

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:

Word count: 750

The article discusses the ineffectiveness of excise taxes imposed to manage the negative consumption externalities (NEC) of alcohol in the US. NEC are external costs caused by consumers to third parties who are not involved in the process and whose interests are not taken into consideration. By stating that the tax imposed is insufficient, the article conveys that instead of alcohol acting as a source of revenue, it is costing the government money.

The reason the tax imposed is ineffective is because it is hard to quantify NEC. The NEC's of alcohol include drunken driving, alcohol related homicides and illnesses. The externalities are measurable when the damage has been done to vehicles, architecture or caused by diseases (through hospital's expenditure on the patient). However, these can also affect an individual's mental health, which in turn affects their productivity at work (hard to measure).

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

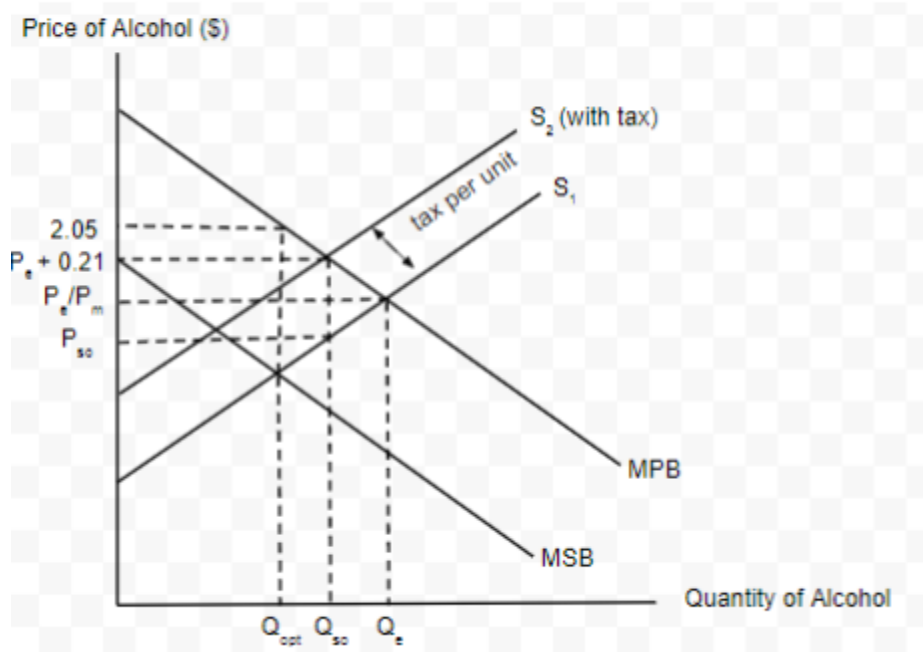


Figure 1 shows the effect the tax has on controlling the NEC of alcohol. As shown,  $MPB > MSB$ , representing market failure. The intersection point of  $MPB$  and  $S_1$  shows the equilibrium price ( $P_e$ ) and quantity ( $Q_e$ ).  $P_e + 0.21$  represents the price of alcohol post tax. As the tax incidence is shared by producers and consumers, the cost of production increases, causing an upward shift from  $S_1$  to  $S_2$ .

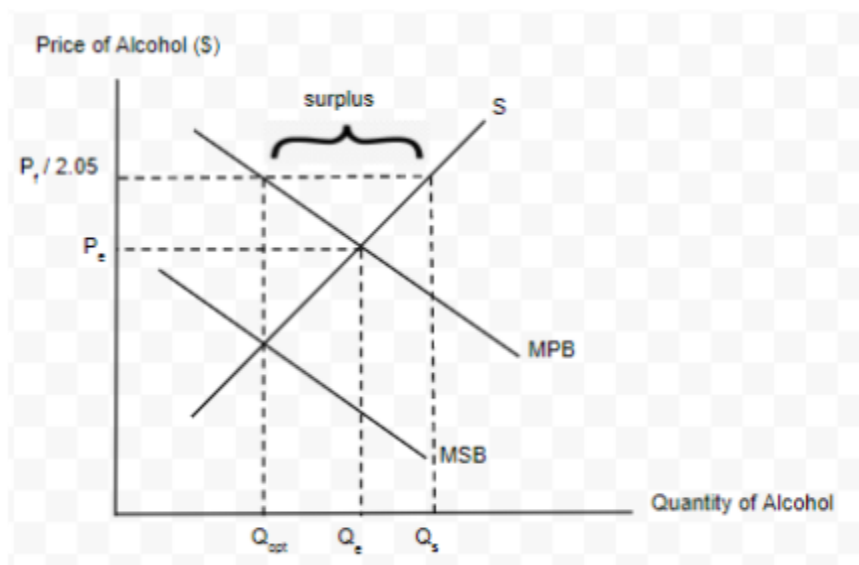
The article states that in order for the tax to internalize the externality completely, the price after tax has to be \$ 2.05. This creates a corresponding new quantity in the market  $Q_{opt}$ . As shown in

