SHAAP (Scottish Health Action on Alcohol Problems) has been established by the Scottish Medical Royal Colleges and Faculties to raise awareness about alcohol-related harm and to promote solutions based on the best available evidence. A key function of SHAAP is to provide a coherent and authoritative medical voice on reducing the impact of alcohol on the health and well-being of the people of Scotland and to promote measures that can be adopted to reduce this harm.
# CONTENTS

BACKGROUND

EXECUTIVE SUMMARY

Section One
ALCOHOL-RELATED HARM
Rising trends in alcohol-related harm
Deaths from alcohol use
Impact of alcohol on health
How much alcohol is harmful?

Section Two
TRENDS IN ALCOHOL CONSUMPTION
Rising overall consumption
Increased drinking at home

Section Three
PRICE, CONSUMPTION AND HARM
Trends in price and consumption
Deep discounting and below-cost selling
Supermarket pricing practices
Evidence on price and consumption
Comparison with other countries

Section Four
EFFECTIVE ALCOHOL POLICIES
Why alcohol policies need to reach the majority of drinkers
Population consumption and harm
UK alcohol policies
Scottish alcohol policies
A matter of individual responsibility?

<table>
<thead>
<tr>
<th>Section</th>
<th>Topic</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>BACKGROUND</td>
<td></td>
<td>6</td>
</tr>
<tr>
<td>EXECUTIVE SUMMARY</td>
<td></td>
<td>9</td>
</tr>
<tr>
<td>Section One</td>
<td>ALCOHOL-RELATED HARM</td>
<td>21</td>
</tr>
<tr>
<td></td>
<td>Rising trends in alcohol-related harm</td>
<td>22</td>
</tr>
<tr>
<td></td>
<td>Deaths from alcohol use</td>
<td>22</td>
</tr>
<tr>
<td></td>
<td>Impact of alcohol on health</td>
<td>23</td>
</tr>
<tr>
<td></td>
<td>How much alcohol is harmful?</td>
<td>24</td>
</tr>
<tr>
<td>Section Two</td>
<td>TRENDS IN ALCOHOL CONSUMPTION</td>
<td>27</td>
</tr>
<tr>
<td></td>
<td>Rising overall consumption</td>
<td>28</td>
</tr>
<tr>
<td></td>
<td>Increased drinking at home</td>
<td>30</td>
</tr>
<tr>
<td>Section Three</td>
<td>PRICE, CONSUMPTION AND HARM</td>
<td>31</td>
</tr>
<tr>
<td></td>
<td>Trends in price and consumption</td>
<td>32</td>
</tr>
<tr>
<td></td>
<td>Deep discounting and below-cost selling</td>
<td>33</td>
</tr>
<tr>
<td></td>
<td>Supermarket pricing practices</td>
<td>34</td>
</tr>
<tr>
<td></td>
<td>Evidence on price and consumption</td>
<td>36</td>
</tr>
<tr>
<td></td>
<td>Comparison with other countries</td>
<td>36</td>
</tr>
<tr>
<td>Section Four</td>
<td>EFFECTIVE ALCOHOL POLICIES</td>
<td>39</td>
</tr>
<tr>
<td></td>
<td>Why alcohol policies need to reach the majority of drinkers</td>
<td>40</td>
</tr>
<tr>
<td></td>
<td>Population consumption and harm</td>
<td>40</td>
</tr>
<tr>
<td></td>
<td>UK alcohol policies</td>
<td>42</td>
</tr>
<tr>
<td></td>
<td>Scottish alcohol policies</td>
<td>43</td>
</tr>
<tr>
<td></td>
<td>A matter of individual responsibility?</td>
<td>43</td>
</tr>
</tbody>
</table>
BACKGROUND

This report presents the findings of an expert workshop convened by SHAAP on 27th September, 2007 to consider action that government could take on pricing policy to reduce alcohol-related harm in the population. Prior to the workshop, SHAAP undertook an extensive literature review of the evidence on alcohol consumption, harm and price. Expert participants from Scotland, England and the Republic of Ireland participated in the production of evidence summaries to inform the workshop. Discussion at the workshop was also informed by two legal opinions commissioned by SHAAP to explore particular aspects of alcohol pricing policy. Written submissions were received from alcohol industry interests, and Paul Waterson, Chief Executive of the Scottish Licensed Trade Association, presented the association’s views on pricing to the expert workshop. Jack Law, Chief Executive of Alcohol Focus Scotland, presented AFS’s views to the expert workshop and Anna Poole, the author of one of the legal opinions commissioned, answered questions on her opinion.

SHAAP is grateful to the expert participants for their significant contribution in helping to formulate the recommendations in this report and to the stakeholders who took time to submit their views in writing or in person to the expert participants.

This report has been written by Evelyn Gillan and Petrina Macnaughton with input from the expert participants and the SHAAP representatives who attended the workshop.
EXPERT WORKSHOP

Dr Bruce Ritson (chair)  Chair of SHAAP
Professor Christine Godfrey  University of York
Professor Anne Ludbrook  University of Aberdeen
Dr Ann Hope  Trinity College, Dublin
Dr Nick Sheron  Royal College of Physicians (London)
Professor Gerard Hastings  University of Stirling
Ben Baumberg  Institute of Alcohol Studies
Russell Bennetts  Institute of Alcohol Studies

Professor Peter Brunt  Dr Lesley Graham
Dr Peter Rice  Dr Iain Smith
Evelyn Gillan

Iain MacAllister (observer)  Scottish Government

Open Session

Jack Law  Alcohol Focus Scotland
Paul Waterson  Scottish Licensed Trade Association
Mark Baird (observer)  Scottish Government Industry Partnership
Anna Poole  Advocate, Axiom Advocates

Written Submissions

1. British Retail Consortium

EXECUTIVE SUMMARY

Reducing alcohol-related harm will require a range of actions in the short and longer term to foster a change in our drinking culture. No single policy initiative will solve all the alcohol problems in our society. An effective alcohol policy will be one that includes regulatory action, treatment interventions and culture change delivered through a comprehensive strategy aimed at the whole population as well as being targeted at high-risk groups.

ALCOHOL related DEATH rates in Scottish men are DOUBLE those in the rest of the UK.¹
EXECUTIVE SUMMARY
This report presents the findings of an expert workshop convened by SHAAP that focused specifically on pricing policy measures open to government. The workshop considered this particular aspect of alcohol policy in view of the significant international evidence base, which confirms that price and taxation strategies are one of the most effective and cost-effective policy options available to governments to reduce alcohol-related harm.

ALCOHOL-RELATED HARM
Alcohol is the third leading contributor to disease burden in developed countries. Over the last 30 years, UK liver cirrhosis mortality has risen over 450% across the population with a 52% increase in alcoholic liver disease in Scotland between 1998 and 2002. Scotland now has one of the highest cirrhosis mortality rates in Western Europe. Research has shown that alcohol is related to more than 60 types of disease, disability and injury. Alcohol consumption is also associated with a substantial burden of social harm with estimates from some countries suggesting that the burden of social harm from drinking is roughly equal to the burden of health harm. Alcohol-related problems are estimated to cost Scotland over £1 billion every year.

TRENDS IN ALCOHOL CONSUMPTION AND HARM
Over the past 40 years, alcohol consumption in the UK has doubled with a significant increase in drinking at home. Sales from supermarkets and off-licences now account for nearly half the amount of alcohol sold in the UK. The Scottish Health Survey (2003) suggests that two in three men and one in two women are drinking at levels that increase the risk to their health. The available international evidence shows that as overall alcohol consumption increases, so does alcohol related-harm. In other words, the more alcohol a nation consumes, the greater the burden of harm it will experience.
ALCOHOL PRICE AND CONSUMPTION

Analysing trends in alcohol price and consumption in the UK shows that as the price of alcohol has come down, consumption has risen (Figure 1a). The real price of alcohol (measured in constant price terms to take account of the effects of inflation) has been in steady decline over the past 50 years. The main reason for the price decline is that alcohol has become much more affordable. Between 1980 and 2005 the price of alcohol increased by 22% more than prices generally. However, because households’ disposable income has increased by 97% in real terms (between 1980 and 2005), alcohol was 62% more affordable in 2005 than in 1980.12

Figure 1a: Consumption of alcohol in the UK (per person aged 15+) relative to its price: 1960-2002

Competition in the alcohol market has also had the effect of driving the price of alcoholic drinks down through extended promotions, ‘buy-one-get-one-free’ offers, deep discounting and below-cost selling. Big pub companies operating ‘megapubs’ have been able to offer cheaper drinks on the basis of selling more volume and being able to extract discounted deals from alcohol producers. Supermarkets have admitted to selling alcoholic drinks below cost as a means of attracting customers into their stores and increasing their total grocery sales, a practice known as ‘loss-leading’.13
The pricing practices of alcohol producers and retailers have resulted in the profit margins on the unit price of an alcoholic drink being squeezed. This means that in order for producers and retailers to maintain their total profits they have to sell more; and in order for producers and retailers to sell more, consumers have to drink more.

