

**FRAMEWORK FOR ACTION:
CHANGING SCOTLAND'S
RELATIONSHIP WITH ALCOHOL**

**FINAL
BUSINESS AND REGULATORY
IMPACT ASSESSMENT FOR MINIMUM
PRICE PER UNIT OF ALCOHOL AS
CONTAINED IN ALCOHOL (MINIMUM
PRICING) (SCOTLAND) BILL**

**SCOTTISH GOVERNMENT
2012**

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Summary

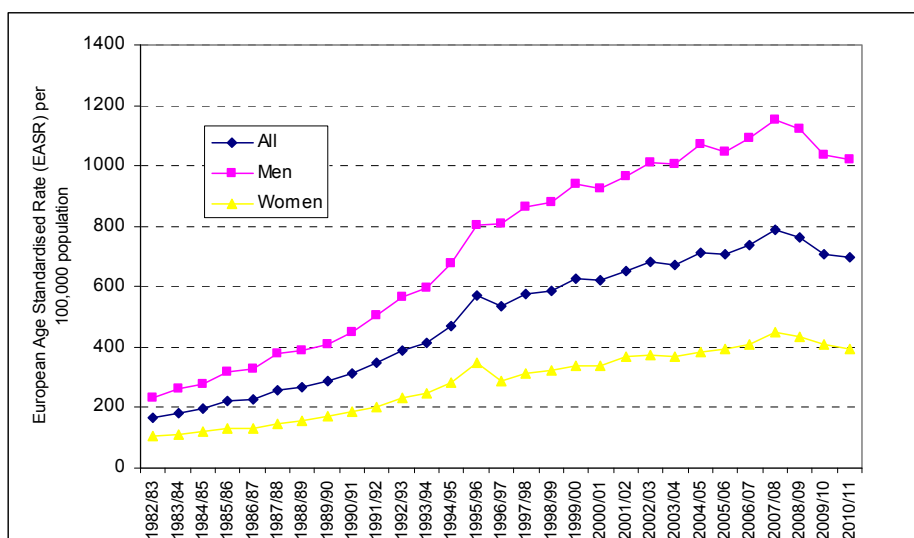
Scale of the problem (section 2)

1. By global standards, Scotland consumes very high levels of alcohol. Even within the European Union, our consumption is above average and our pattern of consumption, allied to other health factors, means there is a very significant impact which undermines the country's potential as individuals, families and communities.

2. Scotland's alcohol-related harm statistics are stark:

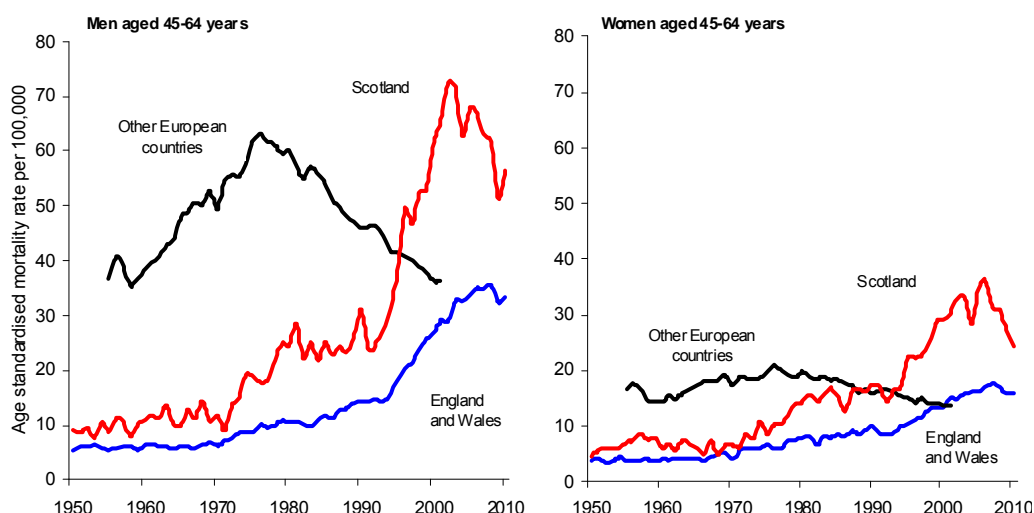
- Alcohol sales in Scotland in 2010 were equivalent to 22.8 units per person per week (11.8 litres of pure alcohol), almost a quarter more than our counterparts in England and Wales and amongst the highest in Western Europe. Even this figure is likely to be an under-estimate;
- While consumption in many countries (such as France, Italy and Spain) has fallen in recent decades, consumption in the United Kingdom has doubled since the 1950s (including an 11% increase in Scotland since the mid 1990s);
- Alcohol-related hospital discharges have quadrupled since the early 1980s, with more than 100 Scots being admitted to hospital each day;

Alcohol-related general hospital discharges, Scotland 1982/3 – 2010/11



- Deaths caused by alcohol have doubled in recent decades, with Scotland having had one of the fastest growing chronic liver disease and cirrhosis rates in the world;

Chronic liver disease and cirrhosis mortality rates per 100,000 population, 1950-2010¹



- A significant proportion of young people are drinking on a regular basis, potentially limiting them from achieving their full potential;
- Half of Scottish prisoners (including 75% of young offenders) say they were drunk at the time of the offence, with a study showing that at least 70% of assaults presenting to our Emergency Departments were alcohol-related;
- Alcohol misuse is estimated to cost £3.6bn each year (representing around 3% of Scotland's GDP) – the equivalent of £900 for every adult in Scotland. Not only does it burden public services, such as health and police, it also negatively impacts on Scotland's economic potential.

¹ Rates for Scotland and England & Wales updated to 2010; European rates to 2002.

Scotland's Alcohol Strategy (section 2)

3. The Scottish Government's alcohol strategy² sets out over 40 measures aimed at addressing alcohol-related harm, and is closely aligned with the World Health Organisation's *Global strategy to reduce harmful use of alcohol*. The 4 broad headings in the strategy are:

- reducing consumption,
- creating positive attitudes and choices,
- supporting families and communities; and
- providing effective support and treatment.

