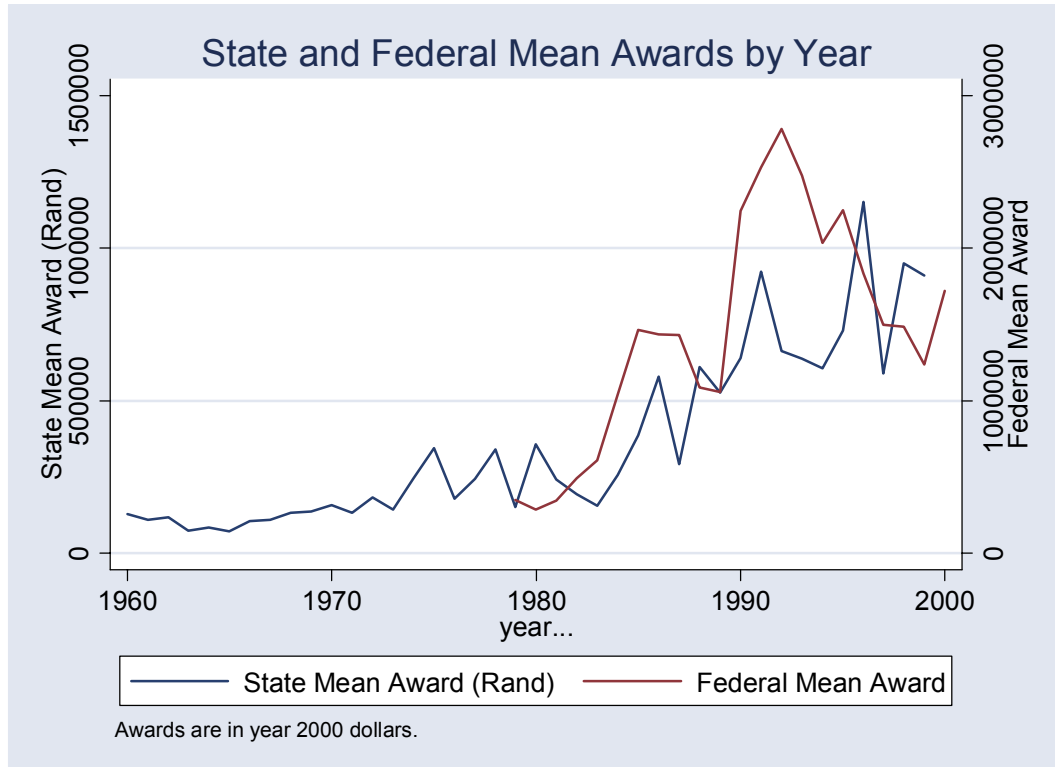
Alexander Tabarrok
Eric Helland
Jonathan Klick

Tort reform is hotly debated in Congress, the national media, and academia.¹ But what do we know about the tort system and how do we know it? In this column we survey some of the most important datasets on torts and civil justice assessing their strengths and weaknesses. Although we illustrate the uses of the various datasets with some interesting findings, our primary goal is to discuss what data are available for the researcher interested in the scientific investigation of the U.S. civil justice system. We discuss data useful for analyzing trends, data that are more useful for cross-sectional research, usually because of a limited number of available years, and finally data covering only a specific type of civil litigation such as medical malpractice. We conclude by discussing the limitations of all civil litigation data.

Datasets Useful for Research on Trends

One of the fundamental questions confronting policy makers is whether tort awards are rising (**might we need a phrase suggesting why this is a fundamental question – for instance, this is central to caps and is central to the question of whether moving to a no-fault system will increase the number of docs**). Although there are many selection issues in determining a trend (see Galanter, 1983) a good place to begin is the raw data. Figure one graphs the mean award by year from two of the longest datasets on tort awards, the Administrative Office of the U.S. Courts data (hereafter the Federal data) and a series put together by researchers at the Rand Corporation drawing from state courts in two counties (hereafter the Rand data). Both series are corrected for inflation by converting to year 2000 dollars. The mean award in the Federal data is about 2.5 times as large as the mean State award so to make the trends clear the State awards are graphed against the left axis and the Federal awards against the right axis. Both series show a dramatic increase in mean awards in the 1980s. The roots of the “tort crisis” have traditionally dated back to the 1960s and 1970s when tort law shifted from negligence to strict liability as a means of increasing compensation for the injured (Priest 1991). This may be correct, but, if so, the impact of the change in the law did not really begin to be felt until the mid 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.