Although the availability of cheap alcohol is not the sole reason for problem alcohol use in Scotland, it is a factor in rising consumption levels and associated harm. More significantly, in terms of alcohol policy, it is an area in which government regulatory action could make a difference in reducing the level of alcohol-related harm.

**EFFECTIVE ALCOHOL POLICIES**

There is now a significant body of evidence that has examined the policies that are most effective in reducing alcohol-related harm. A review of 32 alcohol strategies and interventions has found that in terms of the degree of effectiveness, the breadth of research support, the extent to which they have been tested cross-culturally, and the relative expense of implementation, the most effective alcohol policies include regulatory interventions (controls on price and availability of alcohol); brief interventions for hazardous and harmful drinkers; and drink-driving laws. By contrast, education in schools, public service announcements and voluntary regulation by the alcohol industry are found to be the least effective in changing drinking patterns or problems.14

The relationship between alcohol price and the level of consumption and associated harm is one of the most researched areas of alcohol policy. Many individual and aggregate level studies have examined the effects of price changes on overall consumption of alcohol, and on the consumption of different types of alcoholic beverage (beer, wine, and spirits). Essentially, what the weight of evidence from all these studies and reviews indicates is that alcohol appears to behave like most other consumer goods in the market. That is, when all other factors remain the same, an increase in the price of alcohol generally leads to a decrease in consumption, and vice versa. (See Appendix 1 for a more detailed review of the evidence of effects of price changes on alcohol consumption)
CONCLUSIONS AND RECOMMENDATIONS

Having reviewed the international evidence linking price, consumption and harm; and considered the mechanisms for raising alcohol price in Scotland and the UK, this report advocates using price as a policy lever to reduce alcohol consumption and related harm. Based on estimates by the Academy of Medical Sciences, a 10% rise in alcohol price would save the lives of 479 Scottish men and 265 women every year.15

SHAAP acknowledges that this position runs contrary to the position of the alcoholic beverages industry as evidenced by written submissions from sectors within the industry. The submissions argued against using population-based measures such as price as a policy lever to reduce alcohol consumption and related harm. These arguments are addressed in Section 3 and Section 4 of the report.

In convening the expert workshop, SHAAP sought to identify policy measures that Scottish Ministers could implement and were most likely to reduce alcohol harm in Scotland. Expert participants also identified the need for policy action on price at a UK level. In this context, SHAAP acknowledges that Scotland is already showing leadership in the UK by enshrining a public health principle in the new licensing legislation; acknowledging that alcohol is no ordinary commodity; and outlawing irresponsible drinks promotions in pubs and clubs.

The purpose of Scottish alcohol policy is to reduce levels of harm which are regarded by experts and politicians – as well as the public – as being much too high. Whilst it is tempting to hope that Scottish drinking culture can be changed through school education and TV campaigns, the reality is that these measures by themselves are unlikely to have a significant impact on drinking behaviour. By contrast, the evidence on price and tax policy suggests that it is one of the most effective ways of reducing alcohol-related harm. SHAAP recognises that taking action to address alcohol pricing policy is not an easy step for any government to take. Public opinion, although supportive of measures to
reduce the burden of alcohol use on society, may be resistant to price increases.\textsuperscript{16} The alcoholic beverages industry is likely to oppose any regulation of the alcohol market. A vocal industry lobby has consistently argued against efforts to lower the overall consumption of alcohol in the population as it seeks to protect its markets.\textsuperscript{17} There are also legal and administrative constraints that may impact on policy action in this area. SHAAP acknowledges these constraints, but believes nevertheless that action to increase alcohol price is both necessary and possible.

Scotland adopted an enlightened, evidence-based approach to public health when it banned smoking in public places - a public health measure that has has been associated with a 17\% reduction in heart attacks in Scotland.\textsuperscript{18} Alcohol policy offers another opportunity for the Scottish government to show leadership in the UK by taking seriously its duty to protect the public health against harmful alcohol use and to improve the overall health and well-being of the people of Scotland.

Having considered the pricing policy measures most likely to reduce levels of alcohol harm in the population, SHAAP recommends the following action.
RECOMMENDATION 1

The Scottish Government should end irresponsible alcohol promotions in all licensed premises.

New Scottish licensing legislation due to come into force in 2009 will outlaw irresponsible drinks promotions in pubs and clubs. Irresponsible alcoholic drinks promotions are defined as promotions which offer alcohol free of charge or at a reduced price on the purchase of one or more alcoholic drink, or any other product. The provisions of the new licensing legislation should be extended to cover shops, supermarkets and off-licences (See Appendix 2 for more details on Scottish licensing legislation and the promotions mechanism).

RECOMMENDATION 2

The Scottish Government should establish minimum prices for alcoholic drinks.

Fixing minimum drinks prices can achieve health goals that raising alcohol taxes alone cannot by preventing below-cost selling and the deep discounting of alcohol that some retailers engage in. Fixing minimum drinks prices is possible under both UK and EU competition law, provided that minimum prices are imposed on licensees by law or at the sole instigation of a public authority. Minimum prices can be expressed either as a particular price or a minimum profit-margin. The provisions of the new licensing legislation in Scotland appear to be sufficiently broad to allow the addition of a description of a drinks promotion which is irresponsible if it involves the supply of an alcoholic drink below a certain price. (See Appendix 2 for more details on the mechanisms and legal framework for setting minimum drinks prices in Scotland).
RECOMMENDATION 3
The Scottish Government should make representation to Westminster to increase alcohol duty and link alcohol taxes to inflation.

Increasing the rates of duty on all categories of alcoholic drinks is a simple, straightforward means available to the Westminster government to raise alcohol price. It is possible for alcohol producers and retailers to absorb the costs of a tax increase without increasing the retail price of alcohol, and this is particularly likely in the case of big supermarkets that can subsidise losses on alcohol with profits from other products. However, the evidence suggests that most producers and retailers generally pass on the costs of tax increases to consumers. In addition to raising the duty on alcohol, the Westminster government should also index-link tax increases to counter the erosion of the real value of specific alcohol duties in nominal terms due to inflation.
RECOMMENDATION 4
The Scottish Government should make representation to Westminster to link levels of taxation to alcohol strength.

Increasing levels of taxation on stronger alcoholic beverages and reducing the level of taxation on lower strength beverages would give a financial incentive to consumers to buy and consume lower-strength drinks (provided the reduction or increase in tax was reflected in the retail price) and to producers to produce lower-strength products. Although the way excise duty is levied in the UK is subject to rules laid down by the EU, EU law allows taxes other than excise duty to be placed on alcohol products by individual member states. This gives the UK government scope to place further taxes, in addition to excise duty, on alcoholic beverages with higher alcohol content with the aim of reducing alcohol consumption and improving public health.

In particular, the duty on cider should be increased in relation to its alcoholic strength and taxed at the same rate as beer, a comparable alcoholic beverage. Under the current excise arrangements, cider is taxed at a much lower rate than beer of an equivalent alcoholic strength. (See Appendix 3 for more details on linking taxation to alcohol strength).
**RECOMMENDATION 5**

The Scottish Government should reconvene the National Licensing Forum with appropriate health representation.

The National Licensing Forum should be reconvened to oversee the implementation of the new licensing legislation and to ensure that local licensing boards fully understand their responsibilities in relation to the public health principle embedded in the legislation. There should be appropriate medical and health public representation on the Forum.

**RECOMMENDATION 6**

The Scottish Government should consider whether there is a need to create an independent, regulatory body to protect the health of the nation in relation to alcohol.

There are a number of issues relating to the regulation of the alcohol market, including pricing practices, labelling, the effectiveness of voluntary agreements and harmful promotional practices, that could be the responsibility of an independent, regulatory body. The purpose of such a body would be to protect the health of the nation in relation to alcohol.
RECOMMENDATION 7

The Health and Justice Committees of the Scottish Parliament should consider jointly initiating a Parliamentary inquiry into the health and social harm caused by alcohol in Scotland.