4. In recent years the Scottish Government has:

- invested record sums (£196m since 2008, a step change in previous funding levels) in tackling alcohol misuse, the bulk of which (£173m) has been targeted at prevention and treatment services;
- rolled out a national programme of screening and alcohol brief interventions to help individuals who have been endangering their health by drinking above sensible limits to cut down;
- reformed local alcohol and drug delivery arrangements bringing together local partners which include health boards, local authorities, police and voluntary agencies;
- introduced legislation which contains measures such as banning quantity discounts and restricting alcohol promotions in off-sales³ premises. The legislation also paves the way for the introduction of a social responsibility levy to ensure those who profit from the sale of alcohol also put something back into the community;
- established a Youth Commission on Alcohol and their findings have helped inform policy and practice, for example, in relation to advertising and work on essential services for those with alcohol problems;
- refreshed advice for parents and carers was published; and
- continuing to work with industry partners on joint initiatives to promote responsible drinking such as Alcohol Awareness Week and launched a new alcohol health behaviour change campaign targeting women to

² *Changing Scotland's Relationship with Alcohol: A Framework for Action*, published in 2009

³ Off-sales and off-trade refers to alcohol that is bought from retailers such as supermarkets, small shops and is for consumption off these premises.

encourage them to make positive informed choices about their alcohol consumption.

5. This has built on the tightening of licensing arrangements and the introduction of restrictions in the off-trade. These measures are not being taken in isolation. This comprehensive alcohol strategy is underpinned by wider policy initiatives across health, education, justice and the economy, which seek to address the underlying causes of poor health and social disadvantage.

Alcohol Affordability (section 2)

6. Despite these actions, and an economic downturn in recent years, Scotland's consumption and harm remain at unacceptably high levels. The key component missing from Scotland's alcohol strategy has been an intervention to address the low price of alcohol. There is strong evidence from numerous studies conducted in 15 European countries, America, Canada, New Zealand and elsewhere, that levels of alcohol consumption in the population are closely linked to the retail price of alcohol.

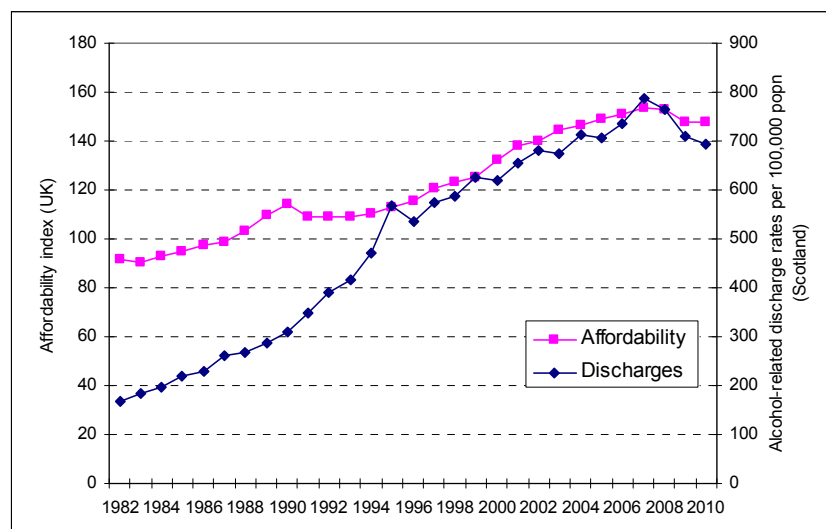
Put simply, as alcohol becomes more affordable, consumption increases; as consumption increases, harm increases.

7. Alcohol has become around 45% more affordable in the UK since 1980. Beer sold through the off-trade is now almost 130% more affordable in real terms than in 1987, while the equivalent figure for wine and spirits is 98%. This increasing affordability in the off-trade saw sales increase by 52% between 1994 and 2010, compared to a fall of 29% in the on-trade⁴.

8. The link between affordability and harm is illustrated in the following graph which clearly demonstrates that as the affordability of alcohol has increased in the UK since the early 1980s, alcohol-related hospital discharges has followed a very similar trend. It is possible in Scotland today to exceed the maximum weekly recommended intake of alcohol for men (210ml pure alcohol, or 21 UK units) for around £4. This is an unacceptable position which the Scottish Government has a responsibility to address.

⁴ On-sales and on-trade refers to alcohol that is consumed on premises such as pubs, clubs and restaurants.

Alcohol affordability index (UK) versus alcohol-related discharge rates (Scotland), 1982-2010⁵



Why minimum pricing? (sections 2 and 4)

9. The sale of alcohol products at retail level in Scotland is subject to licence. Minimum pricing is to apply only to retailers of alcohol products and makes it a condition of a retailer's licence that they must only sell alcohol products of all types at or above the minimum price (50 pence per 10ml unit of pure alcohol is proposed).

10. Scotland's minimum pricing policy aims to reduce alcohol consumption and, in particular, targets a reduction in consumption of alcohol which is cheap relative to its strength. Minimum pricing achieves this aim because it is both a whole population approach and a targeted intervention – it applies to the whole population, but hazardous and harmful drinkers are likely to be affected more than moderate drinkers⁶, in terms of the amount they drink, how much they spend and how much they benefit from reductions in harm.

11. Hazardous and harmful drinkers drink proportionately more alcohol which is cheaper relative to its strength. The measure is able to target cheaper alcohol relative to its strength because the minimum price is determined by, and is directly proportionate to, the number of units of pure alcohol in an alcoholic product. Furthermore, it is not possible to absorb the effect of minimum pricing by selling a product below its minimum price. The level of the minimum price per unit can be varied proportionate to the reduction in alcohol-related harms that the measure is

⁵ The affordability index is for the UK as no Scottish index is available (however relative affordability will be similar across the UK). Affordability is measured on a calendar year, discharges on financial year. Discharge rates are assigned to the year from which the majority of the data comes

⁶ Moderate drinkers are men/women who consume no more than 21/14 units of alcohol per week, hazardous drinkers are men/women consuming between 21/14 and 50/35 units of alcohol per week, harmful drinkers are men/women consuming more than 50/35 units of alcohol per week.

intended to achieve, based on the latest evidence available. Minimum pricing per unit is simple to understand, measure and enforce.

12. Whilst it may not be possible to exploit a low cost to set a retail price below the minimum price, this applies equally to domestic and imported products. The measure does not discriminate between domestic products and those from abroad – the minimum price depends on the number of units of alcohol, regardless of the type of alcohol or where that alcohol originates. It applies to all holders of a license to retail alcohol in Scotland.