¹ Tort reform has even reached the beach, with John’s Grisham’s popular novel the King of Torts. The nomination of successful lawyer John Edwards, sometimes called the Prince of Torts, to the vice-Presidential slot on the Democratic ticket raises the profile of civil justice and its reform even higher.



The Federal data represent the largest dataset in the 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 non-specialized federal appellate courts. There are over XX million cases in these files including patent, antitrust, and inmate cases as well as product liability, medical malpractice, and other tort cases. We focus on tort cases.²

Although there is information on every case filed since 1970 the information from the first decade is spotty. Until fiscal 1979, for example, there was no indicator for whether the plaintiff or defendant won the case, and we find many years when the information on awards is clearly incorrect (every award in 1972 in our subset of cases is coded 1, for example). The Federal data set also has a number of peculiar conventions - leftovers from an earlier age of expensive data storage - award amounts, for example, are coded in \$1,000s and are top-coded at 9999, i.e. \$9,999,000. This top-coding was not terribly important initially but 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 dollars or higher.

² To be specific we examine personal injury cases such as product liability, medical malpractice, premises liability and injuries resulting from auto accidents. **Might we mention that we don't consider statutory claims (e.g., CA's consumer protection statute 17-200 which allows thrid parties to bring traditional tort suits). Might be important to flag this since these suits are going to overtake tort suits in many areas, so they will be the subject of future research . . . thus if changes to data collection occur, folks should keep these areas in mind too.**

It is possible to compare award information in the Federal data with docket information available on the internet under the auspices of PACER, the federal judiciary's *Public Access to Court Electronic Records* project. PACER data may be more accurate than Federal data set because it is updated as the case proceeds rather than retrospectively. PACER data, however, are in narrative form and are only available on a case by case basis. Using this labor intensive procedure on a sample, Eisenberg and Schlanger (2003) conclude that 9999 codes are often inaccurate, and it may be worthwhile to cross check just these awards against PACER.

If coding errors do not vary systematically across time or space then studies that look at changes in awards across time or space can be informative even if the absolute size of the mean award differs from the true mean. Researchers should in anycase consult Eisenberg and Schlanger (2003) before using the Federal data as they provide useful background material and practical advice.

It should be kept in mind that the Federal data are designed and collected to help with court administration not to conduct research. As a result, case type and process variables appear to be more accurately coded than outcome variables. In addition, to awards, 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 Clean Air Act, Habeas Corpus, or say 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 contacts, and Dunworth and Rogers (1996) on corporate litigation. Eisenberg and Schlanger (2003) reference more examples.)

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.

The data are easily available at the website of the Inter-University Consortium for Political and Social Research (<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.

The most limiting aspect of the Federal data is that the Federal courts handle very few cases compared to the state courts. In 2002, for example, there were a total of 254,000 cases filed in the U.S. District Courts and 96.2 *million* cases filed in the state courts (approximately 16 million of these were civil cases).³ Federal courts deal with a

³ See B. Ostrom, N. Kauder, & R. LaFountain Examining the Work of State Courts, 2003: A National Perspective from the Court Statistics Project (National Center for State Courts 2004) for state court statistics.

different range of cases than the state courts, different law often applies, procedural rules are different, juries are drawn from different pools and unlike many state court judges federal judges are all appointed with life-tenure rather than being elected (Helland and Tabarrok 2002). It would be easy, therefore, to draw false conclusions if one took federal court cases as a representative sample of civil justice in the United States.

It should also be kept in mind that the Federal data contain a comprehensive list of filed cases but do not capture allegations of injury that are dealt with before the case is filed.⁴ Moreover, the Federal data indicate whether a case was settled but does not generally contain information on the details of settlement; a trait shared with the State Court Data that we discuss next.