A parliamentary inquiry initiated jointly the Health and Justice Committees could examine a) the current functioning of the alcohol market including promotional practices and b) effective policy action which would reduce the significant burden of health and social harm caused by alcohol.
Section One
ALCOHOL-RELATED HARM

Alcohol-related health harm has risen exponentially in the UK over the past few decades as alcohol consumption has doubled since 1960. Along with other modern lifestyle behaviours leading to health risks and chronic disease, such as obesity and smoking, problem alcohol use now represents a major threat to public health, both in Scotland and the UK as a whole.\textsuperscript{21,22}
RISING TRENDS IN ALCOHOL-RELATED HARM

Although there is a long history of alcohol consumption in many societies including our own, it is only relatively recently that advances in scientific knowledge have given us a better understanding of alcohol’s harmful effects on the body. Cumulative research has shown alcohol to be linked to more than 60 types of disease, disability and injury, and work is ongoing to map out the biological processes and chemical pathways linking alcohol use to the development of disease. As our research base on alcohol-related health damage expands, then the medical imperative to act to address problem alcohol use becomes more pressing.

<table>
<thead>
<tr>
<th>DEATHS FROM ALCOHOL-RELATED CAUSES</th>
</tr>
</thead>
<tbody>
<tr>
<td>600,000 people died of alcohol-related causes in Europe in 2002²³</td>
</tr>
<tr>
<td>63,000 of those deaths were of young people aged 15 to 29 years²⁴</td>
</tr>
<tr>
<td>Hazardous alcohol use has been estimated to cause 31.5% of all deaths in 15 to 29 year old men in the developed world²⁵</td>
</tr>
</tbody>
</table>

Harmful use of alcohol is the third leading contributor to disease burden in developed countries, and the leading risk factor for young people. Unlike most other risk factors for developed countries, such as tobacco, high blood pressure and high cholesterol levels, alcohol use can have a detrimental effect on health early in life.²⁶

DEATHS FROM ALCOHOL USE

In the UK, rates of alcohol-related morbidity and mortality are on the increase. Over the past 30 years, UK liver cirrhosis mortality has risen over 450% across the population, as well as peaking at a younger age.²⁷ Within Scotland, which now has one of the highest cirrhosis mortality rates in Western Europe, there was a 52% increase in alcoholic liver disease between 1998 and 2002.²⁸
Liver cirrhosis mortality rates are an important indicator of the level of chronic alcohol health harm in a society, as alcohol is directly responsible for the majority of cirrhosis deaths.ii

According to the Office of National Statistics (ONS), the number of alcohol-related deaths in the UK nearly doubled between 1991 and 2004. In Scotland male alcohol-related death rates were consistently more than double the overall UK rate between 1994/96 and 2002/04, and in 1991/93 they were 80% higher. From 1993/95 onwards, women in Scotland had a higher alcohol-related death rate than men in England.29

The National Statistics UK definition of alcohol-related deaths includes only those causes regarded as being directly due to alcohol consumptioniii. It does not include other diseases where alcohol has been shown to be a contributory factor, such as cancers of the mouth, oesophagus and liver. Apart from deaths due to poisoning with alcohol (accidental, intentional or undetermined), the UK definition also excludes any other external causes of death, such as road traffic and other accidents in which alcohol may be implicated. Although alcohol was directly responsible for more than 2,000 deaths in Scotland in 2005.30 it is likely that it was a contributory factor in thousands more.iv

IMPACT OF ALCOHOL ON HEALTH

Patterns of drinking and the amount of alcohol consumed can lead to different types of health problems. Sustained heavy drinking over a number of years, of the type that has been common in wine drinking countries of southern Europe, may not lead to visible intoxication and the commonly associated problems of street violence and anti-social behaviour, but can still result in health damage and dependency. Daily drinking of relatively small amounts of alcohol can lead to liver cirrhosis as a result of continuous damage to liver over a long period.31 A pattern of drinking which involves less frequent drinking occasions, but consuming large volumes of alcohol on those drinking occasions can lead to a number of adverse health effects associated with acute intoxication, including accidental injury and violence, alcohol poisoning, acute pancreatitis and acute cardiac arrhythmias, as well as the more high-profile consequences of public drunkenness and disorder.
EFFECTS OF ALCOHOL ON THE BODY

When alcohol is consumed, it is absorbed quickly into the bloodstream and acts on the brain and nervous system progressively impairing coordination, sensory perception, reasoning and memory in line with how much alcohol is consumed and how quickly.

Health damage from alcohol use can be related to the effects of acute intoxication or from sustained drinking over many years.

Alcohol-related health conditions include accidents and injuries, acute and chronic pancreatitis, alcoholic liver disease, high blood pressure, cardiomyopathy, coronary heart disease, strokes, mental and behavioural disorders, infertility and foetal damage. Alcohol consumption is linked to various cancers including cancer of the mouth, oesophagus, larynx and pharynx. Recent research has also suggested a link between alcohol use and breast cancer.32

A report published earlier this year by the RSA Commission on Illegal Drugs, Communities and Public Policy recommended a reclassification of drugs according to the harm caused by their use. In the proposed alternative system, alcohol was ranked the 6th most harmful drug, ahead of tobacco, cannabis and Class A drugs such as Ecstasy and LSD.33

HOW MUCH ALCOHOL IS HARMFUL?

For most health conditions in which alcohol is a significant factor, there is a dose-dependent relationship. That is, the more alcohol is consumed, the greater the risk of alcohol-related health harm.3 Genetic and environmental factors also play a part in determining whether an individual will develop an alcohol-related condition, and the threshold at which alcohol consumption becomes harmful may differ for different diseases.

In the 1980s, the Royal Colleges of Psychiatrists, Physicians and General Practitioners sought to set out more clearly the
relationship between levels of alcohol consumption and the development of alcohol-related harm, excluding injuries. The consensus of opinion on what would constitute ‘sensible’ limits, which was based on the best available evidence at that time, was for men to drink no more than 21 units of alcohol a week and women to drink no more than 14 units a week. These levels were associated with a low risk of developing alcohol-related health harm, but not with the absence of risk. These opinions were endorsed by the British Medical Association.

‘SENSIBLE’ LIMITS ON ALCOHOL CONSUMPTION

The issue of ‘sensible’ limits is complex because alcohol causes a wide variety of health problems, and may also be protective of heart disease. If, for example, a person wanted their cancer risk to be as near to zero as possible, then the advice would be to drink no alcohol. On the other hand, drinking up to the recommended limit may give some protection from heart disease - a benefit only evident for older men and post-menopausal women. For a healthy middle-aged person the risks of drinking alcohol start to outweigh the benefits at around 14 (women) and 21 (men) units per week. The health risks escalate at 20 (women) and 30 (men) units per week, and at 35 and 50 units a week respectively, the health risks become severe.

Other co-factors can be involved in the risk of alcohol-related health damage. For example, obesity almost certainly increases the risk of both alcohol-related cancer and liver disease. So, whereas the ‘sensible’ limit for a thin, healthy man may be 21 units of alcohol a week, there may be no ‘sensible’ limit for an overweight woman with a family history of breast cancer, or for those in the UK population that have fatty liver disease. All heavy drinkers increase the risk to their health, but the actual extent of this risk depends on both alcohol intake and on other factors.34
Until it is possible to quantify an individual's risk of developing alcohol-related harm, the best approach is to adhere to guidelines that are based on the most up-to-date evidence.

In 1995, to address the issue of patterns of consumption as well as overall levels, daily benchmarks were introduced. These were for men to drink no more than 3-4 units per day and women to drink no more than 2-3 units whilst still keeping within weekly limits. In Australia, a comprehensive review of recent evidence on levels and patterns of alcohol consumption and harm has led to the publication of revised recommendations of no more than 2.5 units daily for both men and women. It is however recognised that further research should continue to more precisely define the nature of the relationship between the level and pattern of consumption and particular pathologies for individuals. At a population level, it is well established that the average population consumption is directly related to the burden of alcohol-related harm: the higher the average consumption, the greater the harm. Conversely, if the average population consumption is reduced, the overall burden will be reduced.
Section Two
TRENDS IN ALCOHOL CONSUMPTION

Over the past 40 years, alcohol consumption in the UK has doubled, rising from 5.7 litres of pure alcohol per person (16+) in 1960 to 11.3 litres in 2005. UK adult alcohol consumption now ranks 17th out of 21 EU countries compared with 11th place two decades ago. This rise through the EU consumption league can partly be explained by the fact that we are drinking more, but it is also down to many of our neighbours drinking less.
RISING OVERALL CONSUMPTION

Alcohol consumption figures for the UK population are usually derived from two main data sources – individual self-reported consumption in household surveys and information from HM Revenues and Customs (HMRC) on the amount of alcohol cleared for sale in the UK. Both sets of data have their limitations in accurately assessing the amount of alcohol consumed in the UK. Household survey data on alcohol consumption is based on what people report they have drunk in the past week. It is generally accepted that this self-reported data underestimates actual consumption by as much as 50%. In 2005, HMRC data on clearances suggested that the average adult purchased the equivalent of 11.3 litres of pure alcohol over the year, whereas the General Household Survey (GHS) data (which surveys UK households) suggested that the average adult drank 5.6 litres of pure alcohol over the same time period. Although HMRC clearance data include alcohol that is consumed by visitors to the UK as well as alcohol that is not actually drunk, this would not be sufficient to account for the discrepancy between what people say they have drunk and the amount of alcohol cleared for sale in the UK. Furthermore, HMRC data does not include alcohol that the UK population drinks abroad or alcohol brought into the UK through duty-free allowances or smuggling.