13. The policy objective of protecting and improving public health would not be achieved through increasing alcohol duty and taxation for a number of reasons:

- broad taxation increases do not have a targeted effect on the consumption of those most at risk (i.e. hazardous and harmful drinkers);
- a straight-forward increase in existing duty would impact on high price products as well as cheap ones, and so would have a proportionately greater effect on moderate drinkers than a minimum unit price;
- increases in taxation do not necessarily result in a proportionate, or indeed any, rise in price as increases are not always passed on to the consumer – cross-subsidisation of products is common particularly in supermarket multiples;
- a tax increase based on price would disproportionately affect consumers because the prices of high price, relatively low strength products would increase disproportionately to that of the prices of low price, relatively high strength products;
- a scheme of taxation that was levied directly proportionate to the number of units of alcohol per litre, is not directly compatible with the current system of excise duty under the relevant EU Directives; and
- even if it was possible to formulate a scheme of taxation proportionate to the number of units of alcohol in a product, and to prohibit sales at less than cost plus tax, absorption could not be prevented. This is because cost is susceptible to variation, manipulation and cross-subsidisation, and so the declared cost price might bear little relationship to the actual cost. Taxation would have to be set at a level similar to a minimum price per unit of alcohol in order to achieve the same reduction in harms. This would result in a tax rate across all alcohol products at a considerably higher rate than is currently in place.

14. Minimum unit pricing has the advantage over taxation in that moderate drinkers (who disproportionately come from low income groups) will be largely or completely unaffected, by virtue of the fact that they drink very little and do not tend to purchase the type of products that will be affected by minimum pricing. Moderate drinkers are

estimated to pay a relatively small additional amount per year (around £8 for a 50p per unit minimum price).

15. Of course, this must be seen in the context of the significant savings to health, criminal justice and productivity costs brought about by minimum unit pricing. The greatest health benefits are estimated to be seen amongst hazardous and harmful drinkers as they disproportionately consume cheap alcohol.

Minimum pricing, therefore, effectively targets those individuals who will benefit most from a reduction in consumption.

16. Emerging research findings on the minimum pricing systems operating in two Canadian provinces provide the first empirical evidence of the effectiveness of minimum pricing in reducing consumption. Longitudinal estimates suggest that a 10% increase in the minimum price of an alcoholic beverage in British Columbia reduced its consumption relative to other beverages by 16.1%.

17. Time series estimates indicate that a 10% increase in minimum prices reduced consumption of spirits and liqueurs by 6.8%, wine by 8.9%, alcoholic sodas and ciders by 13.9%, beer by 1.5% and all alcoholic drinks by 3.4%. The research further suggested a 10% increase in minimum drink prices resulted in a 4% reduction in acute alcohol-related hospitalisations.

Consultation (section 3)

18. A public consultation on the Government's alcohol strategy, including minimum pricing, was conducted in 2008. Almost two thirds (65%) of all responding organisations were in favour of minimum pricing, while just under a quarter (23%) were opposed. Nine out of ten (90%) health organisations supported minimum pricing, as did over eight out of ten (84%) local government bodies. Six out of ten (61%) trade and business sector organisations were opposed. Views amongst individual respondents were more mixed, with 49% who expressed an opinion in favour and 43% against.

19. Numerous discussions with key stakeholders on the principles of minimum pricing have taken place over the last 4 years, including with the Scottish Government Alcohol Industry Partnership (SGAIP), the Retailers' Working Group (which represents a significant proportion of retailers in Scotland), the Law Society of Scotland and a range of health organisations. The European Commission has been kept informed of the proposals, with meetings between the Scottish Government and Directorate General Health and Consumers, Directorate General Trade, Directorate General Enterprise and Industry held on 2 separate occasions in the last 9 months.

Anticipated benefits (section 5)

20. The Scottish Government is introducing minimum unit pricing for the public health, criminal justice and productivity benefits it will bring for the people of Scotland. After careful consideration, the Scottish Government considers that, at the present time, a 50p per unit minimum price provides a proportionate response to tackling alcohol misuse, as it strikes a reasonable balance between public health and social benefits and intervention in the market.

21. We will monitor sales and price data as it becomes available to ensure that the preferred minimum price of 50p per unit remains proportionate ahead of implementation. An updated impact assessment will be required when the order setting the minimum price is laid before the Scottish Parliament for approval.

22. Sophisticated econometric modelling undertaken by the University of Sheffield estimates that a 50p minimum price per unit will lead to:

- an overall fall in consumption of 5.7%, with hazardous drinkers reducing their intake by 4.8% and harmful drinkers by 10.7%;
- around 60 fewer deaths in the first year after implementation, rising to over 300 fewer deaths per annum in year 10 (when the policy is estimated to have reached its full effect). A reduction of 300 deaths represents a fall of 17% in alcohol-related mortality rates;
- 1,600 fewer hospital admissions in year 1, rising to 6,500 per annum in year 10 (the equivalent of a 10% fall per annum in alcohol-related admissions);
- around 3,500 fewer crimes per year, leading to a 2% reduction in overall crime per annum;
- over 32,000 fewer days lost to alcohol-related absence from work, and a reduction of 1,300 in unemployment among harmful drinkers due to alcohol use; and
- a cumulative value of harm reduction of £942m by year 10.

23. The minimum price per unit has to be set and remain at a level that is proportionate. As such, the legislation requires Scottish Ministers to review the level at which the minimum price per unit is set 2 years following the policy's implementation. This will provide the market time to respond to the measure, allow for analysis of price data to determine the impact that minimum pricing has had on alcohol sales and prices and also allow some early indicators of changes in alcohol-related harm to come through.

Impact on the market (sections 5 and 6, Annex A)

24. Scottish consumers have a wide range of alcohol products available to them. These are sourced both domestically and across a number of countries worldwide and cover a range of prices. The legislation sets a minimum price based on the unit content of the product and, therefore, applies to all products equally, and also does not discriminate between domestic or imported products. Of those alcohol products which are currently priced below the preferred minimum unit price, 35% are spirits (the majority of which are produced in the UK), 28% are wines (which are generally imported), 26% are beer and ales (which vary in their country of origin but with very significant UK production), and 8% are ciders (which are generally domestically produced).

