# Are Higher Alcohol Taxes Justified?

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Recently, economists have entered the alcohol policy arena by pointing out that consumption, and also abuse, may be reduced through price increases induced by taxation. Articles have appeared on various aspects of alcohol abuse, such as driving under the influence, youth alcohol abuse, and labor market effects. Many of those articles have the goal of estimating the elasticity of abuse with respect to a tax increase. The notion that abuse can be curbed by taxation has led to a call for increased taxes on alcohol. However, the economic justification for a tax increase is that it meet the social cost-efficiency criterion—that is, the marginal external cost of alcohol abuse should exceed the existing marginal tax rate. Although the studies referred to were well executed in terms of the particular focus and econometric technique, very little has been done recently to examine the justification of a tax increase in terms of social costs.

The question of the external cost of alcohol use, as contrasted with abuse, is complex and paradoxical. It is complex because there are two classes of consumers: abusers and moderate drinkers. Although externalities are associated mainly with abusers, both classes pay the tax because it is impossible to differentiate between abusers and moderate drinkers at the point of sale. Hence, a tax on alcohol is an externality for moderate drinkers. The main negative externalities are driving-under-the-influence (DUI) fatalities and injuries, increased medical insurance premiums, and the effect on social security funding of premature death.

The paradox of alcohol taxation arises because of the effect on the health and economic welfare of moderate drinkers. Although it is well known that excessive drinkers often have major health problems, it

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is less well known that moderate drinkers have above-average health, above the average of both abusers and abstainers alike. This phenomenon is referred to as the U-shaped curve.[1] Recent medical research has provided increasing evidence that moderate alcohol consumption is associated with a decreased occurrence of coronary artery disease (CAD) and increased longevity.

Readers are informed in some prominent health-related publications that moderate consumption may carry health benefits. Among those publications are the *Berkeley Wellness Letter* (May 1994), the *Harvard Heart Letter* (March 1994), the *New England Journal of Medicine,* and *The Healthy Heart Handbook for Women* (the NIH). CAD claims a half million lives annually with medical costs alone exceeding $60 billion.

Because it is impossible to levy taxes solely on abusers, tax increases will cause welfare losses for moderate drinkers through a reduction in consumers' surplus.[2] If moderate drinkers have lower medical care costs, medical insurance premiums will be lower for abstainers, resulting in a positive externality for nondrinkers. That insurance consequence, plus the loss in consumers' surplus, makes the calculation of the social cost of alcohol abuse alone inappropriate for evaluation of increased taxation.

The purpose of this article is to identify and quantify the positive and negative external costs of alcohol consumption, not just abuse, in order to evaluate the efficacy of a tax increase. The article relies on previous estimates of the effects on use and abuse of price increases, which seem quite reliable and accurately done. Following W. Kip Viscusi's (1994) analysis of the social costs of smoking, the article provides a range of estimates based on varying assumptions.

The article begins by looking at previous estimates of social costs of alcohol abuse and their methodology. Previous estimates of social cost have ranged from $9.3 billion to $130 billion. Next, the costs particular to DUI deaths and injuries and the subsequent issue of the value of a statistical life are analyzed. The following section deals with the welfare losses to moderate consumers. The impact of moderate and abusive drinking on medical care insurance costs are analyzed next. The last section examines these costs under various assumptions and draws some conclusions regarding the efficacy of taxation.

[1]In the more popular press, it is sometimes referred to as "The French Paradox" after the popular "60 Minutes" television program segment of the same name.

[2]According to evidence based on self-reporting of the American Psychiatric Association's *Diagnostic and Statistical Manual Mental Disorders*, 7.41 percent of the adult population abuse alcohol.

