

## Alcohol and Price

**Background**

In much of the European Union drinking is part of the culture and although rates and patterns vary across countries, **the EU has the highest rate of alcohol consumption in the world** (WHO 2004).

55 million European adults drink to dangerous levels.

A common and socially accepted commodity alcohol is also the 3<sup>rd</sup> leading cause of death and disability in the EU. In 2003 alcohol related disease, injury and violence cost the EU economy €125bn (1.3%GDP) (Anderson & Baumberg 2006). The negative impact of alcohol consumption is seen across sectors including health, social services, employment, justice and education.

In recent years, some European countries have seen a decline in alcohol consumption, however, many have experienced a concerning rise. Harmful behaviours such as binge drinking<sup>1</sup> are increasing among both adults and young people and European<sup>2</sup> young people are beginning to drink at an earlier age (Anderson 2007, EC Recommendation 2001). While 24% of people 15-24 reported binge drinking at least once a week in 2006, the rate was 18% for those over 55 years (Eurobarometer 2007<sup>3</sup>).

There is clear evidence that increased drinking is accompanied by increased harm to the individual and community in terms of health, accidents, injury and violence and in negative impacts on the economy (Anderson & Baumberg 2006).

Policies to reduce alcohol-related harm exist at the European, regional and member state level as well as at the local level within countries. Activities include regulating sale and marketing and specific legislation and initiatives aimed at the general population or groups such as young people, pregnant women or drivers.

A number of strategies have shown strong evidence for effectiveness in reducing alcohol related harm by effecting changes in drinking patterns and reducing levels of consumption. Raising the price of alcohol has shown to be one of the most effective measures (Brennan et al. 2008).

Although there is much evidence that raising alcohol prices reduces consumption, the trend is that the real price of alcoholic beverages and the real value of alcohol taxation are decreasing across the EU making alcohol more affordable. Compared to other goods alcohol has become cheaper in almost all EU member states (Rabinovich et al 2009).

1 Harmful drinking: Regular consumption of >20g day (♀) or 40g day (♂). Binge drinking: >60g on one occasion.

2 EU15: AT, BE DK, FI, FR, DE, EL, IE, IT, LU, NL, PT, ES, SE, UK

3 EU25: AT, BE, CY, CZ, DK,EE, FI, FR, DE, EL, HI, IE, IT, LV, LT, LU, MT, NL, PL, PT, SK, SI, ES, SE, UK.

## **EU priorities**

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In 2006 the Commission adopted an EU strategy to support Member states in reducing alcohol-related harm. The Commission identified five priority themes, which are relevant to all Member states and for which Community action as a complement to national policies has an added value:

- ⊙ Protect young people, children and the unborn child;
- ⊙ Reduce injuries and death from alcohol-related road accidents;
- ⊙ Prevent alcohol-related harm among adults and reduce the negative impact on the workplace;
- ⊙ Inform, educate and raise awareness on the impact of harmful and hazardous alcohol consumption, and on appropriate consumption patterns;
- ⊙ Develop and maintain a common evidence base at EU level.

The Strategy outlines action at three levels: European Commission; national; and, local. At the EC level action is focused on supporting and working with Member states to monitor drinking patterns and develop strategies and action to tackle harmful drinking.

## Key Facts

### *Alcohol is a leading cause of ill-health and death in the EU*

- Alcohol is the 3<sup>rd</sup> leading risk factor for ill-health and death in the EU
- 7.4% of all ill-health and premature death in the EU is due to alcohol
- 55 million European adults drink to dangerous levels
- Some 23 million Europeans are dependent on alcohol in any year
- 25% of all male deaths and 11% of all female deaths between 15-29yrs are due to alcohol
- 80million Europeans aged 15 years plus reported binge drinking at least once a week in 2006

**HARMFUL & BINGE DRINKING ARE RISING**

Harmful: >2 drinks day (♂) >1 day (♀)  
Binge: >6 drinks in one session (60g+)

### *Alcohol harms the EU economy*

- Alcohol related disease, injury and violence cost the EU €125bn in 2003 (1.3% GDP)
- The costs of alcohol related harm impact health, welfare, employment, criminal justice Alcohol contributes to absenteeism, unemployment and accidents at work
- Intangible costs of criminal, social and health harms caused by alcohol were estimated at €270bn in 2003

### *Health risks*

#### *Alcohol, cancer and vascular disease*

- Alcohol is a carcinogen, causing cancer of the oral cavity and pharynx, oesophagus, stomach, colon, rectum and breast, with no safe level.
- Persistent use damages the liver and can lead to liver cirrhosis or cancer
- Alcohol increases the risk of stroke, and, in high doses, coronary disease and heart failure