25. The legislation does not lay down requirements in relation to the characteristics of alcoholic products; it simply *refers* to those characteristics (strength and volume) to calculate how many units of alcohol are in a product and then multiplies that by the price per unit, to determine the minimum price of the product when sold at retail level product.

26. The formula for the calculation is set out in the legislation and is transparent and straightforward to use. This means that both domestic and importing producers remain free to determine the characteristics of alcohol products. Products already on the market will need to comply with minimum pricing, but the legislation does not require the producer to change the characteristics of those products, but nor does it prevent such change if the producer prefers.

27. There should be minimal impact on innovation for both existing products and the introduction of new products into the market. There may even be an incentive for the market to innovate, with one possible effect of minimum pricing being the production of lower strength alcoholic products. These could be sold at a relatively lower price, because they contain fewer units of alcohol per litre. This would be consistent with the Scottish Government's aim of drinkers consuming less alcohol, whilst leaving the market free to determine the characteristics of products. New, high-strength products would have to be sold at or above the minimum price, but this would not prevent them from being introduced.

Monitoring and evaluation (section 9)

28. This is an innovative and largely untested policy, albeit one based on a wealth of international evidence on the relationship between price, consumption and harm. The legislation therefore includes a provision requiring the Scottish Ministers to evaluate the effect of minimum pricing 5 years after implementation and report to the Scottish Parliament. The Bill also provides that minimum pricing will cease to have effect after 6 years unless the Scottish Parliament agrees an order for it to continue.

29. Scotland already has in place a detailed evaluation plan for monitoring the impact of the wider alcohol strategy: Monitoring and Evaluating Scotland's Alcohol Strategy (MESAS). This portfolio of studies, led by NHS Health Scotland, was peer reviewed by leading international alcohol and evaluation experts and includes both commissioned and in-house research and analysis.

30. NHS Health Scotland is currently working with public sector and academic partners to develop further studies to ensure a comprehensive evaluation of minimum unit pricing. This is likely to include research to identify any possible displacement/substitution effects; assessing the impact on the alcohol industry; and whether the policy leads to unintended consequences (for example, an increase in cross-border trade, a rise in the use of illicit substances).

Conclusion

31. Societal problems require societal solutions. The Scottish Government must act in response to the clear evidence of the harm caused by the misuse of alcohol. In response to a recent survey, the vast majority (96%) of Scots saw 'alcohol abuse' as a problem. Minimum pricing has the strong support of the public health community in Scotland, the police, faith groups, children's charities, and significant parts of the alcohol industry. Within the Scottish Parliament, the legislation was voted through unopposed.

32. The UK Government is also now seeking to introduce minimum unit pricing in England and Wales, with Northern Ireland and the Republic of Ireland considering a similar move.

33. Minimum pricing alone will not address Scotland's damaging relationship with alcohol but it is a vital part of a wider strategic approach.

1. TITLE OF PROPOSAL – MINIMUM PRICE PER UNIT OF ALCOHOL AS CONTAINED IN ALCOHOL (MINIMUM PRICING) (SCOTLAND) BILL

1.1 The Alcohol (Minimum Pricing) (Scotland) Bill (“the Bill”), should it attain Royal Assent and once the relevant provisions are commenced by the Scottish Ministers, will enable the Scottish Ministers to specify a minimum price per unit of alcohol by order (secondary legislation). The order must first be laid in draft before the Scottish Parliament, for approval, before it can be made by the Scottish Ministers. The Scottish Ministers are minded to lay a draft order specifying a **minimum price at 50p per unit of alcohol**. The draft order will be notified to the European Commission under the Technical Standards Directive and accompanied by a copy of the Bill together with this Business and Regulatory Impact Assessment.

1.2 Minimum pricing is a new licensing condition, to be inserted by the Bill into the Licensing (Scotland) Act 2005. This only applies to retailing. If a licence holder breaches a licence condition, the holder could lose its licence to sell alcohol.

1.3 The Bill contains a formula for calculating the minimum price of an alcohol product based on, and proportionate to, the number of units of alcohol contained in the product. The formula works out the number of units of alcohol in the product (strength⁷ multiplied by volume in litres and then multiplied by 100⁸) and then multiplies this by the “minimum price per unit” (which is the price specified by order e.g. 50p).

1.4 In specifying a minimum price per unit, the Scottish Ministers should first have regard to all the circumstances and relevant considerations to ensure that the measure is proportionate to health and social needs, before laying a draft order before the Scottish Parliament for approval. Without the order specifying a minimum price per unit, the formula in the Bill is not operative and cannot have any legal effect upon individuals.

1.5 There is also a power in the Bill that enables the Scottish Ministers to specify which pieces of existing legislation are to be the “relevant labelling provisions”. This is intended to be used to enable the “declared” strength by volume of an alcohol product, which is marked or labelled on that product in accordance with law, to be taken as the strength of the product for the purposes of the formula in the Bill (as opposed to relying on the actual strength of the product).

1.6 The Bill contains a review and sunset provision. The Scottish Ministers are required to review the effect of minimum pricing 5 years after implementation and report this to the Scottish Parliament. Minimum pricing will cease to have effect after 6 years unless the Scottish Parliament approves an order, to be made by the Scottish Ministers, for it to continue.

⁷ This is strength by volume (ABV).

⁸ This is based upon a “unit” of alcohol being 10 millilitres of pure alcohol.

2. PURPOSE AND INTENDED EFFECT

Objective

2.1 The Purpose of the Scottish Government is to focus Government and public services on creating a more successful country, with opportunities for all of Scotland to flourish, through increasing sustainable economic growth. Building a healthy and sensible relationship with alcohol will significantly contribute to realising our Purpose and four out of five of our Strategic Objectives. We must help and support people make better choices about alcohol if we are to attain our ambitions for Scotland. There is strong evidence that increases in health harms over recent decades have been driven by increased consumption and that this in turn is driven by the price and affordability of alcohol. That is why the introduction of a minimum retail price per unit of alcohol is an essential component of our alcohol strategy.

