

Issue Background



BEER INSTITUTE

Beer Tax Facts

**The economic and societal impacts
of state and federal taxes on beer**

One in a series of occasional reports for government
officials, journalists and other opinion leaders.

Economic Impact of the U. S. Beer Industry

- Directly employs more than 850,000 people in brewing, wholesaling, and retailing.
- Creates hundreds of thousands of additional jobs in agriculture, business services, travel and entertainment, packaging, and many other sectors.
- In all, the industry makes an important contribution to our national economy, generating nearly 1.7 million American jobs, with an economic output estimated at \$144 billion annually.

Beer. That word conjures up many pleasant images ... hot days and ball games ... a tall, cold one at the end of a hard day's work ... good times ... good friends.

What doesn't come to mind for most beer drinkers – but perhaps should – is TAX. Because in the process of enjoying the simple pleasure of beer, consumers are also making a very large hidden tax payment to their state and federal governments. Surprisingly, taxes are the single most expensive ingredient in beer, costing more than the labor and raw materials combined. A

detailed economic analysis (Standard & Poor's DRI, 2001) found that if all the taxes levied on the production, distribution and retailing of beer are added up, they amount to an astonishing 44% of the retail price! Most consumers would be shocked to learn how much they ultimately pay in taxes on their beverage of choice.

The DRI study found that in 1997 consumers shelled out more than \$10.7 billion in sales and excise taxes on the beer they drink. Federal income, payroll and other taxes add another \$10.7 billion to the purchase price, and comparable state-level taxes add \$3.6 billion more. All told, the tax on beer was \$25 billion dollars *per year*. Even in the era of enormous government budgets, that's a lot of money coming out of beer drinkers' pockets!

This Backgrounder looks at some of the real world impacts of these taxes and considers what happens when beer taxes are increased or reduced. The effects are quite wide-ranging, with the potential to touch many lives in many different ways.

Beer taxes get an “F” in fairness

When it comes to taxes, a basic fairness principle is that people of like ability to pay should pay like amounts in taxes. *Regressive* taxes fail on this count. Instead of taxing equitably, they place a much heavier burden on low- and middle-income taxpayers than on the rich.

Beer taxes score a solid “F” in terms of tax regressivity. That's because many more beer drinkers are working men and women with modest incomes rather than wealthy people.

The tax on beer is one of the most regressive of all taxes in the federal tax code. The Citizens for Tax Justice and the Institute on Taxation and Economic Policy estimate that people whose family incomes are in the bottom 20% pay a tax burden from beer excise taxes 5 times greater than people with family incomes in the top 20%. Most recently, a 2003 analysis of the federal beer tax

by PricewaterhouseCoopers found that households with the lowest incomes pay an amount of beer tax per \$1,000 of income that is *9 times higher* than that paid by households with the highest incomes.

The effect of beer taxes on overall tax fairness is simple: Increasing beer taxes makes the tax system more regressive; cutting beer taxes makes the system more fair.

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Retract that “luxury” tax

On January 1, 1991, as part of an effort to balance the budget, the federal government doubled its take from beer, raising the beer tax from \$9.00 to \$18.00 per barrel.

This was the largest single increase in the tax on beer in American history, and resulted in some 60,000 people losing their jobs in brewing, distributing, retailing and related industries, according to estimates by the economic firm of DRI/McGraw-Hill (1993).

As part of the same budget package, and justified as an effort to be even-handed, Congress also decided it would raise taxes on some of the luxury toys of the very rich – top-of-the-line automobiles, yachts, private airplanes, expensive furs and high-end jewelry.

Less than a year later, however, Congress yielded to pressure ... and repealed or began phasing out the tax on every one of those luxury items. But not the tax on beer!

While excise taxes collected from wealthy Americans have been eliminated, working Americans continue to reach into their pockets to pay the beer tax ... at the rate of \$65 million a week.

As a basic matter of fairness, the time is long overdue to roll back the beer tax to its pre-1991 level. Not only would a serious inequity be corrected, but at the same time Congress could conservatively restore 50,000 jobs to the U.S. economy (DRI/McGraw-Hill, 1996).

The case for tax efficiency

No one – rich or poor – wants to pay more than necessary to support the functions of government. That’s why it is important to understand that beer tax increases are very *inefficient* as revenue-raisers.

This inefficiency comes from two major sources. First, the excise tax on beer is levied, by law, at the brewery and becomes an indistinguishable part of the product cost as it moves through the distribution system. Like other costs, it is marked up by wholesalers and retailers. It is also included in the price used to compute state and local sales taxes, thus causing consumers to pay a tax on a tax.

