

Article:

Alcohol taxes not close to covering cost of drinking harms in the US.

Linda Carrol

September 13, 2019. 2:38 am.

The sum total of taxes on alcohol doesn't come close to paying the bills associated with excessive alcohol consumption in the U.S., researchers say.

The total damages from excess consumption add up to \$2.05 per drink, while state and federal taxes bring in about \$0.21 per drink, according to an analysis published in the Journal of Studies on Alcohol and Drugs.

Raising taxes on alcohol would not only help cover the costs associated with people drinking to excess, but that strategy might also lead to less problem drinking, said study coauthor Dr. Timothy Naimi, a physician and researcher at Boston Medical Center and Boston University.

"I think a lot of people are unaware of the size of alcohol taxes," Naimi said. "People think of alcohol as a source of state revenue, but instead of supplying revenue, alcohol is costing states money," he added.

"The bottom line on current alcohol taxes in the United States is that they don't come close to covering the costs," Naimi said.

Those costs are associated with harms such as car crashes related to drunken driving, alcohol-related homicides, and illnesses linked to excess drinking like liver damage and heart disease.

Naimi and his colleagues analyzed the various types of state and federal taxes on alcohol sales to see how they compared with public costs of excessive drinking. Those costs had been tallied in an earlier study, which based its findings on data from the Centers for Disease Control and Prevention, Naimi said.

While sales taxes have kept up with inflation, some of the other types of taxes have not, the researchers found. That's because excise taxes aren't based on the price of the product, Naimi said. Rather, they are imposed at the wholesale level and are assessed per unit of volume - per barrel of beer, for example.

Those excise taxes have eroded over time as a result of inflation, the researchers note, adding that another recent study found alcohol-specific state excise taxes had declined, on average, by about 30% across all beverage types between 1991 and 2015.

The researchers calculated that state alcohol taxes brought in an average of \$0.13 per drink, with Delaware at the low end of the scale at \$0.03 and Tennessee at the high end at \$0.27 per drink. When Naimi and his colleagues added in the average value of federal taxes per drink, the total average tax amounted to \$0.21 per drink.

The new study highlights the financial price of excess alcohol consumption and the fact that taxes don't remotely cover those costs, said Dr. Ramon Battaler, chief of hepatology at UPMC in Pittsburgh.

Moreover, this study doesn't include all the societal costs, Battaler said. "And it is uncertain how much of these taxes go to repair or to cover the medical costs," he added.

The reason you don't see an increase in taxes is that there are powerful lobbies fighting against it, Battaler said, adding that taxes are much higher in Europe.

Beyond recapturing some of the monetary costs of excess drinking, higher taxes could result in fewer people engaging in the kind of drinking that endangers their health and the health of others, Battaler said, pointing to the example of taxes on cigarettes.

There was a push for higher cigarette taxes not only to bring in more revenue, but also to discourage smoking, Battaler said. "That was proven to be effective in this country," he added.

"Increasing alcohol taxes has been proven to decrease abusive drinking in the UK," Battaler noted. "This is well demonstrated scientifically."

Commentary:

The article addresses the ineffectiveness of excise taxes imposed to manage the negative consumption externalities (NECs) of alcohol in the US. NECs are external costs inflicted on third parties by consumers, without considering the interests of those affected. The article argues that the current tax is insufficient, stating that instead of generating revenue, the tax is costing the government money.

One primary reason the tax is ineffective is the difficulty in quantifying NECs. The NECs of alcohol consumption include drunk driving, alcohol-related homicides, and illnesses. While some externalities are measurable, such as damage to vehicles, infrastructure, or healthcare expenses, others are more challenging to assess. For instance, alcohol can negatively impact an individual's mental health, which in turn affects their productivity at work—an impact that is much harder to measure.