None of the state court datasets 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 only from two counties, San Francisco County, CA and Cook County, IL. In addition, this dataset is available at the current time only to Rand researchers. A shorter dataset covering 1960-1984 but including all CA counties for 1980-1984 is available publicly at the ICPSR (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 in Cook County and California. Jury verdict reporters are private publications/databases that collect information on case characteristics for sale to lawyers and litigants who are interested in estimating the “going value” of their cases. The quality of the verdict reporters varies, some merely collate information from legal newspapers others collect data directly from court documents and some also survey lawyers - the latter technique allows for reports on settlements. 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 contact the attorneys involved for further information which is reconciled and cross-verified.⁵ Peterson and Priest (1982) found that these reporters had high reliability and covered 80 to nearly 100 percent of the total population of cases.

Many articles in empirical law and economics gather their data from verdict reporters of one kind or another often without realizing that they are doing so. Researchers often begin their data collection, for example, with a Lexis-Nexis or Westlaw search for cases of a certain type. Lexis-Nexis, however, is a mere front-end for a verdict reporter. For example, Karpoff and Lott (1999) examine punitive damages using data derived from Lexis-Nexis verdict reporter data. We discuss jury verdict reporters at greater length below and their comparison with more systematically surveyed data.

⁴ In general only data from insurance companies, which must be contacted if there is an allegation of injury, have data on disputes that are not filed with a court.

⁵ Peterson and Priest (1982) and Moller, Pace and Carroll (1999) describe the data collection process in more detail.

Datasets for Cross-sectional Research

Three useful datasets for cross sectional research are the Federal data already discussed, data from the firm Jury Verdict Research (JVR) and the Civil Justice Survey of State Courts, 1992, 1996, 2001 (State Court). As an interesting illustration of some of these data, Figure 2 graphs mean awards by county circa 1990 against 1990 county poverty rates (Helland and Tabarrok 2003). Awards increase dramatically in poverty rates in the JVR and State Court databases but the trend is not so clear in the Federal dataset.