## Previous Estimates of the Social Cost of Alcohol Abuse

The best known of these attempts are the various studies funded periodically by the National Institute of Alcohol Abuse and Alcoholism (NIAAA). The first such study, by Ralph Berry and James Boland (1977), set the methodological tone for those to follow. Successive studies done by the Research Triangle Institute for 1978 and 1983 were followed by a study for 1988. Updates of these estimates also appear periodically in special reports by the Secretary of Health and Human Services to the U.S. Congress entitled *Alcohol and Health.*

Dale Heien and David Pittman (1989) criticized the NIAAA methodology and demonstrated that the NIAAA estimates greatly overstate the costs through systematic bias and selective interpretation of the data. The nexus of the criticism is that the cost estimates do not follow the economic paradigm of external costs.[3] For example, the cost figures include the value of lost wages due to alcohol abuse and the value of the lives of drunken drivers. Those costs are incurred by individual choice and are not externalities. The value of lost wages accounted for over half of the total costs. Other problems with the NIAAA-funded studies were faulty statistical techniques, lack of overall accounting and methodological framework, continual use of the most liberal estimates despite the claim that only the most conservative estimates were used, and attributing causality to alcohol abuse where none had been shown to exist in the scientific literature.

Two recent studies have produced estimates that are consistent with the definition of social costs used in economics. The study by Willard Manning et al. (1991) bases the social costs of abuse on three main factors: DUI auto fatalities (excluding drunk drivers) and injuries, higher medical insurance premiums, and the effect of premature death on social insurance funds. In another study of the social costs of alcohol abuse, Heien and Pittman (1993) estimated the external costs to be $9.5 billion for 1985. The main difference between their findings and those of Manning et al. (1991) are the value of human life. Neither study took into account either the welfare cost on moderate consumers of tax increases or the effect of moderate consumption on medical insurance rates. This study deals with both these areas as well as taking a closer look at DUI deaths and injuries.

## External Costs of DUI Fatalities and Injuries

In 1993 there were 40,115 traffic fatalities in the United States. Traffic fatalities include pedestrians, pedalcyclists, and motorcyclists

[3]All of the NIAAA-sponsored studies refer to the costs as the "economic" costs of alcohol

as well as automobile occupants. The National Highway Traffic Safety Administration defines two types of accidents involving alcohol. A fatal crash is defined as "alcohol-related" if either a driver or a nonoccupant had a blood alcohol concentration (BAC) of at least 0.01 grams per deciliter (g/dl). Drivers with a BAC of 0.10 g/dl or greater are termed "intoxicated." This level is the common norm for a DUI conviction. Using the intoxicated criterion, there were 13,984 fatalities in accidents involving an intoxicated driver or nonoccupant in 1993. This figure compares with 19,174 fatalities a decade earlier.

Leaving aside for the moment whether or not the externalities of DUI should be defined as those within the intoxicated or alcohol-related classes, there are more important distinctions to be made within both of these classes. Table 1 presents the various classifications of fatalities for the intoxicated driver crashes.

The foregoing classification presents a challenge as to which fatalities are externalities. Clearly few would argue that intoxicated drivers are an externality. They drink and drive of their own free will and bear the risks and consequences of doing so. Not surprisingly, the NIAAA estimates count the intoxicated drivers as an externality. Table 1 shows a large number of intoxicated drivers relative to the nonintoxicated ones. This result is attributable to the fact that the vast majority of DUI crashes involve one car. Similar considerations apply to the intoxicated nonoccupants category. Here, there are two main explanations: intoxicated pedestrians stray into traffic and intoxicated motorcyclists have single-vehicle crashes. The last category consists mainly of nonintoxicated bicyclists who are struck by intoxicated auto drivers. Hence, it is reasonable to classify the deaths of

*TABLE 1*

TYPES OF FATALITIES IN FATAL CRASHES INVOLVING AT LEAST ONE INTOXICATED DRIVER OR NONOCCUPANT: 1993

| Type of Fatality | Number | Percent |
|---|---|---|
| Intoxicated drivers | 7,578 | 54 |
| Nonintoxicated drivers | 938 | 7 |
| Passengers | 2,917 | 21 |
| Intoxicated nonoccupants | 1,936 | 14 |
| Nonintoxicated nonoccupants | 615 | 4 |

SOURCE: U.S. Department of Transportation (1993).

abuse. However, no definition of this concept is contained in any of the studies nor is any mention made of the concept of external costs.

nonintoxicated drivers and nonintoxicated nonoccupants as externalities of drunken driving.

