## THE ECONOMICS OF ALCOHOL COMPARED TO OTHER DRUGS

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Economic analyses of alcohol and other recreational drugs can be broadly divided into three areas: analysis of markets, especially the role of price and other factors on consumption patterns; studies estimating the costs of different substances to both the individual and third parties; and the economic evaluation, that is value for money of different policy interventions. In examining the evidence in these three areas there tends to be more similarities between the substances than differences. Indeed alcohol has generally been found to be a complement rather than a substitute for other drug use. Perhaps the most diverse findings are found in social cost estimates of various substances, not so much in the total sum but how these costs vary across different types of impacts.

Summarising the harm in economic terms, however, depends crucially on the view taken on which "harms" and "benefits" are included and the values put by society on some of these individual items. The presentation will give a brief overview of current research and findings across these three areas of economic analyses, and highlight some of the major issues that impact on policy debates.

Much of the innovative empirical research does appear in the National Bureau of Economic Research working paper series before being published in refereed journals. The web site giving more information is <a href="http://www.nber.org">http://www.nber.org</a>. The National Institute of Alcohol Abuse and Alcoholism also has a good database of economic studies covering the three areas of economic analysis covered in the presentation. Full references to the studies mentioned in the presentation are available on request.

#### How Does the Price of Drugs Affect Consumption?

- Evidence gathered from statistical analysis of sales data, individual data and experimental studies suggests price has a definite impact on alcohol consumption.
- The UK overall price elasticity is approximately –1, meaning a 10% increase in price leads to a 10% decrease in consumption. This evidence is particularly strong for the impact of price on young people and binge drinking.
- US students faced with higher prices were found to be less likely to make the transition from abstainer to moderate drinker and from moderate to heavy drinker.
- There is a large amount of evidence suggesting the effect of price on consumption of tobacco but it is a smaller effect than for alcohol.
- There is accumulating evidence on the impact of price on the consumption of other drugs.
- It is important to consider that polydrug use is the norm and most evidence suggests that drugs are complements, that is the fall in the price of one drug will increase consumption of both that and other drugs.

#### How Does People's Income Affect Consumption?

- Income is a major factor influencing the consumption of alcohol.
- Income has less effect on the consumption of tobacco.
- There is little evidence about the impact income has on the consumption of other drugs.
- It is particularly difficult to estimate the effect of income on consumption in younger users who often do not have regular salaries.

#### How Does Information on the Effects of Alcohol Affect Consumption?

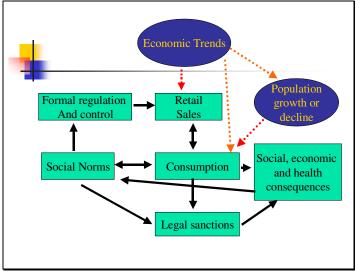
- People tend to overestimate the risks of smoking and drinking alcohol.
- People tend to be confused and ill informed about the short-term risks of alcohol and illicit drugs.
- Influence from peers and the family is a major factor affecting substance use.
- In young men, forming families is the most protective factor in reducing binge drinking.

#### How Does Advertising and Marketing Affect Consumption?

- Images used tend to merge across alcohol and other recreational drugs.
- Illicit drugs have some marketing aspects.
- The tobacco debate highlights the government's role in restricting harmful behaviour.
- One study in the US suggests that a complete ban on alcohol advertising would reduce binge drinking by about 42% in young people.

### How Does Supply Affect Consumption?

- The black market and smuggling are historical features of alcohol and tobacco markets but there are few studies comparing legitimate and illegal markets.
- Global markets adapt to consumers needs and demands, illicit markets adjusting even quicker than legal ones.
- Market interactions are important with the potential for policies to have unintended consequences, so a full system model is essential. Population growth and decline, economic trends, retail sales, legal sanctions and moral values are all involved.



Source: Holder (1998)

#### WHAT ARE THE COSTS OF DRUG USE?

- Social costs are equivalent to the individual's private costs plus external costs caused by their behaviour.
- Rational behaviour should consider all costs but people tend not to be aware of all the consequences of their actions.
- Social costs include premature deaths, unemployment and social disability, and victim costs.