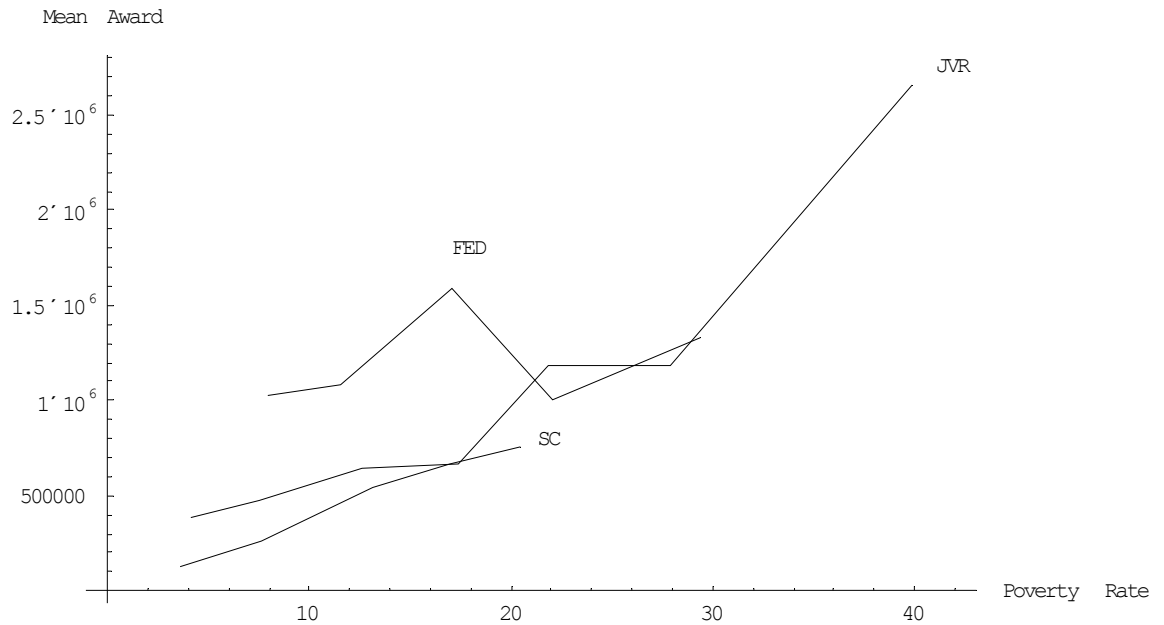


Figure Two

A few facts about these datasets can be discerned directly from Figure 2. The cross-sectional variation in poverty rates is highest in the JVR dataset because it covers the most counties. The variation in the State Court data is much less but over the same range the change in awards with respect to poverty is similar to that in the JVR data. The Federal data, of course, cover the nation. Despite this, the variation in the Federal data is not as large as in the JVR data; this is because federal courts draw juries from “trial units” rather than by county. Poverty rates or other demographic information, therefore, have to be aggregated up from counties thereby diminishing some of the variation (for details on the aggregation which is quite complex see Helland and Tabarrok 2003 and Eisenberg and Wells 2002).

Jury Verdict Research's (hereafter JVR) Personal Injury Verdicts and Settlements on CD-ROM is a national jury verdict reporter (or composition of regional court reporters) containing information on over 200,000 trials, settlements and arbitrations

beginning around 1988. (The precise data we draw upon ends 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 (medical malpractice, product liability, emotional distress etc.) In addition to basic information about awards, the JVR data include information on the plaintiff's injuries, age, gender, the lawyers involved, expert witnesses, the date of the injury, trial or settlement and the outcome of the case.

As a research tool, the JVR data set suffers from two main defects. First, as with other verdict reporters, the data collection methods are not well documented and may vary in different regions. The JVR data is a sample but not a professionally designed random sample. A recent comparison of 42 jury verdict reporters and the Civil Justice Survey (CJS) of State Courts (see below) by the National Center for the Study of State Courts found wide variation in the comprehensiveness of the court reporters. On average about 50% of the cases in the CJS 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 CJS which is designed to capture all cases. More troubling is that the distribution of jury verdict reporters is skewed toward larger awards; although again the size of the skew varies greatly by jurisdiction.⁶

Second, the JVR data set is expensive, currently \$1000, and it does not come in an easily accessible database format. Instead, in keeping with the purposes for which the data are collected, it comes with a front-end useful for lawyers who want to assess the value of their particular case but of little interest to researchers who want information on the universe of cases. Exporting the data requires considerable effort.⁷

The Civil Justice Survey of State Courts series is one of the few datasets in this field to be created by and for professional researchers. It is a product of the Bureau of Justice Statistics and the National Center for State Courts with the assistance of the U.S. Bureau of the Census. The datasets are slightly broader than the JVR as 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 (these counties account for about half of all civil filings.) Each survey covers about 6,500 jury trials to which the 1996 and 2001 survey each add approximately 2,000 bench trials. In most counties, the data cover all the completed trials in that county in that time period. In the larger counties the data are a random sample capturing a high proportion of the total. 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.

⁶ Paula L. Hannaford-Agor, NCSC, personal correspondence.

⁷ There are a number of litigation reporters dealing with specific types of cases. Often these are quite comprehensive. For example, a number of researchers have utilized Securities Class Action Alert, which contains data on shareholder litigation. White (2003) has also used *Andrew's Asbestos Litigation Reporter* and *Mealey's Litigation Reporter: Asbestos* and Eisneberg and Miller (2003) have utilized *CCH™ Federal Securities and Trade Regulation Reporters*.

The surveys are becoming more useful over time not only due to the updating but also because of the addition of new variables. The 1996 and 2001 surveys add information on the plaintiff's injuries and, as noted above, judge trials in addition to jury trials. New variables in the 2001 sample follow cases more closely after an initial verdict has been granted – there are variables, for example, indicating whether a new trial was requested and granted, whether the award was reduced or increased by the judge and so forth.⁸

The 1992 dataset is more extensive 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 settled or disposed of prior to trial. The latter sample, for example, could be used to compare the proportion of medical malpractice that settle with the proportion of auto cases that settle.

A weakness of the State Court data is that it covers only 21-22 states, these account for a large fraction of all tort cases, but for some purposes greater cross-sectional variation is useful. For example, Alabama, is not covered even though it has been called “tort-hell.” Drilling down into the data one also quickly runs into the problem of small cell-sizes. In 2001, for example, there are only 14 medical malpractice cases with positive awards in Florida. The JVR data cover more states and is often more extensive if only because one can draw upon data in adjoining years.