The real debate occurs over the classification of passengers. In most cases, it is not known if passengers are intoxicated or not. It is not relevant whether or not they are. The main criterion is whether or not passengers were in the car of the intoxicated driver or in the other vehicle. For those in the other vehicle, there is clearly an externality in just the same manner as the death of the driver is an externality. However, most occupants of a drunken driver's car are aware of the condition of the driver and exercise their own free will in choosing to ride with him or her.[4] Often they are related to the driver being either a spouse or children.

Published data exist for 1986 on the number of passengers who were in the drinking driver's car. Perrine et al. (1988: Table 6) indicate that 83.3 percent of the passengers were in the drunken driver's car. Applying that percentage to the foregoing 1993 figures results in 487 external deaths. The total external deaths are those 487 individuals, the 938 nonintoxicated drivers, and the 615 nonintoxicated nonoccupants. The total of those three groups is 2,040 individuals.[5]

The choice between alcohol-related and intoxicated is somewhat problematic. Numerous studies have shown that the relative risk of crash involvement rises with the BAC (Perrine et al. 1988). Those studies also show that the relation between risk and BAC is essentially flat until the .08 or .09 level for BAC (Hurst et al. 1994). Because .10 is the cutoff level for the intoxicated classification, it might be reasonable to take 20 percent of the alcohol involved crashes as being due to alcohol abuse. That assumption would result in total external deaths of 2,550.

There are human, vehicular, and environmental factors that interact with alcohol to contribute to accidents. Among them, the greatest amount of research has been done on the human aspect. Numerous studies have found that many of the personality traits that lead to reckless driving are found in alcohol abusers, especially among young drivers. On a per-mile-driven basis, fatal involvement is greatest for young drivers and for older drivers (Massie et al. 1995). Donovan et al. (1990) compared DUI conviction rates between a group of drivers with four prior traffic convictions or accidents within the last year and

[4]This assertion has some empirical verification in the study by Isaac et al. (1994). They found that where there were adult passengers, alcohol involvement by those passengers was high (80 percent).

[5]This figure compares with a total of 7,400 deaths in Manning et al. (1991: 97) and 5,760 in Kenkle (1993: 142). Part of the difference between their estimates and those above reflects the fall in DUI fatalities from 1986 to 1993.

the general population in that age group. The "bad driver" group had over five times the DUI conviction rate of the general population group.

In a similar previous study, Donovan et al. (1985) studied three groups of male drivers: DWI (those arrested for DUI); HRD (those who had received multiple nonalcoholic traffic violations or been involved in an accident); and, GDP (general driving population). Attitudinal questions showed the HRD and DWI groups to be generally more deviant than the GDP group. The HRD and DWI groups did not differ significantly from each other on any of the measures of personality function or hostility. The authors concluded, "The noted similarities between the DWI and HRD groups are consistent with the contention that these two groups may represent subtypes within a larger population of high-risk drivers" (Donovan et al. 1985: 375).

No estimates exist of the number of alcohol-related crashes that would not have occurred if alcohol had not been present. However, drivers between the ages of 16 and 34 accounted for 61 percent of all drivers in fatal-alcohol related crashes.[6] Over 90 percent were males. If one assumes that this group has the same alcohol-relative odds as the older group, then 56 percent of the 16 to 34 age group fatalities were incorrectly ascribed to alcohol. Still, young males also drink proportionately more than older individuals. Adjusting for this fact results in an overstatement of 20 percent—that is, there are 20 percent fewer fatalities in this age group attributable to drinking. That adjustment results in a 12 percent reduction in external deaths caused by DUI.

