

IN THIS ISSUE

- Asbestos and the Future of Mass Litigation
- The Effect of Gasoline Taxes on Work Effort
- The Net Benefit of Debt Relief
- Dual-Class Companies

Asbestos and the Future of Mass Litigation

Legal claims for injuries from asbestos involve more plaintiffs, more defendants, and higher costs than any other type of personal injury litigation in U.S. history. As the litigation bankrupts more and more firms and continues to enrich tort lawyers, the issue has reached Congress, where legislation has been under consideration to establish a compensation fund to resolve the issue. In **Asbestos and the Future of Mass Torts** (NBER Working Paper No. 10308), NBER Research Associate **Michelle J. White** reviews the history of the litigation mess and the lessons it provides that may be applicable to other mass torts.

Asbestos was once referred to as a “miracle mineral” for its ability to withstand heat. As a result, it was used in thousands of products, including fireproofing and insulating material in ships, buildings, and consumer products, and in wallboard, flooring, cement, automobiles, clothing, home appliances, and even children’s toys. But exposure to asbestos causes cancer and other diseases, including asbestosis and mesothelioma; these diseases take 20 to 40 years after exposure to develop.

Physicians recognized some of these dangers as early as the 1920s. In the United States in the 1930s, asbestos producers and insurers lobbied to make asbestos-related claims for workers’ compensation subject to highly restrictive eligibility rules. Asbestos producers such as Johns-Manville Corporation conducted physical examinations of their workers, but did not inform them if they had asbestosis in order to keep down the number of compensation claims. A number of firms engaged in cover-ups and political pressure to hide their behavior. This opened them up to litigation.

By the beginning of 2001, 600,000 individuals had filed lawsuits

against more than 6,000 defendants. The total amount that defendants and insurers had spent on resolving claims — including all legal costs — has been estimated at \$54 billion. Eighty-five corporations have filed for bankruptcy because of asbestos liabilities and several insurance companies have either failed or are in financial distress. Estimates of the total number of people who eventually will file claims range from 1.1 million to 3 million. Estimates of the eventual cost of asbestos litigation range from \$200 billion to \$265 billion.

White writes of a number of bad decisions exacerbating the problem. Companies prevented workers with

local hotels and restaurants, and increasing the number of courthouse jobs. Lawyers also developed new techniques for mass processing of claims, and substituted new defendants when old ones went bankrupt.

Representing asbestos victims has proved extremely profitable for lawyers. It is estimated that legal expenses consumed about 66 percent of asbestos compensation paid during the 1980s and about 60 percent during the 1990s. Based on these figures, of the \$54 billion already spent on asbestos litigation, about \$34 billion went to lawyers. If litigation costs eventually reach \$200 billion, lawyers could collect an additional \$88 billion.

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asbestos-related diseases from collecting workers’ compensation. Washington did not regulate workplace exposure to asbestos until the 1970s and did little to reduce consumers’ exposure to asbestos in products. White argues it was legal liability rather than regulation that eventually caused producers to eliminate asbestos from the marketplace. Yet asbestos litigation continues to grow. Courts allowed uninjured claimants to collect damages and allowed asbestos liability to spread to defendants with little asbestos involvement. Also, in effect they rewrote old insurance policies to increase insurers’ liability.

Plaintiffs’ lawyers shopped for the most favorable courts, in places such as Texas, West Virginia, and Mississippi. In such jurisdictions, judges are usually elected and plaintiffs’ lawyers contribute generously to their campaign funds. Further, high-stake trials attract many out-of-state lawyers, providing extra income for

White notes that, “regulation and liability are related in the sense that, the worse is the regulators’ failure, the stronger the courts’ reaction is likely to be.” Judges and juries respond to attempts to cover up the impact of highly dangerous products by punishing producers with massive compensatory and punitive damages. Asbestos is very unusual as a mass tort because it was used in thousands of products, exposing millions of plaintiffs to harm. Moreover, thousands of defendants and hundreds of insurers were potentially liable. So once the litigation got started, it spiraled out of control. The same scenario is unlikely to happen for other mass torts, suggests White, though plaintiff lawyers have been searching for the next asbestos for years now.

