Forecasting Claims in an Era of Tort Reform

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By Frederick C. Dunbar and Faten Sabry

Forecasting mass tort claims is often based on sophisticated models applied to large, complicated databases. These models can account for such causal factors as the size of the exposed population, the dose-response rates between defendant's product and disease, and actuarial mortality rates of the exposed population. Too often, though, there is one variable that is simply extrapolated into the future at historical levels with no attempt to understand its causal influences — the filing rate (also called the propensity to sue).

The filing rate is defined as the number of people who actually file a claim divided by the population of potential claimants. To give an example: The population who can file a lung cancer claim against the Manville Personal Injury Trust includes virtually all workers exposed to Manville-supplied asbestos who have a primary lung cancer along with physical evidence of asbestos exposure. The filing rate is the yearly number of lung cancer claims on the Trust divided by the nationwide annual incidence of lung cancer among all those who would satisfy the Trust's criteria for payment. It is well known that not everybody who meets the requirements for payment by the Trust will make a claim. In fact, over the late 1990s only 20% to 30% of potential claimants made a claim. Moreover, the filing rate can vary dramatically, up or down, from year to year. Just extrapolating past filing rates without understanding what causes these up and down movements can lead to serious errors in the overall forecast, even if the rest of the model performs well. In fact, the unanticipated increase in the filing rate of nonmalignant claims is the primary reason for the highly publicized under-forecasting of future asbestos claims that occurred in the 1980s and early 1990s.

The filing rate is a complicated interaction between the behavior of individuals who have suffered an injury and the institutions through which such individuals can seek redress. It is not unlike the interaction between supply and demand and the allocation and prices of resources in traditional markets for goods and services. In claims estimation, however, the challenge is that some, though not all, of the institutions involved in the process of dispensing civil justice have different behavioral responses from those of traditional profit-maximizing firms.

Consequently, understanding the behavior and interactions of the various factors in the tort system is important to reduce the errors of claims forecasts. Claim filing is affected by both individual and institutional responses. In the first section below, we summarize the recent empirical research on individual propensity to sue. The second section presents recent findings on the institutional responses to mass torts that also affect future claiming rates.

The Individual Factor: Propensity to Sue

A number of academics have studied the liability claiming process and the propensity to sue. In doing so, they have used various models of law, economics and psychology to analyze the incentives of an injured person to seek compensation. The resulting research attempts to explain why the propensity to sue appears to be lower than one would expect and why it varies according to different circumstances.
The general conclusions concerning motives behind the propensity to file a claim support both economic theory (people are more likely to file a claim as the severity of their injury and associated compensation increases) and a fault/equity model (people are more likely to file a claim if they blame another party for their injury).

One of the early key researchers on this subject, Herbert Kritzer, reviewed the evidence of attribution and its role in claiming behavior from several sources in both England and the United States. See Herbert M. Kritzer's article: "Propensity to Sue in England and the United States of America: Blaming and Claiming in Tort Cases," *Journal of Law and Society*, Vol. 18, No. 4, 1991, pp. 400-27. His general conclusion is that blame is the most important motivation in filing claims. He cites as an example the findings of an English study in which 13% of traffic accident victims who accepted partial blame filed a claim compared to 61% who felt the accident was the other person's fault.

A more recent example is the work of Deborah Hensler, et al., "Compensation for Accidental Injuries in the United States," RAND The Institute for Civil Justice, 1991, using a national household survey to analyze the decision of accident victims to make a claim. A key result in the Hensler study is that "attributions of causation and fault are critical steps on the road that leads to tort liability claiming. Those who mostly blame others for their injury are 12 times more likely to consider claiming than those who blame themselves."