A related area is that of the role of drugs either in conjunction with alcohol or used alone. Mercer and Jeffery (1995) studied blood samples from 227 fatally injured traffic victims and found that 43 percent had neither alcohol nor drugs, 37 percent had alcohol and no drugs, 11 percent had both, and 9 percent had drugs only. Although no attempt will be made to estimate the number of deaths attributed to drug abuse ascribed to alcohol, it should be considered that increases in alcohol taxes are likely to cause individuals to substitute drugs, which are not taxed, for alcohol.

Another aspect of the drunken-driver problem is that there are considerable injuries caused by DUI accidents and there is considerable property damage to the autos involved. Both factors should be treated in the same manner as deaths caused by DUI. Classification of external costs are the same here as for the fatalities and follows

[6]For the statistics on fatalities by age, see U.S. Department of Transportation (1993). For an analysis of age involvement, see Massie et al. (1995).

the estimates of Kenkle (1993), with an update to 1993 for changes in medical care costs.

## Value of Statistical Lives

Whenever the abuse of alcoholic beverages causes a loss of life and that life is considered an alcohol externality, then the life must be valued to arrive at the cost of the externality. There are two main methodologies for computing the value of a statistical life. The first is the human capital method, a method that takes the earnings profile for the remaining years of the life and computes the present value of those earnings. The main advantage of this method is that it is the legal norm. Wrongful death suits use the human capital approach to compute compensation for plaintiffs.

A conceptually more satisfactory alternative is the "risk reduction" methodology. The difference between the wage in risky jobs versus safe jobs is taken as the measure of the compensation required to get workers to do risky jobs. By dividing this risk premium by the probability of death, one arrives at the value of life for that risk.

The standard approach is to estimate econometrically a hedonic wage equation based on individual data. Such estimates are subject to a number of problems. First, there are all of the standard econometric problems of nonexperimental data and mutual causality. Second, risky jobs tend to be unattractive (e.g., noisy and dirty). Hence, there may be a high correlation between the unattractive features of a job and the risk. Because those features are seldom measured, their effects are captured in the risk coefficient. If so, then the coefficients for an industry or occupation will overstate the risk premium.

Similar considerations apply to the estimate of the probability of death (risk) in an industry. Probabilities are based on historical frequencies that may or may not hold in the future or that may be based on inaccurate data. Also, there is a subjective element to probabilities that reflect risk. Some individuals may, through training, upbringing, or heredity, deal with certain risky situations better than other individuals.

Problems associated with the risk reduction approach are discussed in greater detail by Viscusi (1993). Although his article outlines many criticisms of the risk approach, it should not be misunderstood as being a refutation. Conceptually, this methodology is correct. However, there is great variation in the empirical estimates. The estimates given in Viscusi (1993) for air travel risk for standardized individuals range from a low of $0.8 million to a high of $29.4 million. Such variation does not inspire confidence in the estimates. Viscusi (1994) uses a value of life for nonsmoking victims of environmental tobacco

smoke of $5 million for 1993. Although this value is the midpoint of studies reviewed by Viscusi (1993), it seems to be somewhat generous. Manning et al. (1991) use a value of $1.66 million ($1986) or $2.11 million ($1993), and Kenkel (1993a) uses $2.0 million ($1986) or $2.54 million ($1993). This study uses the $5 million value as an upper limit.

