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Taxes, Not Rules, Reduce Drunk-Driving Deaths

Currently, the most effective way to shrink the number of drunk-driving fatalities in the United States may be to raise tax rates on alcohol, which remain low by historical standards. For example, restoring the tax on beer to its 1975 level in real terms (that is, taking account of inflation) probably would reduce highway fatalities in the nation by 8 percent, saving more than 3700 lives annually, according to NBER Research Associate **Christopher Ruhm**.

For the last 15 years, federal and state governments have enacted or strengthened regulations designed to deter drinking and driving. Legislators were concerned because traffic fatalities are a major source of accident deaths at all ages, and the leading cause of mortality for persons under 40. Moreover, almost half of drivers and more than 40 percent of passengers killed in vehicle crashes had been drinking. When fatal accidents occur at night, the proportion involving alcohol is even higher.

However, at this point stricter alcohol laws, unless draconian in nature, are not likely to yield a significant further decline in traffic fatalities, Ruhm finds in **Alcohol Policies and Highway Vehicle Fatalities** (*NBER Working Paper No. 5195*). By 1988, all 50 states had mandated a minimum legal drinking age of 21 and many had adopted other alcohol-control measures. Nor does the regulatory activity show any sign of abating, notes Ruhm. For instance, between 1990 and 1994, eight more states lowered the illegal blood alcohol content levels 0.08 percent from 0.10 percent or higher, increasing to 12 the number of states with that policy. By 1994, 39 states had passed administrative per se laws, requiring license suspension or revocation if a driver's blood alcohol content exceeded a prespecified level, and 26 had established mandatory fines for the first driving-under-the-influence conviction.

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Although traffic fatalities decreased from 51,077 in 1980 to 44,529 in 1990, there are at least two reasons to doubt that the entire reduction is related to these stricter alcohol-control regulations, Ruhm writes. First, the new legislation was accompanied by substantial grassroots activities to change public attitudes toward drinking and driving. For example, Mothers Against Drunk Driving (MADD) formed its first chapter in 1981, and had established 395 chapters by 1986. Second, the percentage of traffic deaths involving drinking did not fall significantly over the same time period. This suggests that driving on the whole may have become less risky, partially because of such factors as mandatory seat belt laws and the increased availability of such vehicle safety features as antilock brakes and air bags.

Using data for the contiguous 48 states for 1982 to 1988, and some additional information beginning in 1975, Ruhm finds that most of the new regulations have had little or no impact on traffic mortality. However, a higher legal drinking age has reduced fatalities among 18- to 20-year-olds. Dram shop

laws (that is, holding the seller of the alcohol liable for injuries) also have had some negative impact on traffic mortality, he finds. In contrast to the more fragile results for the regulatory policies, higher beer taxes appear to reduce vehicle deaths significantly, he concludes.

DRF

Are College Grads Taking High School Jobs?

Twice in the past 25 years, the economic value of college has been called into question. First, in the late 1960s through the 1970s, when college-educated babyboomers surged into the labor market, they sharply depressed the return to the college diploma. Then, an article published in 1992 estimated that 20 percent of all workers with college degrees in 1990 were either unemployed or employed in jobs requiring only high school skills; this message was updated and reinforced in the Summer 1994 *Occupational Outlook Quarterly*. Each of these articles warned that the economy was generating college graduates faster than appropriate jobs for them.

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But a recent NBER study by **John Tyler, Richard Murnane,** and **Frank Levy** demonstrates that a college education continues to have significant economic value. In **Are Lots of College Graduates Taking High School Jobs? A Reconsideration of the Evidence** (*NBER Working Paper No. 5127*), they show that among 25- to 34-year-old male or female college graduates, or 45- to 54-year-old female college graduates, real earnings increased during the 1980s, and the percentage in "high school jobs" declined. In fact, young college graduates improved their labor market position during the 1980s by increasingly obtaining degrees in occupations that had high earnings at the beginning of the decade and that had the highest earnings growth over the decade. Only older male college graduates fit the dismal profile that had been described in the press.

The authors confirm that the proportion of B.A.s and postgraduates either unemployed or in high school jobs did rise from 11.3 percent in 1970 to 19.9 percent in 1990. But most of that increase occurred between 1970 and 1980. Between 1980 and 1990, the increase was only 1.3 percentage points. These facts reflect the surge of babyboomers into the labor force during the 1970s, at a time when the demand for college graduates was increasing steadily but less rapidly than their supply. During the 1980s, the supply of college graduate workers continued to grow, but their proportion in high school jobs increased very little.

The 1980s were also a time of growing inequality of earnings between the bottom and the middle of any specific group of workers. Thus the earnings gap between the average young B.A. and the young B.A. in a high school job grew over the decade. But even for workers in high school jobs, a B.A. grew in value relative to a high school diploma during this decade.

Finally, the authors find that young male and female college graduates were very responsive to market signals about employment and earnings in the 1980s. Increasingly, they earned degrees in occupations with higher earnings at the beginning of the decade and greater growth throughout the decade: engineering, the sciences, and health, for example. Correspondingly, fewer of them opted for degrees in lower-paying fields, such as education and the social sciences.