Figure 1: Sales of alcoholic drinks by category: total volume 2001-2006

© Euromonitor
Both the Westminster and Scottish Governments have recognised the limitations of the data on alcohol consumption and are exploring methods to improve estimates.\textsuperscript{42} The most recent data on alcohol consumption from HMRC suggest a drop in adult per capita consumption in the UK of 2% in 2005 and 3.3% in 2006.\textsuperscript{43} In terms of volume sales, market analysts Euromonitor show a year-on-year growth in the alcoholic drinks market in the UK, totalling 5% between 2001 and 2006\textsuperscript{vi} (Figure 1), although these figures are not directly comparable with HMRC data which relate to litres of pure alcohol as opposed to volume of drink sales.

If indeed alcohol consumption in the UK is starting on a downward trend this would be a positive development. However, it is not possible to draw this conclusion from only two years’ HMRC data. Over the past 40 years there have been slight dips in consumption only for it to begin to rise again after a few years (Figure 2). Moreover current levels of alcohol consumption fall far short of the WHO target of a 25% reduction in consumption in Europe signed up to by the majority of member states.\textsuperscript{44}
INCREASED DRINKING AT HOME

In addition to consuming more alcohol overall, another significant change in UK drinking behaviour in recent years is the shift away from drinking outside the home to more drinking at home. Sales from supermarkets, off-licences, and corner shops (the off-trade sector) have steadily increased in volume over the last few decades and now account for nearly half of the alcohol sold in the UK. By contrast, on-trade sales (pubs, clubs and restaurants) have only decreased slightly (Figure 3).

In Scotland, nine out of ten adults drink alcohol. For three quarters of Scots, the most common drinking location is the home and this proportion increases by age. According to the Scottish Health Survey (2003), 27% per cent of men and 14% of women reported drinking more than the recommended weekly limits. Sixty-three per cent of men and 57% of women who reported drinking in the past week drank more than the recommended daily limits on their heaviest drinking day. Of these, 37% of men and 28% of women reported drinking double (or more) than the recommended daily limits on their heaviest drinking day. Taking into account the deficiencies in the self-reported survey data, it seems certain that the number of people that can be classed as drinking at levels at increased risk to their health represent a significant proportion of the Scottish population.

Figure 3: Sales of alcoholic drinks in the UK by volume

© Euromonitor
Section Three
PRICE, CONSUMPTION, HARM

The relationship between alcohol price, consumption and related harm is one of the most researched areas of alcohol policy. What the evidence consistently shows is that alcohol prices do have an effect on the level of alcohol consumption. All things being equal, if the price of alcohol goes down, consumption will rise as will the level of harm.
TRENDS IN PRICE AND CONSUMPTION

Analysing the trends in alcohol price and consumption in the UK, a distinct pattern emerges that shows that as the price of alcohol has come down, consumption has risen (Figure 4).

Although the sale price of alcoholic beverages has increased over the past 50 years, the real price of alcohol (measured in constant price terms to take account of the effects of inflation) has been in steady decline. The main reason for this is that alcohol has become much more affordable. Between 1980 and 2005 the price of alcohol increased by 22% more than prices generally. However, because households’ disposable income has increased by 97% in real terms (between 1980 and 2005), alcohol was 62% more affordable in 2005 than in 1980.

CHEAP ALCOHOL PROMOTIONS

“JD Wetherspoon launches Ale and Wine Wednesdays with real ale sold for as little as £1.39p a pint.”
(Morning Advertiser 10/10/07)

“Aston Manor Brewery hands out free bottles of cider to students as part of an educational campaign.”
(The Publican, 20/09/07)
DEEP DISCOUNTING AND BELOW-COST SELLING

Competition between sellers of alcohol has also had the effect of driving the price of alcoholic drinks down through extended promotions, ‘buy-one-get-one-free’ offers, deep discounting and below-cost selling. In the on-trade, big pub companies operating ‘megapubs’ have been able to offer cheaper drinks on the basis of selling more volume and being able to extract discounted deals from alcohol producers. In the off-trade, ten grocery retailers - Aldi, Asda, the Co-op, Lidl, Morrisons, Netto, Sainsbury’s, Somerfield, Tesco and Waitrose - reported to a Competition Commission inquiry earlier this year that they sold alcohol below cost. The reasons given for below cost selling included using temporary promotions as a means of attracting customers into the store and increasing total sales. This practice is referred to as ‘loss leading’. The Competition Commission found that the length of time that products were sold below cost ranged from 8 to 25 weeks and represented up to three per cent of total revenue. The supermarket Tesco told the Competition Commission that key seasonal periods, such as the summer period between the May bank holiday and July, were times of intense competition amongst retailers for the sale of alcoholic products. Christmas, or sporting events such as the World Cup during summer 2006, were identified as other times when grocery retailers might use alcohol products as loss leaders to tempt customers into the store. Looking specifically at the extent of below-cost selling of alcohol during the football World Cup in 2006, the Competition Commission found that the total sales value of below-cost alcohol sales during that period by five grocery retailers - Asda, Morrisons, Sainsbury’s, Somerfield and Tesco - amounted to approximately £38.6 million.
SUPERMARKET PRICING PRACTICES

Lager has been heavily discounted by supermarkets and price promotions have led to a narrowing of the price bands between premium and standard lagers. The considerable buying power of supermarkets and their heavy discounting of alcoholic drinks, particularly beer, have resulted in profit margins on the unit price of an alcoholic beverage being cut, meaning that producers/retailers have to sell more volume to maintain profits. In order for producers/retailers to sell more volume, consumers have to drink more. According to market analyst Euromonitor, supermarket pricing policy has resulted in beer sector off-trade volume sales rising above value consistently for the past five years. Whilst this scenario may be of benefit to consumers if the product in question was fresh fruit or wholemeal bread, when it comes to the sale of alcohol, an addictive, psychoactive substance, then it has potentially serious consequences for public health.

The pricing practices of supermarkets are an important factor in overall alcohol consumption because of their position of dominance in the off-trade alcohol market, selling more than 60% of the volume of alcohol sold. The majority of people who buy alcohol to drink at home will purchase it from a supermarket (Figure 5).

Figure 5: Off trade sales by volume

© Euromonitor
Some retail trade representatives have sought to address criticism that their cut-price alcohol policy is fuelling ‘binge’ drinking and other alcohol-related problems by arguing that alcohol sold in supermarkets is not aimed at ‘immediate consumption’. The British Retail Consortium (BRC) has stated that the vast majority of customers who buy alcohol from a supermarket take it home to drink over a period of time or at family events although this assertion is not backed up with any evidence.  

There are issues however with regard to young peoples’ consumption of alcohol bought from off-licences. ‘Front-loading’, where people consume cheap alcohol purchased from the off-trade before going out to pubs and clubs, is recognised as an increasingly widespread practice. In qualitative research undertaken in Scotland, young people report buying a ‘carry out’ and drinking it before going out at the weekend. Results from research on the drinking habits of 18- to 24-year-olds in cities in the north of England confirm this practice with 62% reporting having between one and three drinks before leaving the house. After purchasing alcohol from an off-licence or supermarket, 80% reported consuming the alcohol they had bought over the course of a weekend. Furthermore, the latest ONS Omnibus Survey of UK adults’ drinking behaviour and knowledge found that in relation to the level of alcohol consumption, about half of men drinking 21 or more units a week on average, and women drinking eight or more units, had bought alcohol in a supermarket in the last week. This compared with about a quarter or fewer of those with lower alcohol consumption.

<table>
<thead>
<tr>
<th>The survey found that overall, those most likely to have bought alcohol from a supermarket were:</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Women.</td>
</tr>
<tr>
<td>• People aged 25 or more.</td>
</tr>
<tr>
<td>• People in managerial or professional occupations.</td>
</tr>
<tr>
<td>• Heavy or moderate drinkers.</td>
</tr>
</tbody>
</table>

The survey found that overall, those most likely to have bought alcohol from a supermarket were:
EVIDENCE ON PRICE AND CONSUMPTION

The relationship between alcohol price and the level of consumption and associated harm is one of the most researched areas of alcohol policy. Many individual and aggregate level studies have examined the effects of price changes on overall consumption of alcohol, and on the consumption of different types of alcoholic beverage. What the weight of evidence indicates is that alcohol appears to behave like most other consumer goods in the market. That is, when all other factors remain the same, an increase in the price of alcohol generally leads to a decrease in consumption, and vice versa.