Eisenberg, La Foundatain, Ostrom et al. (2002) use the 1996 State Court data to compare judges and juries and the awarding of punitive damages. The raw data suggest that juries give much higher awards than judges (Helland and Tabarrok 2002 find similar results using the JVR data). Either party to a dispute usually has the right to request a jury trial, however, so judge trials are highly selected. Controlling for case type reduces the differences significantly and Eisenberg et al. conclude that no significant differences exist in the awarding of punitive damages. In part, this is a result of the paucity of punitive damages in the data set. In the 1996 sample there are only 121 punitive damage awards by juries and 55 by judges but recall that this sample is a significant fraction of the population so the residual uncertainty is a true reflection of what there is to know.

Data Sets on Specific Types of Civil Action

Most of the dispute specific data sets deal with medical malpractice. Medical malpractice insurance premiums increased greatly in the early 1970s resulting in a wave of tort reform legislation aimed specifically at controlling awards in medical malpractice suits. California's Medical Injury Compensation Reform Act of 1975 (MICRA), for

⁸ All cases were tracked for at least a year and a half post-verdict so coverage ought to be high. A future release by the BJS will track cases even further through the appeals process.

example, capped noneconomic damages (i.e., pain and suffering, loss of consortium) at \$250,000, required disclosure to the jury of collateral sources of payment, and put some restrictions on contingency fees (see Danzon and Lillard 1983, and Danzon 1986 for an evaluation of some of these reforms). Insurance premiums have been rising again in the last several years and there has been an extensive effort by President Bush and others to pass national reforms modelled on MICRA. We discuss two important sources of information on medical malpractice suits.

Since 1975, Florida has required insurance firms to submit data on all closed medical malpractice claims to the Department of Insurance. Claims on doctors, dentists, hospitals, health maintenance organizations, abortion clinics, ambulatory surgical centers, and crisis stabilization units are included but only if they are professionally insured. Almost all doctors can be expected to be insured but some of the largest HMOs self-insure. The data are sparse for the first decade but in late 1985 a longer-format was introduced and since that time the data set has quite extensive information on the defendant's characteristics (the physician's speciality, board certification, whether a foreign graduate or not etc.), information on the injured person (age, sex, injury, gross pre-injury wages etc.), and adjudication information (where and when the suit was filed, the court decision, amount paid etc.)

In a book on the medical malpractice system, Sloan et al. (1993) draw upon the Florida data extensively. Holger Sieg (2000) shows how some of the important moments of the data can be simulated in a bargaining model based on Nalebuff (1987). Helland and Tabarrok (2003) study decisions to drop cases before and after Florida restricted contingency fees on medical malpractice suits in 1985.