These findings explain what might otherwise be considered an anomaly in asbestos litigation. It is widely recognized that asbestos exposure is the primary cause of mesothelioma — a fatal cancer of the pleural lining. The number of mesothelioma claims made on asbestos defendants is close to the number of federally reported mesothelioma deaths per year for white males — the race and gender most exposed to asbestos in the workplace. This means that the propensity to sue for mesothelioma victims is almost equal to 100%. Alternatively, lung cancer, which is almost always fatal, has a much lower claiming rate — less than one-third. The explanation for the difference is that there are many other causes of lung cancer including, most importantly, smoking. The lower claiming rate for lung cancer is consistent with the fault/equity model because many potential lung cancer claimants will have internalized the blame and this deters their making a claim.

To determine other factors that explain the propensity to sue, we analyzed the Hensler national survey data, using econometric methods such as probability choice modeling. Consistent with the findings of others, our analysis shows that the perception of fault is more important than the actual severity of injury. However, the model also finds other important factors that affect the propensity to claim.

**Age.** A middle-aged claimant is almost twice as likely as a retired claimant to make a claim. To some extent, this may be consistent with an economic model because economic damages are likely to be greater for younger workers and their estates. This finding is particularly important for legacy torts, such as asbestos, where the population of potential claimants is finite and aging. If all factors remain the same, keeping the claiming rate static will lead to an overestimate of future claims.

**Education.** Interestingly, victims with less than a high school education are twice as likely to claim as those who have graduated from college.

**Location.** Some states have higher filing rates than others. For example, Mississippi, Texas and Illinois are all well above average.

Our thesis is that the location effect is particularly the result of the institutions in a state — such as judicial rules and plaintiffs' bars. Consequently, to get a comprehensive understanding of claiming, one must also analyze how institutions affect filing rates and whether there are institutional adjustments to claiming rates over time.

**The Institutional Factor: Tort Reform as a Response to Reduce Claims Filings**

The presence of a mass tort can often be attributed to some institutional failure such as inadequate...
regulation either by the private or public sector. The judicial system, for example, is overwhelmed by the
task of providing individual evaluation and justice for a mass of claims. See, eg, Jack B. Weinstein:
*Individual Justice in Mass Tort Litigation* (Evanston: Northwestern University Press, 1995). Arguably, the
civil justice system is ill equipped to administer a mass claiming process. See Michelle White of the
National Bureau of Economic Research: “Explaining the Flood of Asbestos Litigation: Consolidation,
Bifurcation and Bouquet Trials,” December 2002 (“White, December 2002”). The courts’ burden has been
augmented by another institutional failure: allowing the payment of claims to people who are not sick and
cannot prove exposure. Important examples of this failure include such mass torts as asbestos, breast
implants and Fen-Phen. The following articles provide helpful discussions:

- Frederick Dunbar and Denise Martin: "Clearing Uninjured Plaintiffs From the Tort System: The
- Lester Brickman: "On the Theory Class’s Theories of Asbestos Litigation: The Disconnect Between
- Joseph Gitlin, Leroy Cook, Otha Linton, and Elizabeth Garrett Mayer: "Comparison of 'B' Readers’
11, 2004, pp. 843-56;
- Angell, Marcia: Science on Trial: *The Clash of Medical Evidence and the Law in The Breast Implant

Payment to asymptomatic plaintiffs has obviously contributed to the financial woes of the many firms that
have gone into bankruptcy during the past 5 years, causing unemployment and destabilizing communities
in which the debtors’ plants were located. See Joseph Stiglitz, Jonathan M. Orszag, and Peter R. Orszag:
"The Impact of Asbestos Liabilities on Workers in Bankrupt Firms," Sebago Associates, December 2002
and Frederick Dunbar's Statement Before the U.S. Senate Committee on the Judiciary Hearing on Solving
Washington, D.C., 2003. In response to the overburdened system, courts and state legislators have been
reducing procedural advantages to plaintiffs and removing both unimpaired claims and the ability to shop
for venues, from mass torts.