2.2 The Government Economic Strategy sets out how we will work collaboratively with the private, public and third sectors in pursuit of our Purpose. A set of high level Purpose Targets have been identified to ensure that growth is shared by all of Scotland, focussing on:

- improving our productivity and competitiveness;
- increasing our labour market participation; and
- stimulating population growth.

2.3 Underpinning the Government's Purpose and Economic Strategy are five Strategic Objectives - to make Scotland Wealthier and Fairer, Safer and Stronger, Healthier, Smarter and Greener. To fully achieve these objectives we need to tackle alcohol misuse.

- **WEALTHIER & FAIRER** - Enable businesses and people to increase their wealth and more people to share fairly in that wealth.

Developing a more mature and balanced relationship with alcohol will reduce the burden of alcohol misuse on business, public services and our most deprived communities, and thus contribute to a Wealthier and Fairer Scotland.

- **SAFER & STRONGER** - Help local communities to flourish, becoming stronger, safer places to live, offering improved opportunities and a better quality of life.

Reducing consumption and alcohol misuse in Scotland will help to underpin the development of more resilient, cohesive and successful communities - by tackling alcohol misuse we will be able to reduce crime and anti-social behaviour, making Scotland Safer and Stronger.

- **HEALTHIER** - Help people to sustain and improve their health, especially in disadvantaged communities, ensuring better, local and faster access to health care.

Adopting a balanced approach to alcohol will contribute to increased physical and mental wellbeing amongst Scots especially in our most disadvantaged communities, making Scotland Healthier.

- **SMARTER** - Expand opportunities for people in Scotland to succeed from nurture through to life long learning, ensuring higher and more widely shared achievements.

Preventing young people misusing alcohol and enabling them to make positive choices and fulfil their potential while addressing the effects of alcohol misuse within families will make Scotland Smarter.

2.4 The Strategic Objectives themselves are supported by 15 national outcomes which describe in more detail what the Scottish Government wants to achieve over the next ten years. Policies to tackle alcohol misuse will make a positive contribution to delivering over half of our published national outcomes:

- we live longer and healthier lives;
- we have tackled the significant inequalities in Scottish life;
- we have strong, resilient and supportive communities where people take responsibility for their own actions and how they affect others;
- we live our lives safe from crime, disorder and danger;
- we realise our full economic potential with more and better employment opportunities for our people;
- our young people are successful learners, confident individuals, effective contributors and responsible citizens;
- we have improved the life chances for children, young people and families at risk; and
- our children have the best start in life and are ready to succeed.

2.5 In addition, in recognition of the need to build a healthier relationship with alcohol in pursuit of our objectives, we also have a specific national indicator, related to excessive consumption, to reduce alcohol-related hospital admissions.

Background

2.6 The Scottish Government issued a consultation *Changing Scotland's relationship with alcohol: a discussion paper on our strategic approach*⁹ in June 2008 which set out the scale of the alcohol misuse problem in Scotland, the Scottish Government's approach to tackling it, and a range of proposals aimed at reducing alcohol-related harm, drawing on the best available international evidence. Responses to this consultation are available on the Scottish Government's website¹⁰.

⁹ Scottish Government (2008) *Changing Scotland's relationship with alcohol: a discussion paper on our strategic approach*, Edinburgh: Scottish Government
<http://www.scotland.gov.uk/Publications/2008/06/16084348/0>

¹⁰ Available at: <http://www.scotland.gov.uk/Publications/2008/11/26115423/Contents>

2.7 The Scottish Government published its own response *Changing Scotland's Relationship with Alcohol: A Framework for Action*¹¹ on 2 March 2009, and this identifies that sustained action is required in 4 areas:

- reduced alcohol consumption;
- supporting families and communities;
- positive public attitudes towards alcohol and individuals better placed to make positive choices about the role of alcohol in their lives;
- improved support and treatment.

2.8 Scotland's alcohol strategy sets out over 40 actions aimed at addressing alcohol-related harm, with minimum unit pricing a key component of that approach. The actions set out in the Framework reflect the need for a whole population approach to tackling alcohol misuse. An approach which recognises that as a country we need to drink less as well as to drink more responsibly. Scotland's alcohol strategy is closely aligned with WHO's *Global strategy to reduce harmful use of alcohol*¹².

2.9 Considerable progress has been made on implementing key aspects of the Alcohol Framework, including:

- We have made a record investment of over £196m since 2008 in tackling alcohol misuse. The bulk of this funding (£173m) has gone directly to NHS Boards for use in line with local priorities identified by Alcohol and Drug Partnerships (ADPs). Investment in local prevention and treatment services has been and continues to be a key element of our strategy.
- The commencement of the Alcohol etc. (Scotland) Act 2010¹³ on 1 October 2011, which contains measures such as banning quantity discounts and restricting alcohol promotions in off-sales premises. The quantity discount ban stops off-trade retailers discounting alcohol based on the volume of alcohol sold, such as 'buy one, get one free'; 'three for the price of two'; '3 bottles of wine for £10'; and 'buy six, get 20% off'. A similar ban on promotions in the on-trade was introduced through the Licensing (Scotland) Act 2005.
- The Act also paves the way for the introduction of a social responsibility levy to ensure those who profit from the sale of alcohol also put something back into the community.
- NHS Scotland has delivered over 174,000 alcohol brief interventions (ABIs) to help individuals who have been endangering their health by drinking above sensible limits to cut down.
- In collaboration with Convention of Scottish Local Authorities (CoSLA), we have reformed the way in which local areas plan and deliver services. Thirty Alcohol and Drug Partnerships have been established, bringing together local partners

¹¹ Scottish Government (2009) *Changing Scotland's Relationship with Alcohol: A Framework for Action*, Edinburgh: Scottish Government
<http://www.scotland.gov.uk/Publications/2009/03/04144703/0>

¹² World Health Organization (2010) *Global strategy to reduce harmful use of alcohol*, Geneva: World Health Organization http://www.who.int/substance_abuse/alcstratenglishfinal.pdf

¹³ Available on the Scottish Parliament website: [Alcohol Etc. \(Scotland\) Act 2010](#)

which include: health boards, local authorities, police and voluntary agencies, who are anchored in Community Planning Partnerships. These ADPs are responsible for developing local strategies and commissioning services which meet the needs of local people.