Some studies show that the most popular drink in a country (e.g. beer in the UK and wine in the countries of southern Europe) is the least price sensitive. This means that a price change would be expected to have less of an effect on the level of consumption of the most popular drink in a country compared to other types of alcoholic beverage consumed. However, what most research shows is that even for the most popular drink in a country, an increase in alcohol price will lead to a decrease in consumption.

A recent review of studies looking at the effects of price changes on alcohol consumption in the UK revealed that in no study was the consumption of any type of alcoholic drink found to be independent of price.\(^4\) (See Appendix 1 for a more detailed review of the evidence of effects of price changes on alcohol consumption).

COMPARISON WITH OTHER COUNTRIES

The experience of other countries can be very useful in the development of policy as much can be learned from looking at strategies implemented in other countries to address specific policy problems. However, some care needs to be taken to ensure that the indicators used for comparison are measuring the same thing so that any conclusions drawn are accurate.

It is sometimes highlighted that Scandinavian countries have the highest alcohol taxes and prices in Europe but they still have alcohol problems, whereas Italy and other Mediterranean countries, where alcohol is much cheaper, allegedly don’t have
the problems with alcohol that we do. Much media attention in the UK is given to the perceived problem of ‘binge drinking’ - characterised by public drunkenness and disorder - which is a pattern of drinking that is common in northern European countries. Based on this indicator, it is certainly the case that the countries of southern Europe, where the traditional drinking pattern is daily wine drinking, have not experienced the problems associated with heavy episodic drinking and acute intoxication that are evident in the north. However, it is misleading to infer from this that countries in southern Europe are without problems related to alcohol use. An examination of the other indicators for alcohol-related harm, such as liver cirrhosis mortality shows this to be the case. The table below provides the standardised death rates from chronic liver disease and cirrhosis for 2001 (the last year that data are available for all countries) for selected countries from the north and south of Europe. It can be seen that the lower tax rate regimes of southern Europe have substantially higher death rates from liver disease than Sweden and Norway, where the availability of alcohol is more strictly regulated by the state through a retail monopoly and high alcohol taxes.

<table>
<thead>
<tr>
<th></th>
<th>SDR chronic liver disease and cirrhosis mortality: all ages</th>
<th>Alcohol consumption: litres of pure alcohol (15+)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Denmark</td>
<td>13.94</td>
<td>11.93</td>
</tr>
<tr>
<td>Finland</td>
<td>12.2</td>
<td>8.95</td>
</tr>
<tr>
<td>Norway</td>
<td>4.23</td>
<td>5.82</td>
</tr>
<tr>
<td>Sweden</td>
<td>5.35</td>
<td>6.86</td>
</tr>
<tr>
<td>France</td>
<td>13.33</td>
<td>13.55</td>
</tr>
<tr>
<td>Italy</td>
<td>13.8</td>
<td>9.14</td>
</tr>
<tr>
<td>Portugal</td>
<td>16.52</td>
<td>12.06</td>
</tr>
<tr>
<td>Spain</td>
<td>10.47</td>
<td>11.43</td>
</tr>
<tr>
<td>UK</td>
<td>10.15</td>
<td>10.73</td>
</tr>
</tbody>
</table>

Source: European Health for All database.
The conclusion that restrictive alcohol policies do not work cannot logically be drawn solely from the observation that in the countries where they are implemented there is still problem alcohol use. It is equally arguable that if these countries did not have such policies in place, then levels of alcohol-related harm could be even higher. Scandinavian countries have adopted restrictive alcohol policies precisely because levels of harm from alcohol use were so high and there was a demand for action. In the case of Norway and Sweden at least, these policies appear to have been effective in minimising harm.

Finland too has restrictive alcohol policies, but has expressed concern that EU legislation on traveller alcohol allowances has undermined its ability to develop a health-based policy on alcohol. In March 2004, Finland lowered its excise taxes on alcohol to provide price competition with lower-cost alcohol from neighbouring EU countries, in an effort to reduce cross-border trade which accounts for a high percentage of the unrecorded alcohol consumption in Finland. This move followed the introduction of EU regulations that increased the amount of alcohol which residents could bring back into the country from other EU member states. However, the policy change has since been acknowledged to have been a mistake. Research subsequent to the policy change has found that the Finnish alcohol price reduction had a statistically significant effect on alcohol-related mortality leading to a 17% increase in alcohol-related deaths. No statistically significant effect however, was found on such deaths as the result of increased traveller allowances alone. Thus the Finnish solution of dropping local prices to reduce cross-border importing appears to have been more harmful than the importing itself.
Every day in Scotland emergency departments deal with over 70 ALCOHOL-RELATED assaults.\textsuperscript{58}

Section Four

EFFECTIVE ALCOHOL POLICIES

The scientific study of alcohol policy indicates which interventions are likely to be successful in reducing alcohol-related harm. The evidence consistently shows that the most effective and cost-effective policies include controls on the price and availability of alcohol. The evidence also demonstrates that efforts to reduce the burden of harm from alcohol need to reach the majority of drinkers and not just high-risk groups.
WHY ALCOHOL POLICIES NEED TO REACH THE MAJORITY OF DRINKERS

Alcohol policy has tended to focus on the minority of the drinking population who are the heaviest drinkers. However, a number of research studies aimed at quantifying the burden of alcohol-related harm have indicated that it is actually the much greater number of drinkers in a population (over 1 million in Scotland) who, on occasions, drink to excess, who account for most of the alcohol-related problems. Examining the causes of disease and disability attributable to alcohol, the evidence shows that a greater proportion of the overall burden of harm is associated with the acute effects of alcohol use and drinking to intoxication, rather than the chronic effects of sustained heavy drinking over a long period of time. Acute effects of alcohol use include unintentional injuries such as road traffic accidents, burns, drowning and falls, and intentional injuries including suicide. A number of studies have shown that the acute effects of alcohol use and the risk of injury increases even at low levels of consumption, starting with a single drink and rising depending on the amount of alcohol consumed. This means that the risk of alcohol-related injury is not confined to the heaviest drinkers in a population, but is much more widespread. Recent research from Finland investigating alcohol-related harms in the Finnish population revealed that the majority of problems were found in the 90% of the population consuming moderately, compared to the 10% of the population drinking heavily. In the UK, where a pattern of heavy episodic drinking is prevalent, more people die from alcohol-related falls and intentional injuries than cirrhosis of the liver and alcohol-related oral cancers.

POPULATION CONSUMPTION AND HARM

Research findings from numerous studies directly link per capita alcohol consumption with the burden of alcohol-related harm in a population. What the evidence clearly demonstrates is that changes in per capita consumption are reflected in changes in harm. In other words, the more alcohol a nation consumes, the greater the burden of harm it will experience, and vice versa. The European Comparative Alcohol Study (ECAS), using data from EU member states and Norway between 1950 and 1995, reported significant increases in all-cause male mortality as per capita
consumption increased in eight of the 14 participating countries and in none was the effect opposite (i.e. drinking more led to a reduction in mortality). Other studies have shown a relationship between accident mortality and per capita consumption; population consumption and levels of suicide; and per capita consumption and murder rates.

In addition to demonstrating the link between population alcohol consumption and levels of alcohol-related harm, the ECAS study also found direct and statistically significant relationships between changes in per capita alcohol consumption and liver cirrhosis mortality in the majority of the 14 countries in their study. If it is known that heavier drinkers are more likely to develop liver cirrhosis, then what this research tells us is that changes in per capita consumption will lead to changes in the intake of heavier drinkers. In relation to alcohol policy, this evidence together with the evidence linking alcohol price and consumption indicates that policy action to increase the price of alcohol will result in a reduction in consumption and associated harm across the whole population, and that this reduction will also include heavier drinkers. This was confirmed in a study carried out in Scotland on the effect of economic changes on drinking habits which found that overall consumption levels decreased following a tax increase that exceeded the cost of living, and heavier drinkers cut down their alcohol intake more.

The World Health Organisation (WHO) has stated that alcohol policies and interventions targeted at vulnerable populations can prevent alcohol-related harm, but that policies targeted at the population as a whole can have a protective effect on vulnerable populations and reduce the overall level of alcohol problems. Thus both population-based strategies and interventions and those targeting particular groups, such as young people and hazardous drinkers, are required.