*Forecasting Claims for Bankruptcy Trusts.* In some cases, institutional failure has contributed to a
company's bankruptcy. Claims forecasting can play a role in the bankruptcy process. Some of the §524
bankruptcy trusts included the payment of unimpaired claims. The inclusion of these payments may have
been due to the pressure exerted on debtors by the need to appease plaintiffs' attorneys so that the
parties would be able to form a coalition to win plan confirmation. The plaintiffs' attorneys had leverage to
bargain for these payments because §524 requires the vote of a 75% supermajority of asbestos claimants
before a plan to emerge from bankruptcy can be approved. Nevertheless, in an effort to escape the
pressures inherent in the tort system, some debtors may use the bankruptcy process to weed out invalid
claims that they were forced to settle at a premium when they were subject to past tort pressures.

Although estimation of future claims is a common feature of bankruptcy proceedings, using bankruptcy
protection to bring more control over the settlement of a mass tort claim creates a conundrum for claims
estimation. One purpose of estimation pre-bankruptcy is for the defendant firm to understand the nature of
its future liability, assuming it were to remain in the tort system. If the claims are removed from the tort
system and become part of a bankruptcy estate, the purpose of the estimation is to determine the size of a
§524(g) trust. Except by mathematical accident, the two estimates cannot be the same. The very act of
declaring bankruptcy and using a Trust Distribution Process (TDP) to handle claims (in lieu of the tort
system) creates circumstances that materially impact the number and value of future claims. A TDP uses
claims handlers to determine valid claims; in the tort system, on the other hand, plaintiffs' attorneys
negotiate group settlements based on tort system pressures placed on the defendant and then decide
who among the group of their clients would get what proceeds from the settlement. See "White,
December 2002," *supra*. Furthermore, removing defendants from the pressure to make group settlements
will allow a more systematic approach to various defenses, especially exposure criteria, which will also
select out claims that had been paid pre-bankruptcy.
The Impact of Tort Reform on Filing Claims. Given that accurate forecasts incorporating future changes in tort system claiming rates are needed in both the tort and bankruptcy context, we have analyzed the impact of state tort reform on filings in different states during the period 1991 to 2002 using regression models. See Joan Schmit, Mark J. Browne, and Hane Duck Lee: "The Effect of State Tort Reforms On Claim Filings," Risk Management & Insurance Review, Vol. 1, 1997. This article estimated the effects of tort reform using data for the period 1984 to 1990. Reforms were classified into the following categories:

1) Caps on non-economic damage awards. Damages for non-economic losses are for pain and suffering, emotional distress, loss of consortium or companionship, and other intangible injuries. See also page 29 of the Dec. 31, 2003 edition of ATRA's Tort Reform Record. Eighteen states have modified the rules for awarding non-economic damages.

2) Limits on punitive damages awards. While punitive damages awards are not common, their perceived frequency and size have grown in recent years. It is difficult to predict whether punitive damages will be awarded in any particular case, and the apparent trend toward large punitive damages has impacted the settlement and litigation processes. There are 33 states that have reformed their punitive damages laws. See page 17 of the Dec. 31, 2003 edition of ATRA's Tort Reform Record.

3) Limits on joint-and-several liability. Joint-and-several liability means that any of the multiple co-defendants can be deemed responsible for all of a victim's damages. A typical example is a claim made under a conspiracy cause of action. In some states, the plaintiff need only show that one of the defendants is part of the conspiracy and then that defendant cannot be excused or have damages reduced by showing that other defendants were involved. Only seven states have banned the application of the doctrine, but 42 states limit its application in some manner. Congressional Budget Office White Paper: "The Effects of Tort Reform: Evidence from the States," June 2004, pg. 4.

4) Sanctions on frivolous suits or defenses. Federal Rule of Civil Procedure 11 allows a court to impose sanctions when a groundless lawsuit is filed. Similar rules have been adopted recently in three states, eg, Texas SB 31, 1995. See page 13 of the Dec. 31, 2003 edition of ATRA's Tort Reform Record.