As a result, beer drinkers actually end up paying about \$2 out-of-pocket for each dollar of tax levied by government.

Second, because beer taxes are narrowly-based, dollar for dollar they inflict more economic damage than broad-based taxes. A 2002 study by DRI-WEFA and The Parthenon Group compared the economic impact of a nationwide 1% increase in state income taxes compared to an equal increase in sales and excise taxes. They found that the broad-based taxes did far less harm, resulting in less than half the losses in GDP, employment and consumer confidence. This suggests that if taxes *must* be raised, it is best to do so through broad-based taxes.

On the other hand, cutting back on excise taxes could be an extremely *efficient* way to provide lower and middle-class tax relief. When beer taxes are cut, new jobs are created, which

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increases income taxes and related revenues for the government. PricewaterhouseCoopers estimates that because of these dynamic impacts, every dollar reduction in beer taxes would cost the government only about 65 cents. A full repeal of the doubling of the federal beer tax in 1991 would reduce net revenues by only about \$1 billion annually, while helping low- and middle-income workers.

Beer taxes & “social cost”

There are broader questions about the impact of beer taxes on American society. Some advocacy organizations suggest that regardless of their negative impacts on the American economy, beer taxes should be raised even higher in order to pay for the problems caused by abusive drinkers.

The suggestion is that individuals who abuse alcohol create a “social cost” which has been estimated to be anywhere from \$12 billion annually (Heien and Pittman, 1989, 1993) to \$176 billion (Rice, 1999). These “social cost” estimates are highly controversial and subject to many criticisms, given their wide range as well as their failure to consider any *benefits* from alcohol beverages.

Many have suggested these social cost studies are little more than an academic exercise with little policy relevance. Too often they are simply tools to help make a political claim or to justify a budget increase.

But there is an even more basic problem with the entire “social cost” argument. At heart,

it suggests that some people’s taxes should be raised because they make *personal* choices which are a cost to “society,” primarily in the form of lost productivity and lost quality of life. “Society” should therefore be compensated for these losses, or so the argument goes.

Fortunately, this whole approach doesn’t sit very well with most people. Politicians should not use the tax code to manipulate private choices – such interference runs directly counter to basic democratic and free market principles.

Also, there is a striking arbitrariness about focusing on beer taxes to pay for social costs. If

we tax all beer drinkers to pay for the alleged “social cost” created by some problem drinkers (who are a very small minority of those who consume alcohol), will we next start taxing downhill skiers because some people ski out of control and cause accidents?

Or should we encourage the government to start mailing out speeding tickets to *all* drivers because *some* people exceed the speed limit, or to impose a tax on those

who do not get enough exercise?

Ridiculous exaggeration? A peer reviewed article in the *American Journal of Public Health* claims that the social cost of a “sedentary lifestyle” is \$80 billion and calls for government programs to “induce enough additional exercise among that group to justify their costs” (Keeler, et al., 1989).

Unfortunately, some alcohol abusers do inflict costs on others. But taxing all drinkers for the abuses of the few is simply not consistent with our nation’s values or with the way our society goes about helping people or solving problems.

The “social cost” argument as a basis for higher beer taxes is logically equivalent to mailing out speeding tickets to all drivers because some people exceed the speed limit.

A way to reduce alcohol abuse?

One variation of the social cost argument is that beer taxes can have a beneficial impact on problem drinking and should be used to discourage alcohol abuse. Raising alcohol taxes is sometimes promoted as a way for government to force people to cut back on their drinking.

The problem is, life's just not that simple. In this area, the scientific studies confirm precisely what we all know from common sense:

people can't be taxed into responsible behavior. Abusive drinkers are the very last people who will reduce their consumption when the price of alcohol goes up.

Several recent studies clearly show that while light and moderate drinkers are sensitive to price, that's not true for the heaviest drinkers. For example, Manning et al. (1995) utilized data from the National Health Interview Survey to analyze drinking patterns among light, moderate and heavy drinkers. The researchers found that the heaviest drinkers had no "price elasticity" – their level of consumption was not influenced by the price of alcohol.¹ On the other hand, the moderate drinkers in the study were most sensitive to prices, cutting back most when prices rose.

The U.S. Supreme Court has noted this behavioral pattern, finding that "... the evidence suggests that the abusive drinker will probably not be deterred by a marginal price increase, and

that the true alcoholic may simply reduce his purchases of other necessities" (*44 Liquormart, Inc. v. Rhode Island*, 116 S. Ct. 1495 (1996)). The evidence clearly shows that higher beer taxes discourage purchases by responsible drinkers but have no impact on alcohol abusers.