A WHO review of 32 alcohol strategies and interventions found that, in terms of the degree of effectiveness, the breadth of research support, the extent to which they have been tested cross-culturally, and the relative expense of implementation, the most effective alcohol policies include alcohol control measures (price and availability), drink-driving laws, and brief interventions
for hazardous and harmful drinkers. At the other end of the spectrum, those alcohol policies for which it was difficult to find a direct positive effect on drinking patterns or problems include education in schools, public service announcements and voluntary regulation by the alcohol industry. WHO has recommended that if these latter measures are used, they should form only part of a comprehensive strategy to tackle alcohol-related harm.67

UK ALCOHOL POLICIES

In the UK, by contrast, strategies aimed at reducing escalating levels of alcohol-related harm have focused predominantly on specific groups of ‘problem’ drinkers, identified as young people under 18 who drink alcohol and young ‘binge drinkers’.68 The strategies also rely heavily on policies with the weakest evidence base - education and voluntary regulation by the alcohol industry - to try and effect change. They are further undermined by action taken by government to relax controls on the supply of alcohol. Alcohol is now available in more places, for longer periods, and at more affordable prices.

A strategy which just targets young people’s drinking as a problem without addressing the wider drinking culture and environment ignores the fact that young people do not form their views and attitudes towards alcohol use in isolation. As qualitative research with young people in Scotland demonstrates, not only do young people mention their peers as influencing their drinking behaviour, but also their parents’ drinking habits and the culture of drinking within their area.69 Moreover, as a stand-alone measure, educational approaches have not been proven to be effective or cost-effective in reducing alcohol use in young people. A recent comprehensive review, carried out for the National Institute of Clinical Excellence, found that there was a lack of clear, long-term evidence for the effectiveness of school-based interventions.70 By comparison, regulatory interventions, including controls on price and availability of alcohol, have the strongest evidence for effectiveness in reducing levels of harm in the population, particularly among young people.71,72

The Westminster government has recently announced that it will commission an independent national review of evidence of the
relationship between alcohol price, promotion and harm and, following public consultation, will, if necessary, consider the need for regulatory change in the future.73

SCOTTISH ALCOHOL POLICIES

There are some subtle but significant differences between English and Scottish approaches. In Scotland, a public health principle has been enshrined in the new licensing legislation which comes into force in 2009. This places a duty on local licensing boards to consider the protection and improvement of public health when granting or reviewing licences. The new legislation also prohibits irresponsible drinks promotions in pubs, clubs and restaurants (the on-trade sector), meaning that ‘happy hours’, ‘all you can drink’ offers in return for a club entry fee, and other similar promotions, will be outlawed. More recently, the Scottish government has published regulations which, if implemented, will require retailers to have separate display areas for alcohol.74 Other measures currently being considered by the Scottish government include extending the provisions of the licensing legislation banning irresponsible drinks promotions to cover supermarkets and off-licences as well, and invoking a ‘polluter pays’ principle in licensing.

A MATTER OF INDIVIDUAL RESPONSIBILITY?

A lot of emphasis in UK alcohol strategies is placed on individual responsibility for appropriate drinking behaviour. Some commentators, notably in the media, go further and argue that alcohol consumption is entirely a matter of individual responsibility, not an area to be regulated by government intervention. A difficulty with this argument is that harmful alcohol use is rarely, if ever in modern society, an ‘individual’ problem. Harmful alcohol use impacts on family, friends, neighbours, work colleagues, and ultimately society as a whole. The burden of social harm from drinking alcohol is substantial. Estimates from some countries suggest that the burden of social harm from drinking is roughly equal to the burden of health harm.75 Alcohol is recognised as a contributory factor in a wide range of social problems including anti-social behaviour, crime, violence, domestic violence, family breakdown, child abuse and child neglect.
The personal responsibility argument also presupposes that decisions on whether to drink and how much to drink are purely rational choices. This overlooks important factors about alcohol itself and the environment in which it is consumed that can have a strong influence on individual decision-making. Firstly, alcohol is an addictive substance and even moderate drinkers can show signs of mild dependency demonstrated by a strong desire to drink at certain times of the day, or in social situations, or as a means of coping with stressful circumstances. Addiction and dependency impair an individual’s ability to make rational decisions.

Furthermore, in our society, drinking alcohol is completely socially acceptable and occupies a central place in how we spend our leisure time. Drinking and drinking to excess has become the norm. Messages about how normal it is to drink also come to the population via multi-million pound marketing and advertising campaigns which suggest that drinking is socially desirable and attractive. Expenditure on alcoholic drinks advertising continues to outstrip sensible drinking campaigns by over 96%78 and the evidence suggests that alcohol promotion has a reinforcing effect on young people’s drinking.79

Urging individual restraint in an environment that promotes access as well as excess is paradoxical. For many people choosing to drink and how much to drink will not be the result of a purely rational decision-making process that can be viewed solely in terms of personal responsibility. This will have to be recognised and addressed if interventions aimed at reducing alcohol-related harm are to be effective.
ENDNOTES

i.  The third out of 26, surpassed only by high blood pressure and tobacco.

ii. However, it should be noted that the rapid increase in liver cirrhosis mortality seen in Scotland in recent years may not be fully explained simply by the reported increase in alcohol consumption. Research is planned to determine which other factors may be contributing to the rise in liver disease and possibly amplifying the effects of increased alcohol consumption. Scottish Alcohol Research Framework, Scottish Government, August 2007.

iii. Causes of alcohol-related deaths included in the UK definition: mental and behavioural disorders due to use of alcohol; degeneration of nervous system due to alcohol; alcoholic polyneuropathy; alcoholic cardiomyopathy; alcoholic gastritis; alcoholic liver disease; chronic hepatitis; fibrosis and cirrhosis of liver; alcohol-induced chronic pancreatitis; accidental poisoning by and exposure to alcohol; intentional self-poisoning by and exposure to alcohol; poisoning by and exposure to alcohol, undetermined intent. International Classification of Diseases, Tenth Revision

iv. Work is currently being done in Scotland by ISD to estimate the alcohol-attributable burden in different diseases in Scotland so that we can more accurately quantify the costs of alcohol consumption to the NHS. Scottish Alcohol Research Framework, Scottish Government, 2007.

v. Some evidence suggests a potential health benefit, specifically a reduced risk of coronary heart disease, from light to moderate drinking for a small section of the population (men over 35 years of age and post-menopausal women).

vi. Euromonitor data on alcohol volumes sales is compiled from official statistics, trade associations, trade press, company research, store checks, trade interviews, and Euromonitor International estimates.

vii. Categories of alcohol misuse - hazardous, harmful and dependent drinking – are provided in the Review of the effectiveness of treatment for alcohol problems, National Treatment Agency for Substance Misuse, November 2006. The category of hazardous drinking, based on WHO definitions, applies to anyone drinking over recommended limits (21 units a week for men or 14 for women) but without alcohol-related problems. The harmful drinking category applies to people drinking over medically recommended limits with resultant problems. Dependent drinking refers to drinking associated with an established moderate or severe level of dependence on alcohol. People drinking in excess of eight units in any one day in men and six units a day in women (“binge drinking”) are also at increased risk of harm even though they may not exceed the “sensible” weekly level.

viii. Apart from the price of beer sold in the off-trade which has fallen in terms of the sale price over the past 5 years.
APPENDIX 1

ALCOHOL PRICE AND CONSUMPTION

The effects of price changes on the level of consumption of a particular product or good is measured by what economists term the price elasticity of demand. The demand for products or goods can be labelled as being price-elastic or price-inelastic and this is essentially a way of describing how sensitive consumer demand is to changes in the price of different goods and products. If a percentage increase in the price of a product results in more than a proportionate reduction in the consumption of that product, then demand for that product is said to be price-elastic, or in other words, price-sensitive. So if a 1% rise in the price of alcohol, for example, resulted in more than a 1% drop in the level of consumption of alcohol in the population, then consumer demand for alcohol would be described as price-elastic. If, however, a percentage increase in the price of a product such as alcohol produced less than a proportionate change in the level of consumption, or even an increase in consumption, then demand for that product is said to be price-inelastic or highly inelastic.

Price elasticity can be expressed numerically. If the price elasticity of demand for a particular product is given as a value of between 0 and -1.0, this indicates that demand for the product is price-inelastic. A value of 0 or above means that a price increase of 1% would have no effect on the level of consumption, or an increase in consumption. A value of -1.0 indicates that a 1% increase in price would result in a 1% reduction in consumption. A product with a price elasticity value of below -1.0 means that demand for that product is price elastic, so that a 1% increase in the price would result in more than a 1% decrease in consumption.