5) Changes to the collateral source rule. The collateral source rule states that plaintiffs' losses are not to be offset by insurance proceeds from other sources. The theory is that the plaintiff pays for the insurance and should get the benefit. According to ATRA, 35% of total payments to medical malpractice claimants are for expenses already paid from other sources. The collateral source rule has been modified or abolished by 23 states; the efforts of two states to reform the rule were struck down as unconstitutional. See page 13 of the Dec. 31, 2003 edition of ATRA's Tort Reform Record.

6) Venue reform. Venue — or forum — shopping has been a fact of life in asbestos and pharmaceutical litigation. For example, prior to 2002, Mississippi allowed liberal joinder of out-of-state plaintiffs, making it one of the venues favored by plaintiffs. Mississippi rules also created high barriers to defendants' access to medical information about plaintiffs. Mississippi's reform in 2002 limits jurisdiction of civil actions to where the defendant resides or the county where the alleged act occurred. See Mississippi H.B. 19 (Special Session), 2002. Venue reform also occurred in one other state, Texas, in the late 1990s.

We collected data on the dates of enactment of the various types of tort reforms in 29 states during the period of 1991 to 2002. We analyzed the relation between the tort filings in state courts per 100,000 population as a function of the various types of reforms using regression analysis. For each state and year, the models also take into account the effects of the following:

1) Population density as measured by average population per 10 square miles;

2) Number of lawyers per 100,000 population;

3) Vehicle miles traveled per 1000 miles of road;

4) A No-Fault indicator used to describe the state auto insurance system;
5) The percent of each state's gross state product attributable to manufacturing and construction; and

6) Unemployment rate in each of the states.

High Tort Filings Cause Reform ...

We found that the past frequency of tort filings in a given state has a highly significant and positive impact on predicting whether a state would enact tort reform legislation. States with relatively high litigation levels are more likely to enact tort reform. This is consistent with the observation that states such as Texas and Mississippi have been recent candidates for tort reform. For example, if a state's filing increased by 60%, then it becomes 37% more likely that this state will enact tort reform.

... Which Then Causes Filings to Decline

Once enacted, we found that certain, but not all, types of tort reform decrease the number of filings in that state by a statistically significant amount. Moreover, tort reform does not cause an immediate decline in the volume of filings. Instead, we found that, on average, filings do not decline until 2 years after passage. The effect of the decline, however, is persistent.

The three types of reform that have the most significant negative impact on filings are: restricting joint-and-several liability, venue shopping and application of the collateral source rule. The estimated impact of each of these reforms varies somewhat, depending on certain technical adjustments made to the regression analysis. However, certain of the results are substantial. For example, the average effect of each of these reforms individually is a 20% decline in filings, although each reform does not have equal impact. Venue reform has the largest impact, causing approximately a 25% reduction in filings. If a state were to pass all three reforms, the models show that filings would be cut in half.

Even relative to the historic range of errors involved in claims forecasting, these are significant declines in the filing rate. In states where tort reform has occurred recently, using historic rates of filings will cause over-prediction of future claims. Moreover, even if there is not yet tort reform in high volume states, our results show that the high volume of filings can be expected to self-correct in the long run. To the extent an analyst forecasts high future claims, the very fact of high filings causes an institutional adjustment, such as tort reform, that causes the claims to decline from the forecast levels.

The key element in forecasting any tort liability is understanding the drivers of the propensity to claim. The filing rate is a complicated interaction between the behavior of individuals who have suffered an injury and the institutions through which such individuals can seek redress. As we discussed, the recent research on the propensity to claim shows how institutional rules and individuals’ characteristics, such as age and behavioral factors, determine the claiming rates. We also analyzed the impact of changes in institutional factors, namely tort reforms on claims filings. It is important to analyze the behavior and interactions of the various factors in the tort system that affect the filing rates in order to reduce the errors of claims forecasts.

Frederick C. Dunbar is a senior vice president at National Economic Research Associates (NERA), based in New York. He established the mass tort practice and is an expert and testifying witness in various asbestos bankruptcy matters and other torts. Faten Sabry is a vice president at NERA and a member of the mass tort practice.

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