## Medical Insurance Externalities

Excess medical care costs for abusers are assumed to be passed along to nonabusers in the form of higher medical care premiums. Hence, estimates of the difference in medical care costs attributable to the cost of alcohol abuse must be made. The concept behind those estimates is to arrive at a statistical model of a "nondrinking drinker"—that is, an individual who is like an abuser in everyway (demographically, sociologically, and economically) but who does not abuse alcohol. However, econometric estimates using that approach are plagued by problems of unobserved components. Abusers lead lifestyles that include smoking, poor nutrition, and poor self-care in general. It is difficult to obtain samples where those traits are not present in abusers. Hence, alcohol becomes a proxy for them. Many abusers do not have insurance and pay for the care themselves, in which case it is not an external cost. Also, medical care is often paid for in a state or county hospital, or is paid through social security disability insurance. Although state hospitals are tax supported, the cost of running those institutions may not be an externality to taxpayers (Lee 1991).

The notion of excess medical care premiums is based on the finding that medical care costs for abusers are above average. Although that is true, it ignores the lower medical care costs incurred by moderate drinkers. Using the 1988 Health Interview Survey, Lewin-VHI (1994) has estimated the per capita medical care costs for all drinkers to be $3,295 versus $4,430 for nondrinkers. Those estimates are consistent with medical research findings on the relation between moderate alcohol consumption and health.

Over the past 20 years numerous studies have appeared in medical journals, indicating that moderate alcohol use is associated with reduced risk of CAD and greater longevity.[7] Those studies include the Harvard study by Rimm et al. (1991), Stampfer et al. (1991), Boffeta and Garfinkel (1990), and Klatsky et al. (1990). Because light to moderate drinkers have substantially lower rates of CAD and mortality than do nondrinkers or heavy drinkers, their medical care costs will be less.

[7]The main causes of CAD are smoking, high blood pressure, diabetes, and obesity. Death usually results from heart attack caused by blood vessel blockage.

Those medical findings have been extended by several economists to examine the effect of alcohol on earnings. Given that moderate drinkers have better health and longevity than abstainers and abusers, it is reasonable to hypothesize that they also earn more. Articles by French and Zarkin (1993) and Heien (1995) confirm a U-shaped relation between earnings and alcohol consumption—that is, moderate drinkers earn more than abusers and nondrinkers.

In the study by Manning et al. (1991), taxes on earnings were approximately equal to the costs of collectively financed medical care for all discount rates. Considering that study, it seems reasonable to assume that taxes and medical costs are equal and cancel each other. Manning's finding can then be used as a lower limit estimate of the net medical care cost of alcohol abuse. The exact incidence of the effect of moderate drinking on health is complex, and a detailed analysis is beyond the scope of the present study. However, if drinkers as a class have lower medical care costs, then those costs will be a positive externality for abstainers. The Lewin-VHI figures suggest that the net savings in medical care costs (and hence presumably premiums) result in a positive externality for nondrinkers of $21.58 billion. That figure will be used as an upper limit for the external costs of alcohol use.

## Revised Estimates of the Social Cost of Alcohol Abuse

This section attempts to look at the range of social costs implied by the various foregoing estimates. The main areas of negative external costs are the value of the external lives lost and injuries attributable to DUI accidents and the increase in medical insurance premiums attributable to alcohol abuse, net of the social security not collected due to premature death of abusers. The main positive externality is the reduction in medical insurance premiums attributable to the health benefits of moderate alcohol consumption. As mentioned previously, estimation of social cost will be done under high and low assumptions to permit a range of estimates.

The estimated number of external deaths from DUI driving was 2,040 using the intoxicated driver criterion and 2,550 for the alcohol-related category. Those figures do not include the estimated 12 percent reduction for drivers who would have crashed even if they were not drinking. The alcohol-related figure less 12 percent, or 2,244, will be used as the lower estimate. The upper estimate will follow Kenkle (1993) and take one-half of the alcohol-related passengers as external and make no adjustment for those who would have crashed anyway.

That method results in 3,765 external deaths.[8] When the external cost of injuries resulting from DUI crashes is calculated on a pro rata basis, using Kenkel's figures updated by the CPI for medical care, the result is an upper limit of $6.18 billion and a lower limit of $3.68 billion.