The two methods that the U.S. legal system has developed to collectively resolve mass torts — bankruptcies of defendant firms and class

action settlements — have not worked for asbestos litigation. This is because when one asbestos defendant went bankrupt, plaintiffs' lawyers found other non-bankrupt defendants to sue, thus shifting the litigation pressure to new sectors of the economy. Also, the large numbers of asbestos plaintiffs, defendants and insurers make it nearly impossible to reach a voluntary agreement on a

class action settlement.

This suggests that Congress eventually will have to pass legislation to resolve the asbestos crisis, White writes. But the current bill is stalled over the same issues: deciding on how much compensation asbestos victims will receive and how much individual defendants' and insurers' must pay.

The legal techniques and precedents that lawyers developed for asbestos

litigation are likely to be applied to other mass torts in the future, making them more common and more expensive, White warns. But because managers tend not to look far into the future, if they can increase profits for 20 or more years by using dangerous substances, "they are likely to ignore the high price that their firms and society will eventually pay," she writes.

— David R. Francis

The Effect of Gasoline Taxes on Work Effort

Gasoline taxes are a hotly debated topic in both environmental and economic policy settings. Previous studies have examined the effects of various gasoline taxes on the supply and demand for gasoline. But in **Empirical Estimates for Environmental Policy Making in a Second-Best Setting** (NBER Working Paper No. 10330), authors **Sarah West** and **Roberton Williams** examine the effect of gasoline taxes on work decisions. Do people work more or less when gasoline prices go up? The authors find that

for all decisions. But this isn't the case. People make work decisions based on the perceived return to them, working so long as the value of making more money is greater than the value of having more free time. Because part of what they earn goes to pay income taxes, people don't have enough of an incentive to work. Since the government needs a certain amount of tax revenue, though, the best it can do is the "second-best" optimum: the ideal policy, given the fact that people don't have sufficient incentives to work. The

decrease gas consumption by 4.3 percent, or roughly 37 gallons per household per year. That same increase in gas prices would also increase hours worked by 0.07 percent, approximately 2 hours per household per year. Raising the gasoline tax thus has the triple benefit of lowering fuel consumption, decreasing pollution, and providing an incentive for people to work at a more socially optimal level.

This change in work is tiny compared to the total number of hours worked, but still substantially increases the optimal gas tax, because the labor market is far larger than the gasoline market. Ignoring effects on work decisions, the optimal gas tax is equal to marginal damage, which other researchers have estimated at 88 cents per gallon (in 2003 dollars). Using this estimate, West and Williams find that the optimal gas tax is \$1.19 per gallon (also in 2003 dollars), with the difference arising because higher gas prices encourage work.

Controlling for various other effects, the authors find that the work effect is not attributable solely to consumers paying more for gasoline. Even if other taxes are lowered to compensate for the increased price of gas, people still work more. This effect may be because decisions regarding non-work-related driving are more flexible than decisions about work-related driving, such as commuting. In other words, a person's choice to work longer or shorter hours does not affect how much gas he uses to commute. However, that person may choose to make fewer non-work automobile trips, thus leaving more time available for work.

— Les Picker

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higher gasoline taxes encourage work, and when this effect is taken into account, the optimal gasoline tax is substantially higher than previous research has suggested.

If gasoline taxes are set based only on their effects on gasoline use, then the best governmental policy would be to set the gas tax equal to marginal damage: the value of all of the negative externalities that result from using a gallon of gasoline, including pollution, accidents, noise, and traffic congestion. Since these costs are imposed on others, people don't have enough incentive to conserve gas. Taxing gasoline forces drivers to take that cost into account when making driving decisions. If the gas tax equals marginal damage, then the cost of gasoline to the driver is the same as the cost to society, thus providing the proper incentives.

"First-best" government policy would provide the proper incentives

second-best optimal gas tax thus depends both on how gas prices affect driving decisions and on how they affect work decisions.