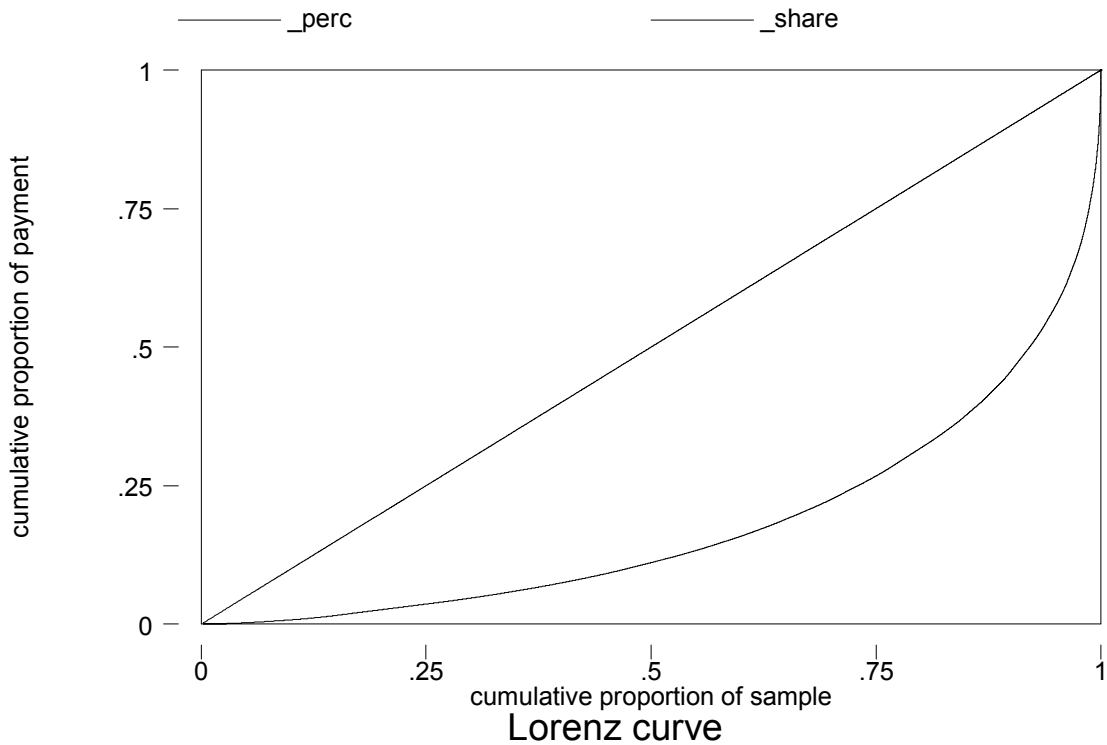
A second useful dataset on medical malpractice arose out of the Health Care Quality Improvement Act which was passed in 1986. The act was intended to make it more difficult for incompetent physicians and dentists to move from state to state without disclosure of their previous performance. The Act requires 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 hiring physicians or dentists the NPDB may be queried (and in some cases must be queried) by hospitals, boards of medical examiners and HMOs with formal review processes.

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 databank is simply to flag potential problems, an unintended consequence has been the creation of a database on medical malpractice payments. It is important to understand, however, that only payments are recorded, there is no information on the number of claims or the number of trials that a plaintiff loses. The data set covers from 1990 onwards. There are a few other peculiarities with the data. When malpractice payments are made according to a schedule instead of lump-sum, in most years, only the first payment is reported and not the total payment. Fortunately, the data do indicate when a payment is not lump-sum and in a

typical year only about 6-7 percent of payments are not lump-sum. Beginning in February of 2004 the data also indicate total future payments. To preserve confidentiality awards are not listed to the dollar but instead are interval coded; payments between \$1,001 and \$2,000, for example, are coded as \$1,500.

The NPDB is also not as comprehensive as it first appears. The NPDB was created to help monitor physicians rather than corporations. As a result, if no physician is named in the final settlement, then no report is made to the NPDB. Physicians fear being named in the NPDB; thus, whether the physician is named becomes a strategic issue in settlement. Furthermore, although there are penalties for not reporting cases, these penalties have never been applied. It is unknown how large these reporting problems are, although anecdotal evidence suggests that they could be significant (GAO 2000, Hallinan 2004).

The NPDB does contain much useful information, however. As a simple illustration the NPDB shows that medical malpractice awards are heavily right-skewed. In 2000, for example, the mean award for single-payment awards was \$203,5105 (**\$2,035,105 or \$203,510**) and the median about half that at \$97,500. Figure 3 graphs the Lorenz curve for 2000 indicating, for example, that 75 percent of the total payments come from the top 25 percent of awards. The distribution of awards is, in a sense, even more skewed when we consider that in any given year most doctors are not sued. Thus, medical malpractice insurance is in essence catastrophic insurance, a useful fact to bear in mind when considering reforms of medical malpractice tort law and insurance.



For cases involving auto accidents the Auto Injury Claims data collected by the Insurance Research Council are very useful. The most recent addition of this data contains information on over 70,000 closed claims files and provides detailed information on a number of facets of the case. The survey has been conducted in 1977, 87, 92, 97 and most recently 2002. . Kessler (1995) estimates the impact of strict liability on case disposition using the Insurance Research Council auto injury claims data (see also Kessler 19XX) . The major drawback of the IRC data set is that it is very expensive, \$30,000 for each survey for commercial users and only somewhat less for researchers.