Why Poor Forecasts Bring Good Results

When it comes to seeing the future, it's hard to beat the averages. An individual economist may predict future interest rates and economic growth rates correctly on a given occasion, but no forecaster stays hot for long. Repeated studies have shown that, over time, the average of forecasters' views is a more accurate guide to macroeconomic developments than any individual's predictions. Why, then, do individuals often produce forecasts that are well away from the mean? The answer, contends NBER Fac-

ulty Research Fellow **Owen Lamont,** is that it is not always in a forecaster's self-interest to issue the most reliable forecast.

In **Macroeconomic Forecasts and Microeconomic Forecasters** (*NBER Working Paper No. 5284*), Lamont suggests that forecasters face conflicting incentives. On the one hand, their clients want the most accurate possible forecasts. On the other hand, individual forecasters profit from enhancing their reputations. Offering forecasts that differ radically from those of their competitors is one way for economists to separate themselves from the pack. If their efforts to gain more public attention lead to erroneous forecasts, then "using professional forecasters may actually be *worse* than using disinterested observers," Lamont writes.

To test his theory, Lamont examines year-end forecasts of the Gross National Product, the unemployment rate, and the Consumer Price Index published in *Business Week* magazine from 1971 to 1992. The forecasters included 118 human beings and 15 econometric models. The predictions of forecasters who owned their own firms, Lamont found, tended to be much farther from the mean than the predictions of other forecasters. They also tended to be less accurate: when forecasters left their original employers and started their own firms, their average real GNP growth forecast error increased by half a percentage point, compared to an average forecast error of 1.6 percent. Age also is associated with less accurate forecasting. "Older human forecasters make bolder forecasts compared to their own behavior when younger," Lamont says. "Further, when human forecasters establish their own firm, their behavior changes dramatically and they produce even bolder forecasts."

The cause of this seemingly irrational behavior, Lamont suggests, is that forecasters usually are not compensated according to the average accuracy of their forecasts. In any given year, some forecasters who break with the conventional wisdom are likely to issue forecasts that prove more accurate than the mean. When that occurs, they receive professional awards and press attention, enhancing their earnings prospects. The benefits of higher visibility are particularly large for self-employed forecasters whose income depends on their ability to attract clients, which may explain why their forecasts tend to be the most extreme. A radical forecast that proves incorrect, however, is less likely to generate attention, perhaps because most forecasts end up being wrong. Among forecasters, Lamont says, "Scattering appears to be a popular practice, both to generate attention and to gain credibility in the unlikely event that the forecast turns out to be accurate." ML

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Higher Corporate Leverage Means Slower Growth

A key question in the field of finance is whether a company's leverage (that is, the use of borrowed money to supplement equity capital) affects the company's ability to invest and grow. In a recent NBER study, **Larry Lang, Eli Ofek,** and **René Stulz** show that there is in general a strong negative relation-ship between leverage and growth. This association holds no matter what variables are used to forecast growth, irrespective of how leverage is measured, and for firms of all sizes. The one exception is firms considered by the financial markets to have good investment opportunities. For those firms, leverage does not reduce growth.

In **Leverage, Investment, and Firm Growth** (*NBER Working Paper No. 5165*), Lang, Ofek, and Stulz study the investment characteristics and performance of 142 selected large (annual sales of more than $1 billion) firms from 1970 to 1989. The negative relationship that they observe between leverage and growth is powerful and economically significant. Average "book" leverage—the ratio of short-term and long-term debt to the book value of total assets—for firms in the sample is 24 percent; the average one-year growth in capital expenditures is 11 percent. The authors find that firms with half the average leverage would have capital expenditures of about 17 percent instead of 11 percent.

The exception is firms with a high ratio of market capitalization to the replacement cost of their assets. This measure, known as Tobin's q, shows how highly the financial markets value the growth opportunities of the firm. The median firm in the sample had a q of .72. Firms in the 75th percentile had a q of 1.1. When the authors test for the differences in the rela-

tionship between leverage and growth in low-q firms (q less than one) versus high-q firms, they find that investment, employment, and investment growth for low-q firms

the high-q firms, though.

Once the authors show that the negative relationship between growth and leverage exists only for low-q firms, they demonstrate that

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all are significantly negatively related to leverage. By most measures there is no significant association between growth and leverage for

it is very robust. The correlation holds both within and across industries, for different measures of book values and investment opportunities, for different estimation methods, for subsamples of better-performing firms, for subperiods, and for small firms.

These results, the authors conclude, suggest that the negative effect of leverage on growth affects only those firms with good growth opportunities that go unrecognized by the market, or those firms that do not have good investment opportunities. If most low-q firms have only maginal growth opportunities and poor performance, then the fact that leverage acts as a brake on their growth might be beneficial to their shareholders, and also might provide support for finance theories that emphasize the disciplinary role of debt. RN

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