#### ALCOHOL

- Major cause of loss of avoidable life years
- o External costs, e.g. accidents, violence / public disorder
- o NHS burden especially hospital care
- o Reduction in productivity.

#### Товассо

- Large number of premature deaths- 120,000 a year but of an older average age than alcohol-related deaths
- o Large NHS costs for smoking-related diseases- estimated at \$\mathbb{0}\$1.5 billion
- External costs, e.g. passive smoking health effects in home and workplace, fires and accidents.

## **ILLICIT DRUGS**

- The World Health Organisation places illicit drugs 17<sup>th</sup> on the scale of the world's greatest social costs whereas alcohol is 5<sup>th</sup>.
- Class A Drugs Users are the most costly to society
- o Social cost per young recreational user- \$\pi 36-\$\pi 72 per year
- o Social cost per older regular user- \$\pi 3-\$\pi 6 per year
- o Social cost per problem user- \$\pi 35,455\$ per year
- o No data on some external costs, e.g. workplace, driving.

#### WHY DO WE NEED POLICIES TO DEAL WITH RECREATIONAL DRUGS?

• Policies can be *population based* (e.g. tax, advertising controls etc.), *problem based* (e.g. drink driving, needle exchanges etc.) or *face to face* (e.g. treatment, brief interventions).

 The consequences of successful policies include positive changes in the quality and quantity of life of the individual and their family, and benefits plus averted costs to third parties. However, policies can also have unexpected adverse side effects, which need to be considered.

## WHAT POLICIES MIGHT REDUCE CONSUMPTION?

#### ALCOHOL

- There is good evidence to support the impact of increasing taxes and reducing availability.
- o There is less support for school education and other information only policies.
- There is good evidence that advertising restrictions are effective but this is a very controversial area.
- There is good evidence for routine brief interventions but these prove difficult to implement.
- There is a range of available treatment interventions which have the potential to be cost-effective.

#### Товассо

- o There is good evidence to support the impact of increasing taxes.
- There is good evidence to support positive effects of treatment at an individual level.
- o There is less support for school education and other information only policies.
- o There is good evidence that advertising restrictions are effective.

#### **ILLICIT DRUGS**

- o Treatment is the most cost effective and most cost saving in social terms.
- The present political emphasis is on education and law enforcement but there is little evidence to support this approach.
- There is some US evidence that the overestimation of health risks reduces cannabis consumption.

## QUESTIONS & ANSWERS

## Is there any impact of the Channel Tunnel on the price of alcohol?

It does not have as big an effect on the price of alcohol as it does on tobacco because alcohol has a large volume, making it difficult to transport. There is considerably more value in a much smaller volume with cigarettes. Any effects are more prevalent in deprived communities where income is stretched and there is greater motivation to buy from unauthorised vendors. Teenage and binge markets are also likely to create hotspots for illegal trafficking.

## Does the high price of alcohol in some countries affect rates of problem drinking?

The high price of alcohol in Scandinavia does impact on the levels of drinking; the overall rates of alcohol dependence are significantly lower in Scandinavian countries than in the UK.

## Is the price elasticity talked about general to all types of alcohol?

Customs and Excise has just published a new analysis, which suggests the impact of the reduced prices in supermarket affects not just wine but beer and spirits consumption too. Other price elasticity studies have shown that the effect is specific to the consumption of wine, not beer and spirits.

# Alcohol prevalence rates are coming down in continental Europe while they are going up in the UK. Alcohol is lower taxed in many parts of Europe than it is in the UK. How can we reconcile these two findings?

European tax levels are on the increase and there is not as much of a gap between the UK and the rest of continental Europe as there used to be. In France there are many other reasons why alcohol consumption is reducing, including social factors such as family unit stability and divorce. The treasury would not lose a great deal of money if it was to drastically increase the taxes on alcohol but the health service would make immense savings from the related reductions in health problems caused by alcohol misuse.