There are number of data sets used by researchers that are not regularly updated. Usually these data come from insurance companies closed claim files. For example Viscusi (1991) uses closed claim data on product liability and Yoon (200X) used a similar set of data on medical malpractice. Often these data sets are quite good but their acquisition requires considerable persistence and luck. Another source of cross sectional data is government agencies. For example the Federal Judicial Center, which produces reports for the federal judiciary has a number data sets they have been willing to make available to researchers on a case by case basis.

Data We Miss

Working with tort data can be frustrating because most of the data have not been collected for research purposes and getting a good grip on a question often requires cobbling together information from several incomplete sources. It is revealing to compare tort data with crime data. If we think of a “representative crime” working its way through the system then we have data from the time the crime is committed (National Crime Victimization Survey), through reporting (UCR), arrests (UCR), sentencing (State Court Sentencing of Convicted Felons), imprisonment and time-served (National Corrections Reporting Program), probation (Survey of Adults on Probation), recidivism (Recidivism of Prisoners Released in 1994) and much more. All of these data are professionally gathered and are available with detailed codebooks from the Bureau of Justice Statistics. Moreover, that list represents just a small sample of what is available. Now consider a “representative tort.” We know very little about the number of incidents that give rise to torts (auto accidents excepted)⁹, we know something about filing but very little about the cases that are dropped and very little about cases that are settled, there are some trial data but as we note above that datasets are rarely complete. We know very little about litigants or lawyers, and we do not track cases well over time.

To be sure good papers have been written on all of the above topics but the data collected for these papers have typically been collected only once with little thought for connecting one data source with another. Data collection in the civil justice system remains far behind that in the criminal justice system.

⁹ In fact one of the only studies examining the role of torts in the overall system of accident compensation is Hensler (1991)

Name	Location	Stages of Litigation covered	Coverage	Update Frequency	Comments
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	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	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	One sample of disputes that result in trials and a second sample of settled cases.	1988-	Annual or monthly	\$1,000 and not easy to import into database format. Similar dataset available on Westlaw in Jury Verdict and Settlement Summaries (LRP-JV).
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	Every 4 years	Professional random sample. Does not cover all states. Useful description in a series of BJS publications.
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-	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-hipdb.com/publicdata.html	Only cases with payments are included most are settled but some trial judgments also.	1990-	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/IRCProducts/Databases.htm	A sample of disputes involving auto insurance claims.	1977, 87, 92, 97, 2002	Irregular	The data set is expensive.

Terence Dunworth and Nicholas Pace. 1994. JURY VERDICTS DATABASE FOR COOK COUNTY, ILLINOIS, AND ALL COUNTIES IN CALIFORNIA, 1960-1984 (ICPSR 6232)

Deborah R. Hensler, M.Susan Marquis, Allan F. Abrahamse, Sandra H. Berry, Patricia A. Ebener, Elizabeth Lewis, E.Allan Lind, Robert J. MacCoun, Willard G. Manning, Jeannette A. Rogowski, Mary E. Vaiana (1991) *Compensation for Accidental Injuries in the United States*. RAND, Santa Monica.

Eisenberg and Wels "Trial Outcomes and Demographics: Is There A Bronx Effect?" (with Martin Wells), 80 *Texas Law Review* 1839-74 (2002).

Farber, Henry S. ; White, Michelle J. (1991) "Medical Malpractice: An Empirical Examination of the Litigation Process, "RAND Journal of Economics" 22(2): 199-217:

Fournier, Gary M. ; Zuehlke, Thomas W. (1989) "Litigation and Settlement: An Empirical Approach" *Review of Economics and Statistics* 71(2): 189-95

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" 31 *UCLA L. Rev.* 4, 11

Karpoff, Jonathan M. ; Lott, John R., Jr. (1999) "On the Determinants and Importance of Punitive Damage Awards" *Journal of Law and Economics* 42(1): 527-73

Kessler, Daniel (1996) "Institutional Causes of Delay in the Settlement of Legal Disputes" *Journal of Law, Economics, and Organization* 12(2): 432-60

Kessler, Daniel (1995) "Fault, Settlement, and Negligence Law" *RAND Journal of Economics* 26(2): 296-313

White, Michelle. (2003) "Explaining the Flood of Asbestos Litigation: Consolidation, Bifurcation, and Bouquet Trials," NBER working paper w9362.

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) Farber,