Different studies have sought to measure the price elasticity of demand for alcohol. What the research has found is a range of price elasticity values for total alcohol consumption and for different types of alcoholic beverages (beer, wine and spirits) between countries and within countries over time. For example, a number of separate research studies in the US found price elasticity values for beer ranging from approximately zero to -1.4; wine from -0.4 to -1.8; and distilled spirits from -0.1 to -2.0.
There are several possible explanations for why different research studies have estimated different price elasticity values for alcohol:

• variations due to methods applied and accuracy of basic data;

• social, cultural and economic circumstances prevailing in different countries at different times. For example, one might expect to find in the beer-preferring countries of northern Europe that the demand for beer is fairly price-inelastic. This was confirmed by research by Godfrey in the UK in the late 1980s which found that demand for wine had been more responsive to prices than the demand for beer.81

• other alcohol control measures already in place may affect price elasticity values. If a community already has a range of alcohol control policies in place, such as restrictions on the availability of alcohol, then it is likely they will see a smaller proportional effect on any given behaviour such as alcohol consumption with each additional control measure put in place. This is because if the first alcohol control measure introduced changes in the behaviour of 50% of the population in a desired way, then it is likely that each subsequent control measure introduced will have less of an impact as the potential margins for change are less. Research from the US has found an interaction effect between different alcohol policies. Looking at effects of beer prices and the minimum legal drinking age (MLDA) on reducing traffic fatalities, researchers found that changing the MLDA caused a larger proportional change in fatalities when beer taxes were low as opposed to when they were high. Similarly, beer taxes were more effective in reducing youth fatalities in states and years where it was legal for young people to buy and consume beer.82 Applying these findings to a European context, we may expect to see alcohol price increases in Sweden, where the distribution of alcohol is heavily controlled, have less of an impact on consumption than in the UK, where the availability of alcohol has increased exponentially over the past decade.
• the addictive properties of alcohol may result in different price elasticities over time. The addictive effect of alcohol means we can expect increases in past consumption of alcohol to raise current consumption, with the opposite also being the case: a decrease in current consumption can mean further decreases in consumption in future years. Research by Grossman et al, 1998, which looked at the relationship between price and alcohol consumption in young adults, estimates an average price elasticity of -0.39 from models that ignore the addictive nature of alcohol consumption and -0.65 when it was taken into account, suggesting that price has a much greater influence on alcohol consumption in the longer term.

An important point to note with respect to price elasticity values is that a rise in price will produce some reduction in consumption even if the commodity is price-inelastic, so long as the value is not zero or higher.

Alcohol price elasticity estimates for the UK

The most recent government estimates of elasticity values for alcoholic beverages in the UK (Huang, 2003) found -0.48 for beer drunk on-premises, -1.03 for beer drunk off-premises, -0.75 for wine, and -1.31 for spirits. These estimates were based on an examination of excise data from 1965 to 2002.

The Institute of Alcohol Studies recently carried out a review of the studies which have looked at elasticity values for alcohol, beer, wine and spirits in the UK and found that the average demand for beer was -0.55, wine -0.62, and spirits -1.24. Although there was substantial variation in elasticity estimates between the different studies, particularly those for beer, no study found that consumption of any type of drink was independent from price. Four of the studies reviewed provided estimates for the overall responsiveness of alcohol to price and the average was -1.39, which is higher than for the beverage-specific elasticities.
Beverage substitution: circumventing alcohol price increases by switching to cheaper products

Research by Gruenewald et al (2006) looking at alcohol prices, beverage ‘quality’\(\text{x} \) and the demand for alcohol showed that beverage substitution can take place when the price of alcohol increases. Consumers in Sweden were found to respond to price increases by altering their total consumption and by changing their brand choices. The availability of a broad range of beverage prices provided opportunities for consumers to mitigate the effects of average price increases by switching from more expensive to cheaper drinks. Using observations from the Swedish data, researchers modelled three hypothetical scenarios. They estimated that a flat 10% price increase across all beverages would lead to a 1.7% drop in sales; a price increase that resulted in higher prices for more expensive beverages would lead to a 2.8% increase in sales (as consumers switched to buying cheaper beverages which they could afford to buy more of); and a price increase for cheaper drinks would lead to a 4.2% drop in sales.86 This research emphasises the importance from a public health perspective of raising minimum alcohol prices to reduce alcohol consumption and associated harm.

\(\text{x} \) Quality is difficult to define. For the purpose of this research, the level of quality was inferred from its relative price which is generally thought to reflect costs of production and demand.
APPENDIX 2

MINIMUM DRINKS PRICES

Fixing minimum drinks prices is possible under both UK and EU competition law, provided that minimum prices are imposed on licensees by law, or by a public body exercising public functions imposed on it by an enactment. Any involvement by alcohol producers or sellers in the fixing of minimum drinks prices, however, whether it be by voluntary industry codes or local agreements between pubs, police and licensing authorities, breaches UK and EU competition law. The critical factor when it comes to setting minimum drinks prices is that the alcohol industry should not be involved in the process in any way whatsoever.

This position has been confirmed by the Office of Fair Trading (OFT) in written advice to local authorities in England. The OFT, which monitors compliance with UK competition law, confirmed that “...where minimum prices are imposed at the sole instigation of a public authority such as the police or a local authority ...there is unlikely to be an agreement between undertakings that can be the subject of a challenge under the Act. (Competition Act 1998) However, it is crucial to differentiate this from a situation in which licensees actively and jointly participate in the determination of minimum prices in a meeting or other joint forum, facilitated by the police or local authorities and licensing officials. This latter scenario is likely to fall within the Chapter 1 [anti-competitive behaviour] prohibition”. The OFT position was also clearly spelled out to the Scottish Beer and Pub Association (SBPA) who complained to the OFT in 2004 that the provisions in Licensing (Scotland) Bill would have the effect of introducing ‘linear pricing’ and therefore be anti-competitive. Rejecting the SBPA complaint, the OFT pointed out that in exercising its legislative functions the Scottish Parliament was not engaging in ‘economic activity’ and therefore was not an ‘undertaking’ for the purpose of the Act. Accordingly, the Competition Act did not apply to the Scottish Parliament acting in its legislative capacity.

Minimum drinks pricing schemes are already in existence in some local areas in England and Scotland, with the full knowledge of the OFT.

---
x  Amended by the Enterprise Act 2002
xi Scottish Licensing Law and Practice 2205, 32, 13-14
Mechanisms for establishing minimum drinks prices

Minimum prices can be expressed either as a particular price (1) or a minimum profit-margin (2).

(1) Setting minimum drinks prices as specific monetary amounts makes monitoring and enforcement easier as authorities and the public can immediately see if a retailer is selling alcohol below a minimum price. However, deciding what the minimum price should be for categories of alcoholic beverages poses some practical and administrative challenges and legislators or public authorities may have to give some consideration to EU trade law on the matter.

In relation to EU law, if prices in the UK were set at a level which was deemed to disadvantage imported alcoholic beverages against national products, either because imported beverages could not profitably be marketed on the conditions laid down or because the competitive advantage conferred by lower cost prices was cancelled out, then a minimum pricing framework may be judged to constitute a trade barrier contrary to EU free movement of goods rules. If prices are fixed by reference to a solely national criterion without taking into account costs in other EU member states then the policy could fall foul of free movement rules. Deciding whether a minimum pricing framework did or did not constitute a trade barrier would require analysis of the relevant alcoholic beverages' markets in Europe. However, it’s also important to note that EU law allows exceptions to the free movement of goods rule on the grounds of public health, provided it can be shown that the prices set did not constitute a disguised trade barrier and were proportionate to addressing the problem of alcohol-related harm. Proportionality requires a measure to be necessary to achieve the objective, and that the objective cannot be achieved by any less trade-restrictive means. On this point, health campaigners would argue that the best available evidence demonstrates direct links between alcohol price, consumption and associated harm and that action to increase alcohol price is one of the most cost-effective ways to reduce alcohol-related harm. Campaigners would therefore argue that minimum drinks pricing was both necessary and proportionate.

xii Article 30 of the EC Treaty allows for restrictions on imports, exports or goods in transit on the grounds of public policy and the protection of health.
In contrast to establishing minimum drinks prices as fixed monetary amounts, minimum pricing achieved by a minimum profit mark up would not be contrary to the free movement of goods rule. However, determining whether a trader was selling alcohol below cost would be much more difficult to monitor and enforce as compliance could not be immediately observed from the selling price.

