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Legal Liability Reforms Boost Production and Jobs

Reductions in legal liability can have real economic effects, according to a recent NBER study. In **The Causes and Effects of Liability Reform: Some Empirical Evidence** (*NBER Working Paper No. 4989*), **Thomas Campbell, Daniel Kessler,** and **George Shepherd** show that substantial increases in productivity and employment have occurred in states that enacted reforms that reduced tort liability. On the other hand, states that enacted liability-increasing reforms experienced reduced productivity and employment, they find.

The authors classify six kinds of reforms as reductions in liability: 1) caps on contingency fees; 2) relaxation of the collateral source rule, which held the defendant liable even if the plaintiff was compensated by an independent or "collateral" source; 3) caps on damages; 4) reforms that require future damages to be paid periodically, rather than in a lump sum; 5) elimination or limitation of joint and several liability, which held each of many defendants liable for the whole damage, regardless of the defendant's contribution to the damage; and 6) limits on punitive damages.

They classify two reforms as increasing liability. First, under the old rule of contributory negligence, a defendant was not liable if the plaintiff contributed at all to his own injury. In many states, this has been changed to comparative negligence, which makes a defendant liable to the extent of his contribution to the damage. Second, the shift to prejudgment interest, whereby the plaintiff receives interest on a loss either from the time of the loss or from the time the plaintiff files suit, rather than from the date of the judgment, increases liability.

In 13 of the 17 industries that are studied here, increases in productivity follow decreases in liability. Often these increases are substantial. In an average state, the adoption of one additional reform to reduce liability causes output per worker to rise by about 3 percent in retail trade, 7 percent in miscellaneous repair services, and 9 percent in amusement and recreation. Conversely, in 14 of the 17 industries, increases in liability cause productivity to fall.

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The authors find that the effect of liability on employment is even more dramatic. In 14 of the 17 industries studied, decreases in liability are associated with increases in the number of jobs. In an average state, the adoption of one additional reform to reduce liability causes employment to grow by almost 18 percent in miscellaneous repair services, 23 percent in amusement and recreation, and 25 percent in motion pictures. Also, in 14 of the 17 industries, increases in liability cause jobs to decrease.

Campbell, Kessler, and Shepherd find that the causes of liability reform are difficult to identify. States' political characteristics influence adoption of many, but not all, of the reforms. In general, enactment of reforms that reduce liability is

associated with (measures of) political conservatism.

How do lawyers affect the prospect of liability reform? Interestingly, the higher the number of lawyers per capita in a state, the greater is the state's tendency to adopt both reforms that increase liability and reforms that decrease it. One possible reason, the researchers speculate, is that all changes to the legal system require people who understand them. Thus, the demand for lawyers increases, regardless of the change. DRH

Congressmen Can "Buy" Votes with Federal Spending

For decades members of the House of Representatives have fought for "pork barrel" projects, federal jobs, and other federal spending in their districts, figuring their electorate would reward them when the time for reelection arrives. In spite of the widespread belief that such a relationship exists, earlier studies have never been able to confirm it.

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Now economists **Steven Levitt** and **James Snyder, Jr.** show that the politicians were correct. In **The Impact of Federal Spending on House Election Outcomes** (*NBER Working Paper No. 5002*), they find that an additional $100 in federal spending per person in a district produced 2 percent more votes for the incumbent. This means that the cost of "buying" one additional vote in House elections amounts to about $14,000 of extra federal spending, since the average district population is about 500,000 and the average number of votes cast is about 175,000. If one additional federal job in a district costs about $70,000, each new federal job is worth four votes to the incumbent.

This result holds only for the more discretionary, high-variation spending programs, including grants. There are more than 1000 such federal programs, including money for highways, urban development, parks, mass transit, farm programs, defense procurement or bases, education, and research. While such programs comprise a relatively small fraction of the overall budget, they account for a substantial share of the year-to-year variation in federal dollars flowing into a district. In contrast, Social Security spending on Medicare, Medicaid, and other transfer programs appears to have no effect on votes.

Levitt and Snyder's results are based on federal outlays to each of 435 congressional districts drawn from the Federal Assistance Awards Data System for 1983 to 1990. This money amounts to about 56 percent on average of the total federal budget. The authors obtain similar results using state-level data covering 1962 to 1990.

One explanation for the failure of earlier studies to uncover the expected relationship between federal spending and election outcomes is that incumbents who expect to have difficulty being reelected, for whatever reason, are likely to exert greater effort to obtain federal outlays than representatives with "safe" seats. This obscures the statistical relationship between more pork brought home and victory in elections. To circumvent that problem, Levitt and Snyder use information on changes in spending *outside the district,* but inside the state containing the district. Such spending is correlated closely with spending inside the district, but is not likely to be contaminated by the congressman's level of effort. DRF

No Productivity Effects from Extra Infrastructure

Do public sector investments in infrastructure—roads, bridges, and the like—strongly influence economic productivity? Traditional analyses based on the costs and benefits of specific projects suggest not. Although some analyses based on regressions linking private productivity and public infrastructure have indicated that public spending has large effects, NBER Research Associate Douglas Holtz-Eakin (in NBER Working Paper No. 4824 summarized in the November *NBER Digest*) used conventional regression techniques and found that increased infrastructure investments had no effect on productivity. Economists who believe that infrastructure raises productivity often attribute that result to ex-

ternalities: that is, geographic "spillovers" in productivity benefits that may not be captured in the more traditional analyses.