Alcohol abuse is a complex problem which deserves a meaningful response. Programs and policies designed to reduce abuse must directly target individuals who have problems with alcohol, and offer them assistance that can be reasonably expected to make a difference. Beer taxes just don't fall into that category.

Abusive drinkers are the very last people who will reduce their consumption when the price of alcohol goes up.

What about drunk driving?

The "tax them into responsibility" rationale is also used by some groups who lobby for higher beer taxes as a way to reduce drunk driving. Here again, the basic idea is that by raising the

price, beer sales will fall, and in the process this will lead to less drunk driving on the nation's roadways.

Some early studies of the relationship between beer taxes and drunk driving suggested that higher taxes reduce traffic fatalities (see for example Cook, 1981; Saffer and Grossman, 1987; Chaloupka, 1993). More recently, at least five different studies that utilize longer time series and more current data (including the doubling of the federal beer tax in 1991) consistently find no impact from beer taxes on reducing drunk driving by adults and/or teens

¹Economists consider beer to be relatively price inelastic compared to other products. On average, a 10 percent increase in price will result in a 5 percent decrease in sales – but the response is much greater than this for light and moderate drinkers, and much less than this for problem drinkers, whose response is so small it has been found to be not statistically significant. See Manning et al., 1995.

(see Sloan et al., 1994; Dee, 1999; Mast, et al., 1999; Stout, 2000; Young & Likens, 2000).

One possible reason that these recent studies find no impact for beer taxes is that their effect has dissipated over time. During the 1980s, grassroots movements such as MADD and SADD developed extensive media campaigns to educate people about the consequences of drunk driving and successfully lobbied for stiffer penalties for drunk driving offenders. People responded, and today there is much less drunk driving than in the 1980s (total drunk driving fatalities are down 37% since 1982, while teen drunk driving fatalities are down 60%). Any possible impact from beer taxes on drunk driving, if it ever existed, must have been significantly reduced or eliminated.

The newer studies – particularly Mast, Dee, and Young and Likens – also find that several of the earlier analyses failed to use appropriate statistical techniques and control variables. The most recent studies typically use much more comprehensive data sets along with more powerful statistical techniques to sort out the effect of taxes versus other possible explanatory variables. And in doing so, they find that beer taxes have no explanatory power in predicting changes in drunk driving rates, across states and over time.

Powerful statistics aside, simply looking at what *actually happened* following the 1991 beer tax increase is highly informative. As shown in the accompanying graphic, according to the U.S. Department of Transportation's National Highway Traffic Safety Administration, for more than a decade the drunk driving fatality rate has steadily declined. If higher beer taxes could truly save hundreds of additional lives each year, the drunk driving trend should have

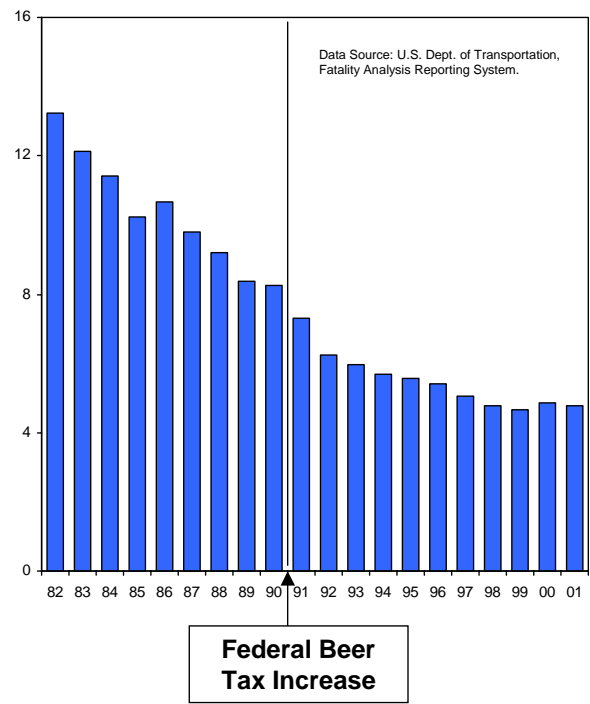
exhibited a steeper decline in 1991 and beyond than it did in the years preceding the federal beer tax hike.

It didn't happen. In fact, the long-term decline in drunk driving simply continued its steady downward pace.

Beer taxes are not the answer to drunk driving. Instead, the evidence clearly points to a small group of hard core drivers who repeatedly drive while very intoxicated. These are individuals who are often repeat offenders, who stubbornly refuse to obey the law, often driving on suspended licenses and are responsible for a very large portion of the drunk driving fatalities which occur each year.