Scottish devolution: Legislating for minimum drinks prices in Scotland

Problem drinking impacts on major areas of public policy - health, social work, law and order, which are all matters devolved to the Scottish Parliament. Under the terms of the devolution settlement, the Scottish Parliament has the authority to legislate on minimum drinks prices in a devolved area, such as licensing or health, providing the legislation is not contrary to UK competition law (which is a reserved matter) or community law. Scottish licensing legislation gives scope to Scottish Ministers to introduce minimum drinks prices. Indeed, new Scottish Licensing legislation which is due to come into force in 2009 has already been used to tackle irresponsible promotions of alcohol in the on-trade, and the current Scottish Government has promised to extend the provisions prohibiting irresponsible promotions the off-trade as well.

The Licensing (Scotland) Act 2005 comes into force in September 2009. The 2005 Act is in part based on the recommendations of the Nicholson Committee which was mandated to review all aspects of liquor licensing law and practice in Scotland with particular reference to the implications for health and public order and to recommend changes in the public interest. The Committee opined that any legislation following upon their report should ‘set out certain guiding principles or objectives which are to be the underlying basis for any decisions made by licensing boards’. Further to this recommendation, the 2005 Act sets out five licensing objectives that licensing boards must seek to promote and take into consideration when granting or reviewing licences. The five objectives are: preventing crime and disorder; securing public safety; preventing public nuisance; protecting and improving public health; and protecting children
from harm. These objectives are similar to those contained in the Licensing Act 2003 (which covers England and Wales), except for the reference to public health which is absent from the Westminster legislation.

Schedule 3\(^{\text{xiii}}\) to the 2005 Act also contains provisions designed to control irresponsible promotions in the sale of alcoholic drinks. Irresponsible promotions which the 2005 Act will outlaw include:

- the supply of an alcoholic drink free of charge or at a reduced price on the purchase of one or more drinks;
- the supply free of charge or at a reduced price of one or more extra measures of an alcoholic drink on the purchase of one or measures of the drink;

and

- the supply of unlimited amounts of alcohol for a fixed charge.

These provisions on irresponsible promotions currently only apply to the on-trade in Scotland. However the current Scottish Government has promised to amend the legislation by extending the provisions to cover the off-trade as well. The Cabinet Secretary for Justice, Kenny MacAskill, has also announced that the government is considering action that can be taken within Scotland to end the deep-discounting of alcohol.\(^{88}\) The provisions of the 2005 Act appear to be sufficiently broad to allow the addition of a further description of a drinks promotion which is irresponsible if it involves the supply of an alcoholic drink below a certain price. The Act permits Scottish Ministers to add further descriptions of drinks promotions to those presently set out in the legislation or modify any of the descriptions and extend or restrict their application\(^{\text{xiv}}\). The Act further permits Schedule 3 of the Act to be modified by Scottish Ministers so as to add further conditions they consider necessary or expedient the purposes of the licensing objectives.\(^{\text{xv}}\) It could be argued that prohibiting the sale of alcohol below cost it was at least expedient for the purposes of the public health objective of the Act.

\(^{\text{xiii}}\) Paragraph 8 (1), (2) of Schedule 3 to the Act.

\(^{\text{xiv}}\) Para 8 (4) of Schedule 3.

\(^{\text{xv}}\) Section 27 (2).
APPENDIX 3

LINKING TAXATION TO ALCOHOL STRENGTH

The price of alcohol sold in the UK is made up of producers and retailers costs and profits, plus excise duty which is set as a specific monetary amount, with VAT, an *ad valorem* tax, being levied on top of these two components.

The way that excise duty is currently levied on alcoholic beverages in the UK is governed by an EU Council Directive (92/83/EEC) and varies according to the beverage type. Beer and spirits are taxed in relation to their alcohol strength, with the duty on spirits applied per litre of pure alcohol and the duty on beer applied per hectolitre per cent of alcohol in the beer. For wine, cider and perry, however, the rates of duty are fixed by volume, per hectolitre of the product. The EU Directive stipulates that wine should be taxed at a single rate per hectolitre, although it allows member states to apply reduced rates on wine and fermented beverages not exceeding 8.5% by vol. At present the UK government applies lower rates of duty on wine not exceeding 5.5%. This means on wines ranging from 5.5% to 15% abv (alcohol by volume) the rate of alcohol duty is the same.

The EU Directive as it stands appears to give little room for flexibility in levying higher rates of alcohol duty on higher-strength wines (above 10% abv) for example. However, EU law allows taxes other than excise duty to be imposed on alcohol products, as long as the tax arrangements pursue community objectives (of which public health is one); differentiate between products on the basis of objective criteria (strength is an objective criterion), and the detailed rules are not discriminatory or protective of competing domestic products. By way of example, a French tax which subjected beverages with a high alcohol content to an additional social security tax has been found not to be contrary to EU law.

---

xvi Article 3 of Council Directive 92/12/EEC of 25th February 1992 on the general arrangements for products subject to excise duty allows alcohol to be subject to indirect taxes (other than those in the Directive) for specific purposes, provided that those taxes comply with the tax rules applicable for excise duty and VAT purposes as far as determination of the tax base, calculation of the tax, chargeability and monitoring of the tax are concerned.

xvii EC Treaty Article 152, Franzen C-189/95.

xviii Commission v France C-434/97.
This gives the UK government scope to place additional taxes on higher-strength alcoholic drinks and lowering the duty on lower-strength products to give a financial incentive to people to consume lower-strength alcohol. The UK government should consider the introduction of a new, additional tax on wines above 10% abv as well placing an additional tax on beers above 4% abv and higher-strength spirits as a means of creating a bigger price differential between lower- and higher-strength drinks to encourage a shift in consumption to lower-trength products.

In Australia where are tax incentives are provided for lower-strength beers, up to 40% of the beer market by value consists of drinks with a lower alcohol content than 3.8%. Since 1980 alcohol consumption in Australia has decreased by 24%, whilst in the UK it has increased by 31%.

**Increase the duty on cider**

Cider should be taxed at the same rate as beer, a comparable alcoholic beverage. Under the current excise arrangements, cider is taxed at a lower rate than beer. Whereas the amount of duty paid on a litre of beer (5% abv) is 65p, for the same amount and strength of cider the duty paid is 26p. The reason cider is subject to reduced rates of duty relates to the reported historical importance of cider-making to the rural economy. Under the EU directive on the structure and arrangements for excise duty it is possible for member states to apply reduced rates or exemptions for certain products of a regional and traditional nature.

Whilst there is a long tradition of cider-making in the UK and most apples used in the production of cider come from local orchards, cider-making is far from being a cottage industry. Over 70% of the cider market in the UK is concentrated in the hands of the top five cider producers which are multi-million pound companies. Moreover, over 50% of cider sold in the UK is produced by one company, Scottish and Newcastle, one of the top ten brewers in the world in terms of volume production.

The availability of cheap, strong cider in off-licences - where most (57% of sales by volume) cider is sold - is a matter of concern. The drink’s appeal to vulnerable groups, such as children and dependent drinkers, lies precisely in its cheapness relative to its alcoholic strength.
APPENDIX 4
REFERENCES

2. Evidence-based strategies and interventions to reduce alcohol-related harm, WHO, A60/14 Add. 1, 5 April 2007.
3. Calling time: The nation’s drinking as a major health issue, Academy of Medical Sciences, March 2004.
8. Calling time: The nation’s drinking as a major health issue, Academy of Medical Sciences, March 2004.
15. Calling time: The nation’s drinking as a major health issue, Academy of Medical Sciences, March 2004.
18. ‘Smoking ban brings positive results’, NHS Health Scotland, 10 September 2007.
24. ibid
27. Calling time: The nation’s drinking as a major health issue, Academy of Medical Sciences, March 2004.
34. Information on drinking safely - www.liverinfo.org.uk
39. *BBPA Statistical Handbook using Customs and Excise data on alcohol clearances in the UK*.
44. *Health for all targets: The health policy for Europe*, WHO Regional Office for Europe, September 1991.
50. BRC briefing to Westminster MPs reported in Alert, Issue 2, 2007.
52. The drinking habits of the 18-24 year old market, 2006, CGA Strategy in conjunction with Galaxy Radio and BEDA (Bar Entertainment & Dance Association).
55. ‘Baltic neighbours face alcohol crisis’, BBC News Online, 22.08.07.
64. *Calling time: The nation’s drinking as a major health issue*, Academy of Medical Sciences, March 2004.
75. *Draft Licensing (Mandatory Conditions No. 2) (Scotland) Regulations 2007.*
81. ibid
89. Tim Stockwell, ‘Working with the alcohol industry on alcohol policy: should we sometimes sit at the same table?’, *Addiction* 102, 1-3 and Stockwell, T, ‘Lies, damned lies and no statistics: A study of dysfunctional democracy in action’ *Addiction* 99, 1090-1093.