As previously discussed, the value of life of $5 million used by Viscusi (1994) could be considered somewhat high given the problems of omitted variables in measuring the risk premium and in view of estimates used by Kenkel (1993) and Manning et al. (1991). The CPI updated value of Kenkel's estimate of the value of life is $2.54 million. That figure will be used as the lower bound and Viscusi's estimate of $5 million as the upper bound. Applying those upper bounds of the values of life and the DUI fatalities gives an estimate of the fatal DUI externalities of $18.83 billion. Following the same procedure for the lower limits gives an estimate of $5.71 billion. Next, the external cost of DUI crash injuries is estimated to be $6.18 billion for the upper limit and $3.68 billion for the lower, which gives total costs for upper and lower bounds of $25.00 billion and $9.39 billion. This article follows the result found by Manning et al. (1991) that the increase in medical insurance premiums are exactly offset by the loss in uncollected social security benefits. Hence, the total positive external costs of alcohol use range from $9.39 to $25.00 billion.

Table 2 presents the totals for the upper and lower positive and negative external costs and contrasts those costs with the current level

*TABLE 2*

POSITIVE AND NEGATIVE EXTERNAL COSTS
(BILLIONS OF DOLLARS)

| | Lower Estimate | Upper Estimate |
|---|---|---|
| External costs | | |
| DUI crashes | −9.39 | −25.00 |
| Medical insurance | 0.00 | 21.58 |
| Total external cost | 9.39 | 3.42 |
| Tax revenues | 17.97 | 17.97 |
| Inefficiency level (difference) | 8.58 | 14.55 |
| Consumers' surplus loss | 8.92 | 15.13 |
| Deadweight loss | .34 | .57 |

[8]It should be noted that the 3,765 estimate is considerably lower than Kenkel's estimate of 5,760. His estimate is for 1986, mine is for 1993. There has been a dramatic fall in the number of DUI fatalities over the 1986–93 period.

of taxation of $17.97 billion.[9] The upper value in the DUI category reflects a greater value of life ($5 million versus $2.54 million) and greater external deaths (3,765 versus 2,244). The difference between the upper and lower estimate in the medical insurance category is simply the lower cost of medical insurance premiums for nondrinkers. Tax revenues exceed the external costs in both the lower and upper limit cases. Hence, the externalities of alcohol use, when properly framed, are more than accounted for by current levels of taxation.

Because the taxation levels are too high, prices are higher than they should be for social efficiency and there is a loss in consumers' surplus. Hence, it is appropriate to compute the loss in consumers' surplus attributable to those excessive taxes. The loss of consumers' surplus is offset by the level of tax receipts in excess of that needed to cover the externality. That loss is given in the next to the last row of Table 2.[10] The last row gives the deadweight loss—that is, the difference between the efficiency loss and the loss of consumers' surplus. The deadweight loss may in fact be much larger depending on the efficiency with which the government uses the tax receipts.

What accounts for the reversal of the results from previous studies? Several factors are prominent. First, the number of alcohol-related fatalities and injuries have declined by 26 percent since 1986, the date of the previous study. On the other hand, the value of life and injury costs have risen. Those opposing forces resulted in a DUI cost of $25 billion based on the same definition of an externality, of $25 billion, which is close to the $20 billion figure found by Manning et al. (1991) in their study based on 1986 data. Another major factor is the increase in alcohol tax receipts as a result of the 1991 federal excise tax increase on alcohol. Finally, the current study accounts for the reduced medical care costs for nondrinkers resulting from lower costs to moderate drinkers. The more stringent definition of DUI externalities given by the lower bound plays a role, but only for the lower bound.

The foregoing analysis results in the conclusion that *total tax revenues exceed total external costs by at least $8 billion*. As long as second order conditions are satisfied, marginal positive external costs are much less than marginal tax rates if their respective totals are nearly

[9]This total is composed of $7.6 billion federal excise tax receipts, $3.6 billion state-and-local excise tax receipts, $4.57 billion state sales taxes, and $2.21 billion local property taxes. The total does not include liquor license and distribution fees.