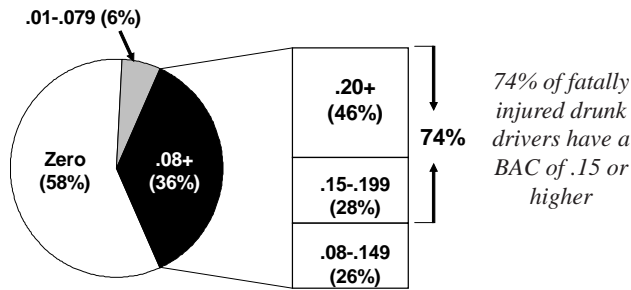
A study by the Traffic Injury Research Foundation (Simpson, et. al, 1996) clearly exposes the magnitude of the drunk driving problem caused by these drivers. The report shows that on a typical weekend night, "hard

Fatalities Involving a Drunk Driver (.08+ BAC) per Billion Vehicle Miles Traveled, 1982-2001²



²The graphic shows the actual number of auto fatalities in crashes involving a drunk (BAC .08% or higher) driver from 1982-2001, adjusted for how much driving occurred each year (billions of vehicle miles traveled). It is important to make this adjustment, since in years when there is a high level of driving there are more fatalities, and in years of less driving, fatalities decline – but these swings have nothing to do with the degree to which people are driving while intoxicated.

BACs Among Fatally Injured Drunk Drivers in the U.S., 2000



Source: Department of Transportation, National Highway Traffic Safety Administration, Fatal Alcohol Reporting System for 2000

core” drinking drivers make up 1% of the traffic on the road, but contribute to approximately 50% of all the traffic fatalities that occur.

The study also shows that nearly 80 percent of all drunk drivers who die in traffic crashes have a blood alcohol concentration of at least .15%; and almost half have a BAC of at least .20% – a BAC level that is at least twice the legal limit in all states.

These are not people who can be taxed into responsibility. Instead, serious and *targeted* policies are required – programs which provide appropriate professional assistance, as well as countermeasures such as ignition interlocks, vehicle confiscation and mandatory jail time.

The special challenge of underage drinking

Some advocates claim that beer taxes are a weapon in the fight against underage drinking. Their theory is that teens do not have as much discretionary income as adults, so they should be more sensitive to changes in beer prices than adult drinkers.³ “Raise the beer tax and there will be less underage drinking,” so the theory goes.

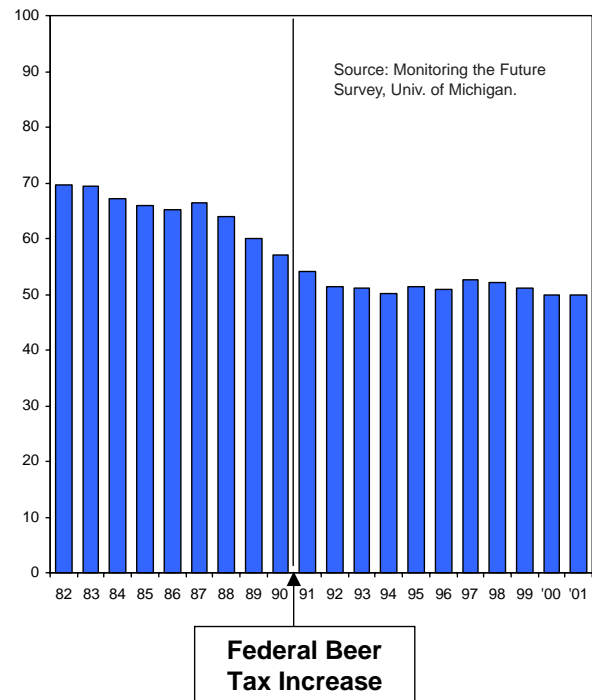
³In fact, it is not true that teens have little discretionary income and base their purchasing decisions heavily on price. A recent article in *American Demographics*, notes that teens spent nearly \$63 billion of their own money in 1994, and that since almost all of their income is discretionary, teens are much less motivated by price than other purchasing considerations. See Zollo, 1995.

This misses the fact that teenagers, unlike adult consumers, must actually *break the law* when they attempt to buy a beer. In many states, teens who are caught risk steep penalties which, depending on the circumstances, can even include the loss of one of their most prized possessions ... their driver’s license.

If underage drinkers are willing to break the law and take these kinds of risks just to buy a beer, it is extremely unlikely that beer taxes can be used as a way to curtail their delinquent behavior. Further, most teens who drink do not directly *purchase* alcohol, but obtain it from their parents’ home supplies or from other noncommercial sources such as parties, older siblings and friends (Wagenaar, 1996). Thus, it becomes clear that teens’ decisions about drinking are quite removed from shelf prices.