Taxes on specific consumer goods often discourage work by even more than the income tax does, thus exacerbating the disincentive to work. If the same were true for gasoline, then this would reduce the optimal gas tax. But the effect could be just the opposite. Whether a specific tax increases or decreases work effort depends in part on how it affects the costs of various leisure activities. Since a gasoline tax increase makes leisure driving more expensive, it may reduce the time spent in such activities, thus encouraging people to work more. The authors' empirical work suggests that this is indeed the case: raising gasoline taxes and lowering income taxes would cause people to work more, not less.

The authors find that a 10 percent increase in gasoline prices would

The Net Benefit of Debt Relief

In order to determine whether the much-debated debt-relief programs have the intended effect of aiding the economies of less-developed countries, **Serkan Arslanalp** and **Peter Blair Henry** study the impact of such relief on stock markets. In **Is Debt Relief Efficient?** (NBER Working Paper No. 10217), the two economists hold that stock markets are excellent indicators in this regard, because the markets bring together the entire expected future stream of debt relief costs and benefits into a single summary statistic: the expected net benefit (current and future) of debt relief.

The researchers acknowledge that the effects of debt relief on the stock market depend on one's model

influx of new capital in turn may reduce the discount rate in the debtor country. To the extent that the country suffers from a "debt overhang" caused by the collective action problem, debt relief increases the incentive to undertake efficient investments. These investments will likely raise expected growth rates.

The United States offered debt relief agreements for less-developed countries (LDCs) in March 1989. Between 1989 and 1995, 16 LDCs — mostly Latin American nations — signed such agreements. Arslanalp and Henry note that in the 12 months prior to the announcement of the relief offers, the average country's stock market appreciated by 60 per-

cent, a great openness to direct foreign investment. The reforms were originally proposed in 1985 by U.S. Treasury Secretary James A. Baker III and were endorsed by the World Bank and the International Monetary Fund to deal with the Third World debt crisis. However, debt relief was not on offer at that time. In 1989, however, U.S. Treasury Secretary Nicholas F. Brady proposed debt relief agreements coupled with the Baker reforms. The LDCs now had new motivation to enact such reforms. Thus as with the anticipation of the debt relief, say the researchers, the anticipation of the reforms may also have helped boost LDC stock markets.

Arslanalp and Henry conclude that understanding why the Brady Plan produced rising asset prices, increased investment, and accelerated growth is pivotal to understanding the circumstances under which debt restructuring can be expected to yield efficiency gains. The Brady plan worked, they say, because debt relief was the right course of action for middle-income LDCs where debt overhang stood in the way of profitable new lending and investment. But key questions remain. The first of these is how one determines if a country in fact is suffering from debt overhang. A second question is whether or not allowing a debtor country to unilaterally invoke a restructuring procedure will yield the same kinds of efficiency gains that were achieved under Brady's multilateral framework.

The evidence suggests there can be large efficiency gains to debt restructuring in middle-income LDCs. But it is not clear that the results can be used to evaluate the prospects for debt relief for the world's highly indebted poorest countries. Debt relief in fact may not yield efficiency gains for those countries because it is not obvious they suffer from debt overhang. Instead, the obstacles to investment and growth in the world's highly indebted poorest countries more likely are weak economic institutions and infrastructure.

— Matt Nesvisky

"Both borrowers and lenders can benefit from debt relief when the borrower suffers from 'debt overhang'... Understanding why the Brady Plan produced rising asset prices, increased investment, and accelerated growth is pivotal to understanding the circumstances under which debt restructuring can be expected to yield efficiency gains."

of lending. Models emphasizing costs suggest that debt relief may hurt the recipient country's stock market in three ways. First, if the relief program allows a government to continue wasteful policies, then economic growth and corporate profits may be held back. Second, countries that fail to honor their debts may incur trade sanctions that likewise will inhibit growth and profits. Third, debt relief may harm a debtor's reputation and increase its costs for future international borrowing