#### *Alcohol and pregnancy*

- Alcohol is a teratogen, affecting the development of the baby.
- Drinking during pregnancy can damage the foetus and increase the risk of miscarriage
- Each year in the EU approx. 60 000 babies are born below normal birth weight due to alcohol

#### *Alcohol and driving*

- Over 1 in 3 deaths in traffic accidents are caused by drink-driving (approx 17 000 /year)
- Over 10 000 people killed as a result of drink-driving each year are not the driver

#### *Alcohol and risk taking, violence, accidents and injury*

- Alcohol intoxication increases the risk of unsafe sex therefore increasing transmission of sexually transmitted infections and unwanted pregnancies
- 4 of every 10 homicides in the EU (>2000) are attributable to alcohol
- 10 000 suicides a year (1 in 6) are attributable to alcohol

#### *Alcohol and children/young people*

- Brain development in young people and children is damaged by alcohol use
- Alcohol is estimated to be the cause of 16% of cases of child abuse
- Over 1 in 8 of 15-16 yr olds have been drunk more than 20 times in their life

## Discussion

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### Evidence for decreasing the affordability of alcohol

#### Price and consumption

The link between alcohol consumption and alcohol-related harm is well established with a clear dose-response relationship. Drinkers respond to changes in the price of alcohol as they do for other consumer products (Anderson, Chisholm & Fuhr 2009). Alcohol consumption and therefore alcohol-related harm fall as the cost of alcohol rises when factors such as income and cost of other goods remain static (Österberg 2001, Cook 2007).

The impact of price increases is most pronounced among heavy drinkers and young people. (Anderson 2009a). In response to increased prices young people begin drinking at a later age, slow their progression to drinking larger amounts and reduce heavy drinking (Chaloupka et al. 2002).

Increasing prices on the cheapest available alcohol by raising floor prices has more impact on consumption than increasing the price of expensive alcohol products.

#### *Price and affordability*

In considering economic availability it is important to determine the “real” price of alcohol using a measure which considers both *price* and *incomes* to determine *alcohol affordability*.

#### *Affordability, consumption and harm*

There is much evidence that increasing the price of alcohol reduces consumption and alcohol-related harm (Anderson 2009b). To assess links between affordability, consumption and alcohol-related harm DG SANCO commissioned RAND Europe to undertake research on the topic. The subsequent technical report published in 2009 (Rabinovich et al 2009) found the following:

- The real value of the EU alcohol minimum excise duty rates, and of Member states’ alcohol taxation, has decreased since the mid-1990s in most EU countries;
- Alcoholic beverages have become more affordable in most EU countries since the mid-1990s – in some countries by over 50%;
- There is a positive relationship between alcohol affordability and alcohol consumption in Europe;
- There is a positive relationship between alcohol consumption and harm, including traffic deaths and liver cirrhosis;
- Cross-border alcohol consumption due to tax (and price) differentials can lead to increases in alcohol consumption in the higher-price country and increases in alcohol harms.

## **Policy measures which effect price / affordability**

### Taxation

Increasing prices is one of the measures with the strongest impact on reducing consumption. Taxation can be used to increase prices and reduce affordability. However, other policies and factors can influence the effectiveness of taxation as a policy tool to decrease affordability.

Trade rules can impact on the implementation and effectiveness of taxation. For example, the introduction of a single market for alcohol in the EU created significant competition between countries which led to lower alcohol taxes (Anderson 2009b).

Increasing taxes may increase revenue without actually impacting on affordability and therefore health. Introducing higher taxes only for revenue purposes rather than with a health goal means that necessary measures to ensure positive health outcomes are not put in place and the health impact is limited. Retailers can offset tax increases by lowering prices, even selling alcohol at or below cost.

The real value of excise duties for most alcoholic beverages has decreased in the EU since 1996 (except in Italy and the UK). Affordability of alcohol has increased in Europe with the exception of Italy; in six countries<sup>4</sup> affordability increased by 50% or more.

### Cross border issues

European trade law can impact on the effectiveness of alcohol policies. Although there is an obligation that all EU policies ensure “a high level of health protection” trade policies which treat alcohol only as a commodity and do not consider health implications can limit the impact of measures to reduce alcohol related harm such as taxation.