This is readily seen in the real world data on teen drinking. For almost two decades, the

Percentage of High School Seniors Who Report Any Drinking in the Past 30 Days, 1980-2001



U.S. government has sponsored the yearly Monitoring the Future survey, a major national poll of high school students which includes several questions about drinking. Looking at the trends in teen drinking behavior from this survey, it is obvious that there was absolutely no impact from the federal excise tax in 1991.

As the accompanying graphic illustrates, the level of past 30-day drinking by high school seniors continued its steady decline in 1991, 1992 and 1993 – completely unaffected by the federal tax increase. In some later years the downward trend has flattened somewhat, but clearly, beer taxes had nothing to do with why this has occurred.

A 1999 study by Dee, published in the *Journal of Public Economics*, confirms that beer taxes do not impact drinking by high school students. Dee uses data for the years 1977-1992 from the Monitoring the Future survey, representing the responses of 255,560 high school seniors in 44 states, to examine whether beer taxes impact three different measures of drinking by high school-aged youth: any drinking, “moderate” drinking, and “binge” drinking. He finds that none of these measures are statistically related to the beer tax rate.

Likewise, a study by Chaloupka and Wechsler (1996) using the Harvard College Alcohol Survey of 17,592 students at 140 campuses, found that beer prices had no impact on drinking by male college students, regardless of whether they were under the legal drinking age or if they were of-age. Underage college women showed a very slight response to beer prices, but of-age college women again showed no statistically significant price responsiveness.

Kenkel (1993), using a different data source, found no statistically significant relationship between alcohol prices and either heavy drinking or drinking and driving by males ages 16-21. And Coate and Grossman (1988), also found no statistically significant price effect among 16-21 year olds once religious sentiment variables were included in their analysis.

Beer taxes & public health

While the problems of alcohol abuse, drunk driving and underage drinking warrant special concern, no discussion of the societal impacts of beer taxes would be complete without considering their potential adverse impacts on *responsible* drinkers.

A growing body of scientific literature consistently finds that

moderate levels of alcohol consumption can actually produce certain health benefits for some adults. These benefits primarily occur in the form of reduced risk of coronary heart disease, the nation’s number one killer.

The irony is that higher beer taxes target precisely the wrong drinkers. They don’t turn abusers into moderate drinkers. But they can force moderate drinkers to consume less. This means that higher beer taxes may reduce the health benefits that some adults receive from moderate consumption, while doing nothing to reduce alcohol abuse.

The numbers here are significant. Based on a review of the scientific literature on the health benefits of moderate drinking, the *Journal of the*

“Beer taxes have a relatively small and statistically insignificant impact on teen drinking”

- Thomas Dee
Journal of Public Economics

American Medical Association has noted that more than 80,000 lives would be lost each year if light and moderate drinkers were forced into becoming abstainers (Pearson, 1994). From a public health perspective, then, higher taxes on beer, which comprises about 60% of all the alcohol consumed in the United States, raise serious policy concerns.

So, why beer taxes?

Historically, beer taxes have been levied to pay for the enormous cost incurred in fighting wars. Beer taxes began in this nation to help pay for the Civil War. And prior to the doubling in 1991, beer taxes were last raised to help pay for the Korean War. Unfortunately, these taxes have a tendency to take on a life of their own, even after the national emergency is long past.

Many policymakers have come to recognize, however, that excise taxes of any kind are an antiquated way to levy taxes. As recently as 1900, 50 percent of federal revenues were collected via excise taxes. By 1950, that share had shrunk to 19 percent. And with the elimination of many taxes on luxury goods imposed in 1991 and the recent rollback of the federal excise taxes on telephone service, the

share of the federal budget represented by excise taxes now stands at well below 5 percent. But there are those who keep pressing for higher excise taxes on beer.

It's time to stop thinking of beer taxes as simple, painless solutions to budgetary problems or as a way to deal with alcohol abuse. In the real world, beer taxes are:

- Regressive and destructive – eliminating jobs, hurting working men and women.
- Inefficient and fiscally unwise – costing taxpayers much more than they raise in new revenues.
- Unfair and divisive – tagging one group of consumers to pay for government services that benefit all.
- Ineffective – failing to have any real impact on alcohol abuse.

Sound tax policy clearly dictates that these taxes be reconsidered as we strive to make the tax system fairer and more efficient. It is time to consider phasing out beer taxes in the interest of a tax policy which makes sense for the next century, and beyond.

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