Nevertheless, both borrowers and lenders can benefit from debt relief when the borrower suffers from "debt overhang." Overhang occurs when the cost of a country's debt, taken with a decline in the economy, discourages new investment. In such a circumstance, if each creditor foregoes some of its claims, then the debtor is able to better service debts owed to every creditor. This means that the expected value of all creditors' claims would rise. Thus if all creditors agree — or are forced to agree — to cut some losses, the debtor nation may qualify for profitable new lending. An

cent, for a total market capitalization growth of \$42 billion. This they attribute to anticipation of the relief programs. At the same time, stock prices of the 11 major U.S. banks with large LDC loans increased by an average of 35 percent, for an increase in total market capitalization of \$13.3 billion. The net benefit of the relief programs was therefore \$55.3 billion.

The researchers note that such growth must not be considered in isolation from overall world markets. But their comparison with countries that did not sign on for debt relief and with banks that were not major LDC lenders is fairly conclusive. The stock market increase associated with debt relief quite clearly was economically large and statistically significant. No significant rises were found in the stock markets of the nations that opted out of debt relief.

Equally noteworthy, say Arslanalp and Henry, is that the 1989 debt relief offers were contingent on debtor countries enacting major economic reforms and restructuring. These reforms included stabilization, trade liberalization, privatization, and

Dual-Class Companies

Aligning the interests of owners and managers has been a problem ever since stock corporations were invented. In principle, owners can shape managerial incentives in a variety of ways. In practice, most managerial incentive schemes are built around equity ownership. Awarding rights to the cash flow created by equity ownership creates a positive incentive to increase future cash flows. But equity ownership also gives managers more control. If managers use that control to entrench themselves, they may run the company for their own benefit, acting against the interest of other shareholders.

In dual-class companies, there are two classes of common stock offered, one of which has superior voting rights. Because management and other insiders typically hold more of the superior voting class, data from dual-class companies lets researchers assess whether the positive incentives of increased cash flow dominate the negative incentives of increased managerial control.

Studies of companies in emerging markets suggest that firms with two classes of stock neglect the interests of those holding shares lacking the superior voting rights. But unlike emerging markets, in developed countries the capital markets have a framework of legal, regulatory, and institutional protections designed to

shield owners of publicly traded stock from managerial fecklessness. In **Incentives vs. Control: An Analysis of U.S. Dual-Class Companies** (NBER Working Paper No. 10240), authors **Paul Gompers, Joy Ishii, and Andrew Metrick** consider how cash flow rights and voting control affect managerial behavior in well developed capital markets.

Combining data from the Securities Data Company, the Center for Research in Security Prices, the Investor Responsibility Research Center, and company proxy statements, the authors create a unique collection of information about U.S.

bly because investors do not wish to buy stock with inferior voting rights. The median debt-to-assets ratio for dual-class firms is 0.21; for single-class companies it is 0.09.

After examining the effects of insiders' cash flow and voting rights on firm value, performance, and investment behavior, the authors conclude that aligning incentives by increasing managerial ownership of cash flow appears to increase managerial willingness to pursue more rapid growth. Increased cash flow ownership increases capital expenditures and growth in advertising and R&D spending, and firm value increases

“Some firms adopt dual-class structures when their original owners are reluctant to cede control... these firms are less likely to tap the capital markets, typically invest less, grow more slowly, and have lower valuations.”

dual-class companies. They find that dual-class firms are more common among media-related firms, possibly because such firms offer greater opportunities for non-pecuniary private consumption and their founders “establish a dual-class structure in order to preserve control.” On average, managers and directors own an average of 26.7 percent of the cash flow rights and 50.7 percent of the voting rights among firms in the authors' sample. Dual-class firms rely more heavily on debt financing, possi-

until managerial ownership of cash flow reaches about 33 percent. Increasing managerial control apparently has the opposite effect, perhaps because “some firms adopt dual-class structures when their original owners are reluctant to cede control” and seeking capital typically dilutes control. As a result these firms are less likely to tap the capital markets, typically invest less, grow more slowly, and have lower valuations.

— Linda Gorman

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