Figure 1: Current situation: tax insufficient to cover negative externality

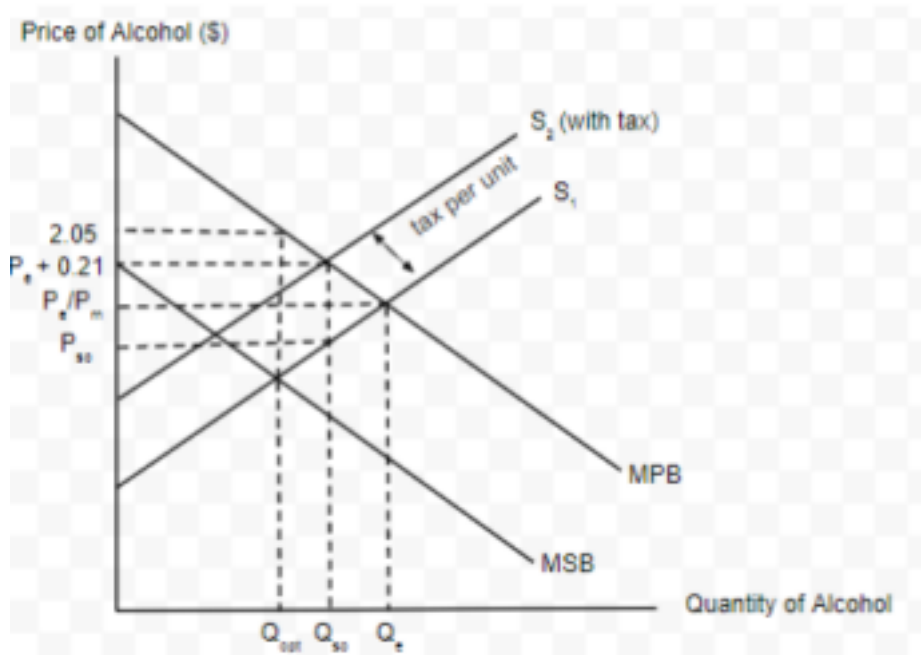


Figure 1 illustrates the impact of excise taxes on controlling the negative consumption externalities (NEC) of alcohol. In the figure, the marginal private benefit (MPB) exceeds the marginal social benefit (MSB), indicating market failure. The intersection of MPB and the initial supply curve (S1) determines the equilibrium price (P_e) and quantity (Q_e). After the tax is imposed, the price of alcohol increases to $P_e + 0.21$. Since the tax incidence is shared between producers and consumers, the cost of production rises, resulting in an upward shift of the supply curve from S1 to S2.

The graph elucidates the issue by showing that the shift in the supply curve is smaller than the shift from the marginal private benefit (MPB) to the marginal social benefit (MSB), indicating

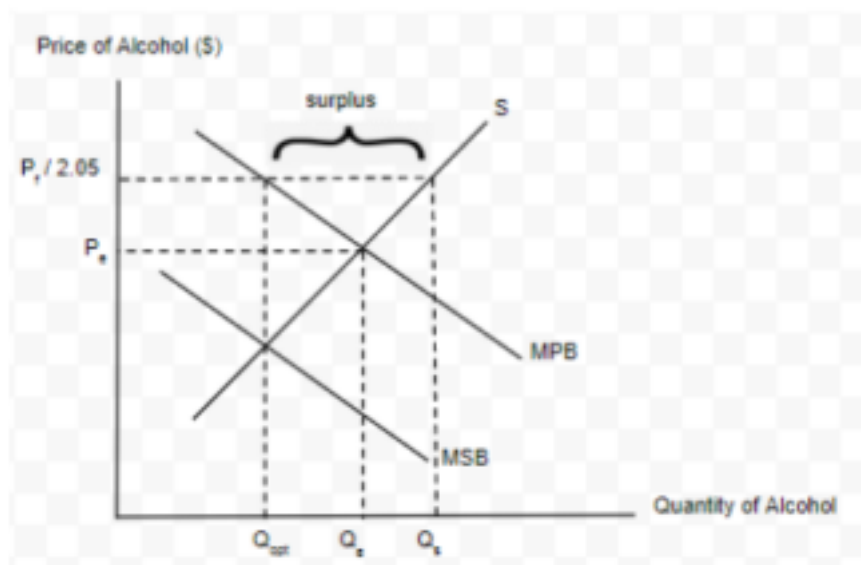
that the current tax is insufficient to cover the external costs of alcohol consumption.

The article argues that to fully internalize the externality, the post-tax price must be \$2.05, which would result in a new market quantity, denoted as Q_{opt} .

Despite their drawbacks, taxes are preferred for controlling negative consumption externalities (NECs) because they help internalize these external costs. However, the current tax on alcohol fails to do so, while still presenting its disadvantages. The increased price ($P_e + 0.21$) for producers leads to a reduction in supply, decreasing revenue and leaving producers worse off. Additionally, with decreased production, firms require less labor, resulting in higher unemployment. Moreover, if the US imposes a higher tax than \$0.21, domestic industries may suffer due to decreased local demand, while foreign industries could thrive.