- We established a Youth Commission on Alcohol¹⁴, facilitated by Young Scot. Their findings have helped inform our policy and practice, for example in relation to advertising and our work on essential services for those with alcohol problems, as well as having wider implications for the future involvement of young people in decision-making at both national and local level.
- Refreshed advice for parents and carers¹⁵ was published in January 2011. This provides information and supports parents / carers to talk to young people about the effects of alcohol consumption. It also encourages adults to reflect on their own consumption.
- We have continued to work with industry partners on joint initiatives to promote responsible drinking such as Alcohol Awareness Week and launched a new Scottish Government alcohol health behaviour change campaign, targeting women, in January 2011 to encourage people to make positive informed choices about their alcohol consumption.
- We have reinvested just under £44m since 2007, seized from criminals under the Proceeds of Crime Act, to provide diversionary and participatory activities for over 600,000 young people across Scottish communities, under our CashBack for Communities scheme.
- We have published research on approaches for managing drunk and incapable people. ADPs have been asked to ensure there are clear and effective partnership-based strategies in place at local level.
- We set a 2010-12 priority work programme for Children Affected by Parental Substance Misuse (CAPSM). This includes a focus on developing the local Child Protection Committee (CPC) and Alcohol and Drug Partnership (ADP) relationship and on early intervention activity and also on developing our CAPSM prevalence (or numbers of children potentially affected by their parents' substance misuse) figures.
- The final report and recommendations (*Quality Alcohol Treatment and Support*¹⁶) from the Scottish Ministerial Advisory Committee on Alcohol Problems (SMACAP) Essential Services Working Group were published in March 2011 and work is now underway to develop an implementation plan for this work which, when embedded in practice, will help to better identify and respond to the needs of those affected by problematic alcohol use.

¹⁴ Young Scot (2010) *Report of Recommendations: Youth Commission on Alcohol*, http://www.youngscot.net/media/12177/syca_recommendations.pdf

¹⁵ NHS Health Scotland (2011) *You, Your Child and Alcohol*, Edinburgh: NHS Health Scotland <http://www.drinksmarter.org/media/14397/parents-guide.pdf>

¹⁶ Scottish Government (2011) *Scottish Ministerial Advisory Committee on Alcohol Problems (SMACAP) Essential Services Working Group: Quality Alcohol Treatment and Support (QATS)*, Edinburgh: Scottish Government

- Although not a specific commitment within the Alcohol Framework, the HEAT¹⁷ (A11) drug treatment waiting times target was expanded to incorporate alcohol. *By March 2013, 90% of clients will wait no longer than 3 weeks from referral received to appropriate drug or alcohol treatment that supports their recovery.*

2.10 These measures are not being taken in isolation, of course. We recognise the need to tackle the underlying cause of poor health and social disadvantage in Scotland, and as such our alcohol strategy is aligned with initiatives across the health, young people, education, justice and economy policy portfolios. The outcomes we seek will only be delivered through close partnership working – with the NHS, the police, local Alcohol and Drug Partnerships, the voluntary sector and the alcohol industry among others.

Alcohol-related harm in Scotland: the scale of the problem

2.11 Alcohol is not an ordinary commodity – it is a psychoactive and potentially toxic and addictive substance and is a contributory factor in around fifty different causes of death ranging from cancers and strokes to assaults and road deaths¹⁸. The harms are not limited to health and not experienced solely by the drinker – damage can and does occur to family and friends, communities, employers, and Scotland as a whole. Alcohol misuse acts as a brake on Scotland's social and economic growth, costing an estimated £2.5bn to £4.6bn in 2007, with a midpoint estimate of £3.6bn¹⁹. For the midpoint estimate, this includes around £870m in lost productivity, a cost of around £270m to the NHS and around £730m in crime costs.

Consumption

2.12 It is well established that harms attributable to alcohol are related to both the quantity of alcohol consumed and the pattern of drinking²⁰. Accurate data with which to estimate per capita alcohol consumption are vital to quantify the relationship between alcohol consumption and consequent harms, to design appropriate policy measures to minimise adverse alcohol-related health and social effects, and to evaluate the effects of any policy or other changes upon alcohol consumption.

2.13 The World Health Organisation advises that the volume of alcohol use in a country is best estimated from national sales, production and/or taxation data since population surveys invariably underestimate total alcohol consumption^{21 22}. These can come from sales data and supply data (e.g. data on production and trade such

¹⁷ HEAT targets are NHS Scotland targets for performance in the areas of Health Improvement, Efficiency, Access and Treatment. These targets help NHS Boards set priorities for their work.

¹⁸ Grant, I., Springbett, A., and Graham, L. (2009) *Alcohol attributable mortality and morbidity: alcohol population attributable fractions for Scotland*, Edinburgh: NHS National Services Scotland <http://www.scotpho.org.uk/alcoholPAFreport>

¹⁹ York Health Economics Consortium (2010) *The Societal Cost of Alcohol Misuse in Scotland for 2007*, Edinburgh: Scottish Government <http://www.scotland.gov.uk/Publications/2009/12/29122804/0>

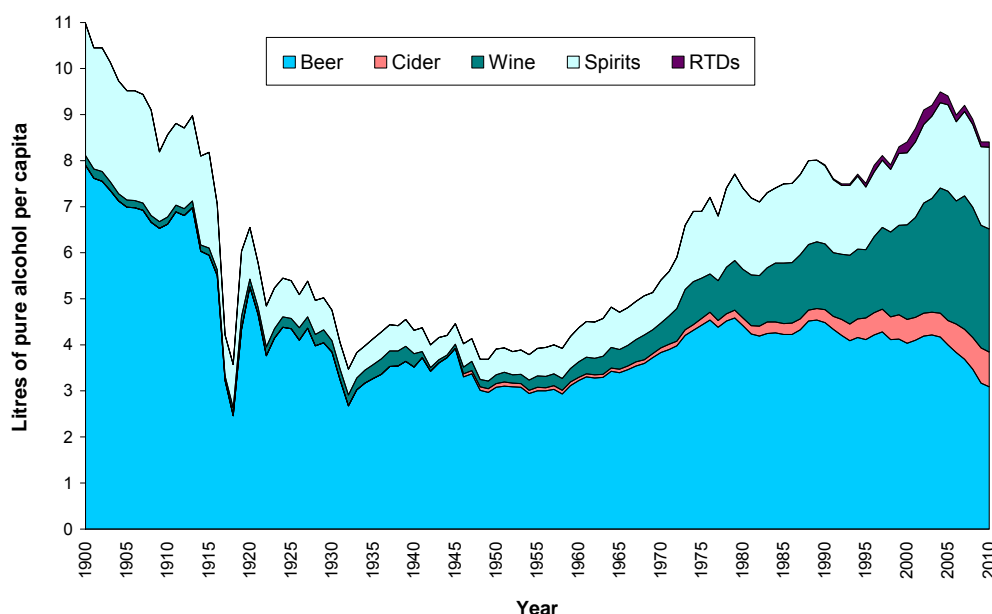
²⁰ Rehm, J. et al. (2009) *Global burden of disease and injury and economic cost attributable to alcohol use and alcohol-use disorders*, Lancet; 373: 2223–33.