Now a new study for the NBER by **Douglas Holtz-Eakin** and **Amy Ellen Schwartz** finds that such productivity spillovers are not very large. In **Spatial Productivity Spillovers from Public Infrastructure: Evidence from State Highways** (*NBER Working Paper No. 5004*), they "examine the degree to which state highways provide productivity benefits beyond the narrow confines of each state's borders." State highways are a natural focus for such a test, they write, because they—unlike local roads—are designed at least in part with interstate linkages in mind. So, to the extent that expansions in road infrastructure increase productivity in neighboring states, this effect should be most dramatic for investments in state highways.

However, Holtz-Eakin and Schwartz "find no evidence of quantitatively important productivity spillovers." They use state-by-state data for private sector output, labor, capital, and state government highway capital for the 48 contiguous states over 1969 to 1986 to reach their conclusion.

Are Democracies Less Likely to Fight?

Are democratic nations much less likely to go to war with each other—or to become involved in serious disputes short of war—than other states? In recent years a growing number of scholars in the field of international relations have claimed that this is the case, with some going so far as to assert that "democracies almost never fight one another." Now, in a new study for the NBER, **Henry Farber** and **Joanne Gowa** challenge those conclusions. They find that the incidence of war or of other disputes does not depend on whether nations are democratic. Most important, the authors conclude, is whether states have interests in common or interests in conflict.

In **Common Interests or Common Polities? Reinterpreting the Democratic Peace** (*NBER Working Paper No. 5005*), Farber and Gowa review data on many countries from 1816 to 1980. They use generally accepted definitions to classify countries as democratic, autocratic, or somewhere in between. They also determine whether states have interests in common by studying alliances between them. They exclude the periods of the World Wars, because wartime alliances do not offer any information about a nation's interests that is independent of the war itself.

"[T]he incidence of war or of other disputes does not depend on whether nations are democratic. . . . [W]hat seems to matter is not whether nations have similar forms of government, but whether they have common interests."

As in earlier studies, Farber and Gowa find that wars between democracies occur at a significantly lower rate than do wars between other pairs of states. The probability of war between democracies is 0.02 percent, compared with a probability of war of 0.09 percent for other nations.

But further analysis shows that the relationship between the type of regime and the probability of war or disputes is not consistent across time. Before 1914 and during the years between the World Wars, there was no statistically significant relationship. After World War II, however, pairs of democratic countries were significantly less likely to fight each other.

The authors' analysis of alliances explains these facts. Farber and Gowa show that democracies were less likely to have interests in common before 1914 and during the interwar years than nondemocratic country pairs. After 1945, however, the relationship reverses and common interests are more likely to characterize relationships between democracies. Thus, what seems to matter is not whether nations have similar forms of government, but whether they have common interests.

RN

The article titled "How Tax Law Changes Lead U.S. Multinational Companies to Cut Investment and Reduce Operations," which was published in the July 1995 NBER Digest, *contained inadvertent text omissions. Therefore, we are reprinting this article in its entirety on the following page. We regret any inconvenience that the text omissions may have caused the authors and our readers.*

How Tax Law Changes Lead U.S. Multinational Companies to Cut Investment and Reduce Operations

The taxation of multinational firms always has presented special problems for governments and for the multinationals themselves. One such problem arises because firms can borrow money in one country and deploy the funds elsewhere. For this reason, U.S. authorities have sought to limit how much interest expense multinationals can deduct from their U.S. income. But companies have warned that these rules increase their cost of capital and distort business decisions. Now a new study for the NBER by **Kenneth Froot** and **James Hines** shows that the loss of tax deductibility of interest expenses leads some multinationals to borrow and invest less, and to scale back the scope of their foreign and total operations.

In **Interest Allocation Rules, Financing Patterns, and the Operations of U.S. Multinationals** (*NBER Working Paper No. 4924*), Froot and Hines examine the impact on firm behavior of the change in interest allocation rules introduced by the Tax Reform Act of 1986. The act dramatically reduced the tax deductibility of the U.S. interest expenses of certain American corporations. The change increased the tax liabilities of American multinationals and made additional borrowing more expensive for them.

One of the concerns raised during the deliberations over the 1986 act was that the additional cost of borrowing might discourage some firms from investing in new plant and equipment, since a sizable fraction of new investment is financed by borrowing. Froot and Hines find that the change in tax rules significantly influenced the operations of American multinational firms. Firms that were unable to deduct all of their interest expenses against their U.S. tax liabilities issued 4.2 percent less debt between 1986 and 1991, and invested 3.5 percent less in property, plant, and equipment, compared with other firms. In addition, the affected multinationals were more likely to lease rather than to own capital assets, and to reduce the scope of their foreign operations. Certain firms, Froot and Hines estimate, reduced their foreign sales by 2 percent a year after 1986. Further evidence—suggestive but statistically inconclusive—implies that interest allocation rules can influence the overall magnitude of firm operations.

Froot and Hines conclude that firms substitute away from debt when debt becomes more expensive, and also that the loss of interest tax shields increases a firm's cost of capital. RN

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