An alternative approach the US could use to control the NECs of alcohol is setting a price floor. By establishing a minimum price above P_e , the government could reduce the demand for alcohol to a level where the shift in the demand curve corresponds to the external costs, effectively eliminating the cost of NECs. This method is similar to implementing a tax in that both raise the price of alcohol. However, while a tax can harm producers, a price floor benefits them. This is illustrated in Figure 3 as producers' revenue increases from $P_e \cdot Q_e$ to $P_f \cdot Q_s$. Moreover, while imposing a tax can lead to unemployment, a price floor can generate employment.

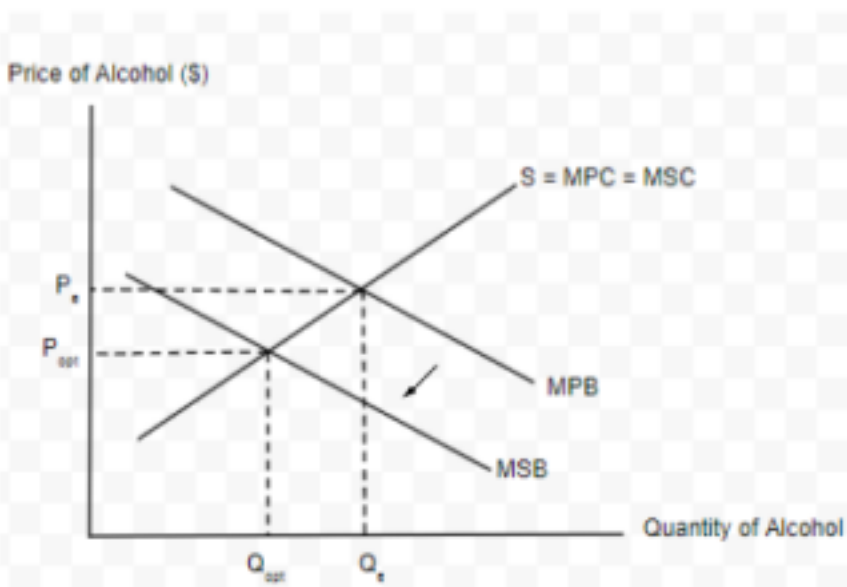
Figure 2: Price Floor as a solution to negative externality of consumption of alcohol



A disadvantage of introducing a price floor is that it creates a surplus in the market (resources are overallocated to alcohol production). To eliminate the surplus, the government may need to purchase the excess goods, which incurs additional costs. Once purchased, the government faces further expenses related to storing the surplus or exporting the excess alcohol. Regardless of the method chosen to manage the surplus, the government will incur significant expenditure.

Another preventive measure the US government can adopt is advertising. Anti-drinking campaigns and advertisements highlighting the negative effects of alcohol, including statistical data on negative externalities, could help reduce consumption i.e. decrease demand for alcohol. In the ideal scenario, the demand would decrease to the extent that it would shift the marginal private benefit (MPB) curve downward until it overlaps with the marginal social benefit (MSB) curve, thereby eliminating external costs (as shown in Figure 2). However, this outcome is unlikely due to the inelastic demand for alcohol.

Figure 3: Advertising as a solution to negative externality of consumption of alcohol



Comparing the use of a tax and price floor; if the tax is increased to the price of the price floor, it would internalize the externality, therefore eliminating it. This would be preferred over price floors which do not internalize the externality. Increasing the tax would also be a better option than advertising as it provides a greater incentive to decrease consumption. Therefore, as the article suggests, the best method to deal with the NEC of alcohol would be to increase the tax to \$2.05 per drink.

When comparing the use of a tax and a price floor, the deciding factor boils down to the fact that if the tax is increased to the level of the price floor, it would internalize the externality and effectively eliminate it. This approach is preferable to price floors, which do not internalize the externality. Additionally, increasing the tax is a more effective strategy than advertising, as it provides a stronger incentive to reduce consumption. Therefore, as the article suggests, the most effective method to address the negative consumption externalities of alcohol would be to increase the tax to \$2.05 per drink.