²¹ World Health Organization (2000) *International Guide for Monitoring Alcohol Consumption and Related Harm*, Geneva: World Health Organization

²² Catto, S. and Gibbs, D. (2009) *How much are people in Scotland really drinking?*, Edinburgh: NHS Health Scotland <http://www.scotpho.org.uk/alcoholreport>

as Food and Agriculture Organization of the United Nations (FAO) and World Drink Trends (WDT))²³ or tax receipts e.g. Her Majesty's Revenue and Customs (HMRC) data in the UK. Using HMRC data, figure 1 illustrates the trend in the population level of drinking in the UK since 1900, showing that consumption has doubled since the 1950s. The slight decline in consumption at a UK level since the mid 2000s has not been evident in Scotland (see figure 2 below).

Figure 1: Per capita consumption (litres of pure alcohol) in the UK, 1900–2010²⁴



2.14 Industry sales data shows that enough alcohol was sold in Scotland in each year since at least 2000 to enable all adults over the age of 16 to exceed the sensible male weekly guideline (21 units²⁵) on each and every week²⁶. In 2010, average per capita sales in Scotland equated to 11.8 litres of pure alcohol (22.8 units) per adult per week representing an 11% increase since 1994. Scottish per capita alcohol sales are now almost a quarter (23%) higher than in England and Wales (this equates to an average of around two pints of beer or half a bottle of wine more per person per week). Significantly, whilst sales have fallen by around 8% from a 2005 peak in England and Wales, there has been no similar decline in Scotland (figure 2)²⁷.

²³ World Health Organization (2004) *Global Status Report on Alcohol 2004*, Geneva: World Health Organisation

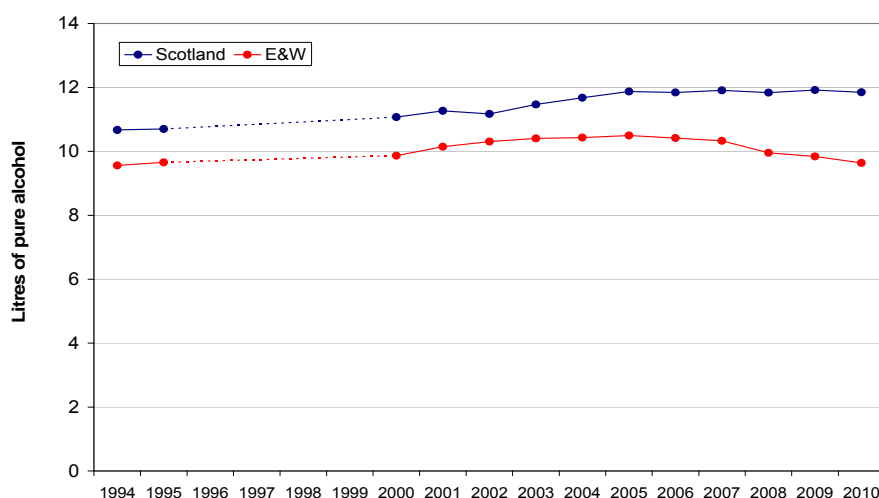
²⁴ Source data: BBPA Statistical Handbook; Cancer Research UK. Note: separate HMRC data for Scotland is not available.

²⁵ A UK unit = 8g / 10 ml of pure alcohol

²⁶ Robinson, M., Craig, N., McCartney, G., and Beeston, C. (2011) *Monitoring and Evaluating Scotland's Alcohol Strategy: An update of alcohol sales and price band analyses*, Edinburgh: NHS Health Scotland

²⁷ *Ibid*

Figure 2: Litres of pure alcohol sold per capita (adults aged ≥ 16) in Scotland and England & Wales, 1994-2010



2.15 A study by NHS Health Scotland on the validity and reliability of alcohol industry sales data found that these data provide a robust measure of population consumption in Scotland, although are subject to typical under and over-estimating influences²⁸. Considering possible sources of overestimation and underestimation, and taking into account the potential for sampling variability to impact on the results, the range of uncertainty in the 2010 data shown above was from an overestimate of 0.3L to an underestimate of 2.4L per adult. This excludes the impacts of alcohol stockpiling (which are likely to be minor and to even out over time) and alcohol sold through outlets not included in the sampling frame (which is likely to be a further source of underestimation). On balance, there is therefore far greater scope for the retail sales data to be underestimating per adult alcohol consumption than there is for overestimation. So the 11.8 litres of pure alcohol per adult estimated using average per capita sales is likely to fall in the range of 11.5 to 14.2 litres per adult.

2.16 Whilst it is challenging to produce robust comparisons of consumption levels across countries, the upper estimate of 14.2 pure litres of alcohol per adult over the age of 16 would put Scotland in the top 5 European countries with the highest per capita consumption, according to the World Health Organisation Regional Office for Europe, Alcohol control database²⁹. What is equally significant is direction of travel. Whilst consumption (and alcohol-related harm) has generally been falling in most Western European countries (including France, Italy and Spain) in recent decades, as noted above consumption in Scotland has risen by 11% since the mid 1990s.