There is evidence that the introduction of a single market for alcohol in the EU resulted in lower taxes due to tax competition between countries (Lockwood & Migali 2008). Lowering of taxes had a notable effect, for example, in Finland where consumption increased following lowered taxes introduced to address the negative impact of the single market (Herttua, Mäkelä & Martikainen 2008); the evidence overall indicates that lowering alcohol taxes in countries where many residents buy alcohol abroad does not address cross-border issues (Anderson 2009b).

### Minimum price

Introducing minimum pricing is one strategy for ensuring that affordability is controlled even if retailers adjust prices to compensate for tax increases. Evidence from the UK shows that setting a minimum price per gram of alcohol can be as effective as an across the board tax increase (Brennan et al. 2008).

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<sup>4</sup> Estonia, Finland, Ireland, Latvia, Lithuania and Slovakia

## Questions for Consideration by Policy Makers

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- **What is the difference between the retail price of alcohol and the “real” price?**

The “real” price of alcohol describes the affordability of alcohol. Affordability of alcohol is a composite measure looking at the *net effect of price and income*. Affordability takes into account incomes and the cost of other goods.

- **Is there an association between affordability, consumption and alcohol-related harm?**

There is significant research evidence that demonstrates a link between the affordability of alcohol, consumption and alcohol-related harm, including traffic injuries, traffic deaths and liver cirrhosis (Rabinovich et al., 2009)

- **Has affordability of alcohol increased, decreased or remained static in Europe?**

In all countries in Europe except Italy alcohol has become more affordable in recent years (Rabinovich et al., 2009).

- **What impact is reducing the affordability of alcohol likely to have?**

Increased alcohol prices when factors such as income and the cost of other goods remain static leads to less consumption and less alcohol-related harm (Österberg 2001, Cook 2007, Anderson 2009a)

Reducing affordability effects consumption among young people and thus alcohol-related harm. Policies which increase the price of alcohol delay the time when young people start to drink, reduce heavy drinking and the volume consumed per occasion (Chaloupka et al 2002)

Reducing affordability has only a limited effect on light drinkers with heavier drinkers switching to cheaper beverages. Influencing the price of the cheapest drinks by raising floor prices has a larger impact on total consumption than raising prices of more expensive drinks (Anderson 2009a).

- **What actions are cost-effective for reducing alcohol affordability?**

The WHO-CHOICE project (Choosing Interventions that are Cost Effective) estimates the cost of changing the alcohol tax rate and collecting alcohol taxes on goods not currently taxed and the effect of increased taxes on health and mortality. Using the CHOICE model, tax increases were the most cost-effective policy option (Chisholm et al. 2009).

Other modelling studies show that minimum price reduces alcohol-related harm with little additional expense to light drinkers (Brennan et al. 2008).

## Options

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### *Taxation*

- To not change taxes would make alcohol more affordable over time leading to increased alcohol consumption and related harm.
- Increasing taxes guided by data on price elasticity, incomes and the relative cost of other goods would reduce affordability and thus consumption and related harm.
- To maximise the effectiveness of taxation in raising prices and reducing consumption and related harm governments must make reducing affordability the goal of tax increases. This would be achieved by using economic modelling<sup>5</sup> which takes into account incomes, relative prices of other goods and inflation.
- Uniform tax per gram of alcohol across all beverage categories. A proportionally higher tax on spirits reflecting their higher alcohol content may be preferable in some countries considering that an across the board tax would include wine and the political difficulties inherent in such action.
- Taxation is a cost-effective measure when planned for health outcomes not only revenue.
- Lowering taxes to offset cross border trade or trade in illicit alcohol can increase the risk of alcohol related harm as in the example of Finland.
- Special taxes to products that are especially attractive to young consumers. Taxes for alcopops and related beverages have already been introduced in some countries.

### *Minimum price*

- Introducing a legislated minimum price per gram of alcohol ensures that taxes can influence affordability even if retail prices drop.
- Economic modelling provides some evidence that minimum pricing has a stronger effect on reducing consumption among heavy drinkers and young drinkers.

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<sup>5</sup> The Sheffield Alcohol Policy Model is the best model to date for estimating the overall impact of alcohol taxes. Brennan A, Purshouse R, Rafia R, Taylor K, Meier P, Booth A, et al. (2008) Independent Review of the Effects of Alcohol Pricing and Promotion: Part B. Results from the Sheffield Alcohol Policy Model Sheffield: University of Sheffield; 2008.

[http://www.dh.gov.uk/en/Publichealth/Healthimprovement/Alcoholmisuse/DH\\_4001740](http://www.dh.gov.uk/en/Publichealth/Healthimprovement/Alcoholmisuse/DH_4001740)

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