

# ECONOMIC IMPACTS OF ALCOHOL-RELATED PROBLEMS

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The same drink of alcohol can generate a benign feeling of prosperity, or moroseness or stupor.

The immediate health effects may be benign (or even beneficial), or may result in harm: injury or death

# Externalities

The social cost of an activity is the total of all the costs associated with it, including

- the costs borne by the economic agent involved and
- all costs borne by society at large.

If social costs are greater than private costs – the costs of purchase – then a negative externality is present.

When the market economy is working effectively and there are no external social costs, the rational consumer will only purchase and consume the product if it is more valuable than the price paid for it.

Alcoholic beverages are one of a number of products for which the purchase price cannot generally equal social costs because the social cost of each unit of consumption varies greatly.

## 'Misuse'

where the consumption generates outcomes which were unintended by the consumer and not taken into account when the purchase/drinking decision was made.

Preferred to '**abuse**' in order to emphasise, that much alcohol consumption is useful, in the sense of its social impact is benign or even (mildly) beneficial.

# *Crime*

1. The pharmacological model: intoxication encourages the commission of crimes which otherwise would not have been committed.
2. The economic means model: crimes are committed to fund alcohol consumption.
3. The systemic model: the illegal economy (as in unlawful brewing or distilling or sale of liquor).
4. The substance-defined model: actions are defined as being criminal by laws which regulate drug use, such as drunkenness in a public place, supplying underage or drunk people and drink-driving.

## ***Diseases (Drinkers)***

Epidemiology details the disease consequences of alcohol misuse on the health of the consumer.

Misuse of alcohol shortens the life and decreases the quality experienced by the living.

Valuation of life: QALYs (quality adjusted life years)

The monetary value on life: Willingness-to-pay?

Better to report the costs of alcohol misuse in two components: the tangible cost (the reduction in material product available) as a proportion of GDP, and the intangible cost (the reduction in the quality life) relative to the total value of life.

The beneficial effects from alcohol consumption?

# Harm to Others

1. Children born as the result of an unplanned conception as a result of intoxication;
  2. Foetal Alcohol Syndrome and Foetal Alcohol Effects
  3. Those close to the drinker who may experience pain and suffering, abuse, violence, injury and death;
  4. The public at large who may experience pain and suffering, violence and death including from motor vehicle accidents.
- There are rarely good estimates of these phenomena. The incidence and costs vary from country to country.

# Motor Vehicle Accidents

## Production Losses

1. Reduced workforce size as a consequence of death or premature retirement;
2. Absenteeism from sickness or injury;
3. Reduced on-the-job productivity from sickness or injury

## Public Spending

1. Health care
2. Social Security
3. Traffic Management
4. Justice and corrections
5. Other
6. **Taxation Reductions**



# Are Drinkers Rational?

It is assumed that people value what they purchase at least at the purchase price and usually more.

But are alcohol drinkers rational - when they are drunk or addicted?

Time inconsistent decisions: a consumer plans to have a couple drinks, drinks more, and the following day regrets the change of mind.

Social cost estimates do not include the cost of the resources used in production and paid for by the consumer since they are offset by the consumption

Unplanned consumption, which is subsequently regretted, is a waste and should not be valued at the full purchase price.

# Calculating Social Costs

Economists sum total of the net social costs of alcohol misuse.

Economic cost studies are worthwhile:

- anecdotes and heuristic guesstimates are unattractive
- systematic estimates expose data gaps, and
- the relative importance various impacts

Rigorous economic theory = compatible with cost benefit and cost effectiveness evaluations.

Comparable data across countries and through time = tracing impact of alcohol misuse = evaluation of gains from effective measures.

## (TANGIBLE) SOCIAL COSTS OF ALCOHOL AS A PROPORTION OF GDP

Country	Australia	Canada
<u>Year</u>	<u>1998-9</u>	<u>1992</u>
Crime, Law and Order	.42%	.20%
Health Care Costs	.03%	.19%
Loss of Production	.23%	.60%
Motor Vehicle Accidents	.24%	.07%
Other Government Resource Costs	included elsewhere	.03%
<b>Total</b>	<b>.92%</b>	<b>1.09%</b>

Specific alcohol taxes were imposed because they were easily collected at brewery, distillery or port.

Later 'sin' taxes

More recently, alcohol taxes have been justified by the reconciling private and social costs of alcohol consumption, 'internalising' externalities.

- the higher price signals discouraging them from additional consumption.
- the additional public revenue may be used to offset the costs.

An appropriate taxation regime? But the same drink can generate different social costs.

Should the total revenue from alcohol specific taxation exactly cover public costs?

The revenue could be higher, to send a stronger signal to the marginal drink that the social costs are higher.

Welfare gains from taxes for time inconsistent behaviour

Consumption of teenagers and binge drinkers is cut back if faced with higher prices.

An optimal taxation regime on alcohol is likely to generate more revenue than the immediate social costs.

Evidence is largely anecdotal that different forms of alcohol – wine, beer, or spirits – induce different levels of social costs.

Should the level of alcohol specific taxation should be related to the quantity of absolute alcohol rather than the value or type of drink?

(This would impose more heavily on low value drinks.)

Tax to target the minimum cost of alcohol?  
(Cheap drinking is where the heaviest social costs occur.)

- No country has an economically rational alcohol taxation regime.
- Revenue considerations still remain important -plus practicalities.
- Moderate drinkers are a formidable political group. (Social cost estimates convey they are paying for the external costs generated by others.)
- Taxes are a useful means of reducing alcohol misuse, but they target clumsily and cannot be relied upon by themselves.
- Other measures (such as drink driving) are necessary.

# Cultural Change Strategies

Do we focus too much on such economic strategies to deal with alcohol abuse, and don't think enough about cultural factors?

Australasia, led by New Zealand, have embarked on programs of changing the drinking culture.

"It's not what you have been drinking. It's how you have been drinking." ([www.alcohol.org.nz](http://www.alcohol.org.nz))



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