the graph, the shift in supply is smaller than the shift from MPB to MSB, showing that the tax imposed is not enough to cover the external costs caused by consumption of alcohol.

Despite their drawbacks, taxes are preferred for controlling NEC's because they internalize the externality. However, the tax presently imposed on alcohol in the US fails to do so, while the cons of the tax are still in effect. The increased price ( $P_e + 0.21$ ) for producers results in reduction of supply, generating lesser revenue, consequently leaving producers worse off. Furthermore, since the production decreases, firms require less labor, resulting in unemployment. Moreover, if the US imposes a higher tax (than \$0.21), domestic industries will suffer (because of decreased local demand) and foreign industries will thrive.

An alternative technique the US could use to control the NEC of alcohol is setting a price floor for alcohol. By setting a minimum price above  $P_e$ , the government could reduce the demand for alcohol to an extent where the shift in the demand curve is equal to the external costs, hence getting rid of the cost of NEC all together. This method is similar to implementing a tax from the perspective that both raise the price of alcohol. However, while levying a tax harms producers, setting a price floor benefits producers. As seen in Figure 3, producers increase their revenue from  $P_e \cdot Q_e$  to  $P_f \cdot Q_s$ . Furthermore, while imposing a tax can cause unemployment, a price floor generates employment.

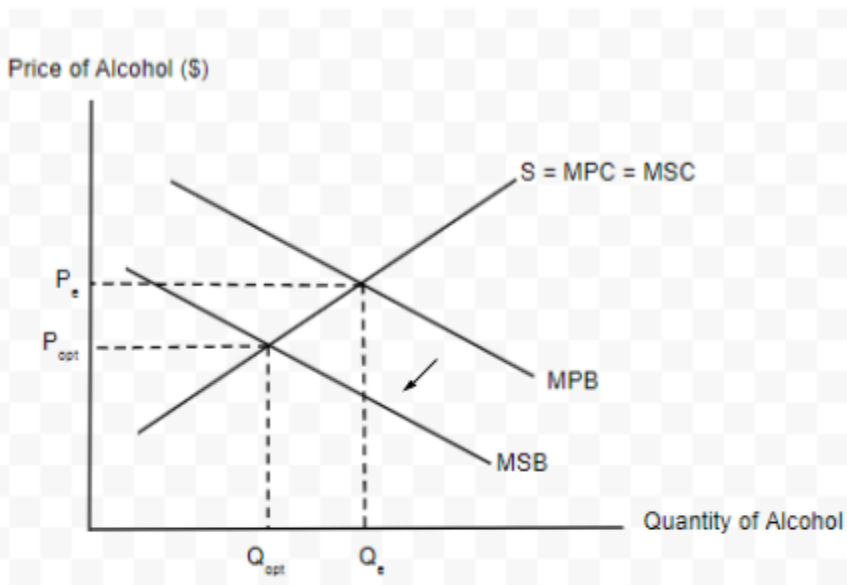
**Figure 2: Price Floor as a solution to negative externality of consumption of alcohol**



A disadvantage of introducing a price floor is that it creates a surplus in the market (resources are overallocated to the production of alcohol). In order to remove the surplus, the government may have to buy the excess goods, incurring a cost. After purchasing, the government could store it (further expenses), or they can export the excess alcohol. No matter the method the government adopts to handle the surplus, it will indulge in expenditure.

Another preventive measure that the government of USA can adopt is advertising. They could hold anti-drinking campaigns and advertise the negative effects of alcohol to reduce consumption. They could also provide statistical figures of negative externalities. This will have the effect of decreasing the demand for alcohol. The ideal situation would be to shift the MPB curve downward to an extent that it overlaps the MSB curve eliminating all external costs (Figure 2). However, since alcohol has an inelastic demand, advertising may not create as much as an incentive - as a tax - to decrease consumption.

**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.