[10]An estimate of $-0.7$ was used for the elasticity of demand. That estimate came from Manning et al. (1995) and also conforms with other econometric studies.

equal, as shown. Thus, on the basis of the analysis, there is every reason to believe that the level of taxation is far beyond the point of social efficiency.

## The Historical and Fairness Standards

A recent article by Cook and Moore (1993) presented two new rationales for increased taxation on beverage alcohol. Those are the historical standard and the fairness standard. The historical standard says that alcohol taxes should be maintained at their (real) historical levels and not be allowed to be eroded by inflation. Because alcohol taxes are generally levied on a per gallon basis and are not ad volarem, that standard seems to have some validity. However, there are two strong arguments against the historical standard. First, the result will depend on what date is chosen as the historical reference. Cook and Moore choose 1951, the last time excise taxes were raised. Had an earlier date been chosen, the result would have been different. More important, their approach ignores the substantial increase in other alcohol taxes over the period. Sales and excise tax rates at the state and local levels have increased substantially over the postwar period so that the overall real tax rate on alcoholic beverages has not declined.

The fairness standard is derived from three criteria: (1) the "horizontal equity" criterion (equals should be treated equally); (2) the vertical equity criterion (unequals should be treated differently, so people with greater ability to pay taxes should pay more than lower income people); and (3) households that receive greater government benefits should be taxed higher. On the horizontal equity criterion, a tax increase will fall equally on moderate drinkers, who are not the source of the externalities, as well as the abusers. That criterion is, in effect, no different than taxing abstainers for the costs of alcohol abuse.

The violation of the vertical equity criterion is even more obvious. It is generally conceded that alcohol taxes are regressive—that is, they bear more heavily on poor people because lower-income individuals tend to drink more, and alcohol taxes are levied on a quantity basis (e.g., dollars per gallon).[11] The finding that expenditures on alcohol tend to be a constant fraction of income is based on the fact that consumers demand better quality as their incomes rise.

Finally, the criterion concerning receipt of government benefits is reasonably clear. Cook and Moore (1993) state that alcohol abusers clearly receive more from government programs than do others.

[11]The regressivity of alcohol taxes has been reaffirmed in a recent study by Lyon and Schwab (1995).

Nevertheless, the really interesting fact about the fairness standard is that it says noting about what the level of taxation should be. It addresses only how the burden should be distributed.

## The Public Health Approach

In addition to the three standards—social cost, historical, and fairness—another standard exists for measuring the cost of alcohol abuse, namely the public health standard (Cook 1990). This standard is used by the NIAAA and attempts to measure the economic cost of alcohol abuse. The problem with this approach is that it is inconsistent with Western notions of individual freedom and responsibility. Under the public health standard, actions that harm only the abuser or his family are lumped together with true external costs. The resulting costs are quite high—$130 billion for the United States in 1990. The analysis by Heien and Pittman (1989), however, strongly questions the validity of such calculations and notes that many of the inseparable effects on moderate consumers are ignored—including the impact on social security funding and the health aspects of moderate drinking.

## Conclusion

Recent articles by some economists have called for increased taxation of alcoholic beverages. The evidence presented here indicates that the net external costs of alcohol do not exceed the current level of taxation. Much like the case for the taxation of tobacco (Viscusi 1994), the rationale for a tax increase on alcohol does not pass the social-cost test when all costs, including those imposed on moderate drinkers, are juxtaposed against the current levels of taxation.

Alcohol bashing has become one of the "feel good" issues of the 1990s. Alcohol consumption and alcohol abuse are declining by any objective measure. The implied notion that alcohol consumption is sinful is a moralistic one and not supported by objective analysis. The very title, "sin taxes," plays on the old moralistic sentiments that led this country to the disastrous policy of prohibition.

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