2.17 Population survey data is needed to understand drinking levels and patterns by different sub-groups of the population (such as age, gender and socio-economic

²⁸ Thorpe, R., Robinson, M., McCartney, G., and Beeston, C. (2011) *Monitoring and Evaluating Scotland's Alcohol Strategy: A review of the validity and reliability of alcohol retail sales data for the purpose of Monitoring and Evaluating Scotland's Alcohol Strategy*, Edinburgh: NHS Health Scotland

²⁹ World Health Organization (WHO) Regional Office for Europe, *Alcohol control database* <http://data.euro.who.int/alcohol/?TabID=2420>, accessed on 4 June 2012. Note the WHO database use population 15+ but this makes a very marginal difference to the per capita figure.

group). However, compared to supply data, population surveys where alcohol consumption is self-reported usually show overall consumption figures which are much lower than those of supply-based estimates^{30 31}. While the Scottish Health Survey (SHeS) 2010 found that 49% of men and 38% of women exceeded the daily and/or weekly limit³², SHeS only captures around 50% of actual sales, suggesting it may miss many very heavy drinkers³³. While survey data has found broadly similar consumption levels in Scotland and England, alcohol sales data confirm that Scots have been drinking at far higher levels than their counterparts in England and Wales since at least the mid 1990s and that this gap is widening³⁴. This higher consumption level in Scotland would appear to explain, at least in part, why alcohol-related harm continues to be significantly worse in Scotland.

Consumption as a driver of harm: the evidence

2.18 The average consumption of alcohol in a population is directly linked to the amount of harm as evidenced in a number of systematic reviews. The more we drink, the greater the risk of harm^{35 36 37}. As overall consumption has increased in Scotland so have the resultant harms.

2.19 Excessive drinking has been shown to damage the brain and nervous system; affect the immune system; harm bones, skin and muscles; cause fertility problems and impair foetal development. Along with physical harms, heavy drinkers are also more prone to anxiety, depression and suicide than moderate or non-drinkers³⁸. The World Health Organisation (WHO) identifies alcohol as the third highest risk factor for ill health in developed countries, behind only tobacco and high blood pressure^{39 40}. Scotland's Chief Medical Officer has added alcohol liver disease to the list of Scotland's 'big killers' alongside heart disease, stroke and cancer, emphasising the scale and seriousness of the problem we are now facing.

³⁰ World Health Organization (2000) *International Guide for Monitoring Alcohol Consumption and Related Harm*, Geneva: World Health Organization

³¹ Catto, S. and Gibbs, D. (2009) *How much are people in Scotland really drinking?*, Edinburgh: NHS Health Scotland <http://www.scotpho.org.uk/alcoholreport>

³² Scottish Government (2011) *The Scottish Health Survey 2010, Volume 1: Main Report*, Edinburgh: Scottish Government

³³ The Scottish Health Survey 2010 estimates mean population (aged 16 and over) consumption of 11.6 units per week; sales data suggest 22.8 units.

³⁴ Robinson, M., Craig, N., McCartney G., and Beeston, C. (2011) *Monitoring and Evaluating Scotland's Alcohol Strategy: An update of alcohol sales and price band analyses*. Edinburgh: NHS Health Scotland

³⁵ Nostrom, T. (ed) (2002) *Alcohol in Postwar Europe: consumption, drinking patterns, consequences and policy responses in 15 European countries*, Sweden: National Institute of Public Health

³⁶ Babor, T. et al. (2003) *Alcohol: No Ordinary Commodity*, Oxford. Oxford University Press

³⁷ Anderson, P. and Baumberg, B. (2006) *Alcohol in Europe*, London: Institute of Alcohol Studies

³⁸ Data from the Continuous Morbidity Register (CMR); *Delivering for Mental Health and Substance Misuse: Consultation Draft*, Scottish Executive, 2007

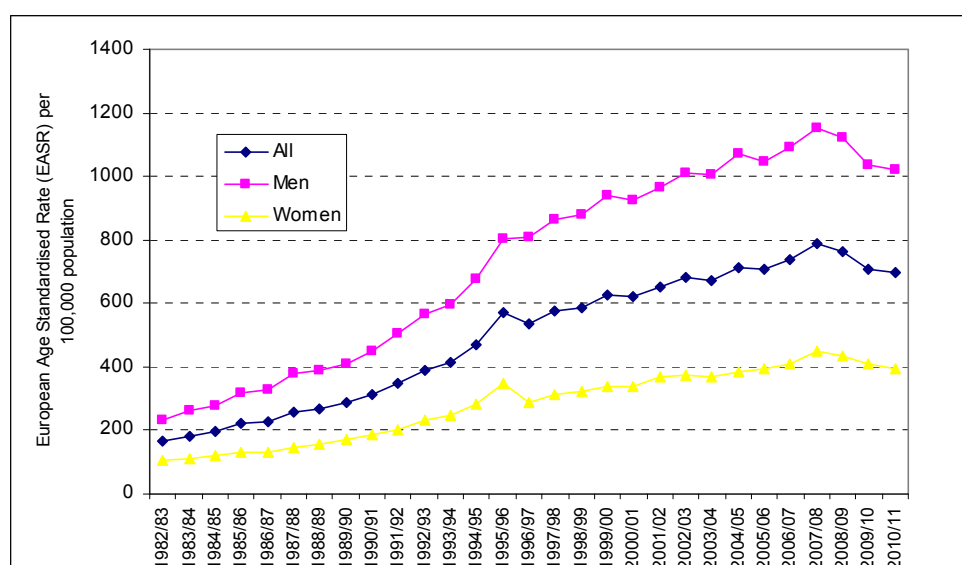
³⁹ World Health Organization, *Global Burden of Disease Project*

⁴⁰ World Health Organization (2011) *Global Status Report on Alcohol and Health*, Geneva: World Health Organization

http://www.who.int/substance_abuse/publications/global_alcohol_report/en/index.html

2.20 There were 38,825 alcohol-related general hospital discharges in 2010-11⁴¹, equivalent to more than 100 discharges per day. As figure 3 shows, despite a slight fall over the last 3 years, alcohol-related discharges in Scotland have more than quadrupled since the early 1980s and remain at historically high levels (increases have been seen across gender and age groups)⁴². Similarly, alcohol-related mortality has more than doubled since the early 1990s (figure 4)⁴³. While there was some evidence that mortality rates may be falling (from 2006 onwards), rates increased again in 2010 (including a rise of 7% in male mortality rates). In 2010 (the latest year for which comparable data is available), alcohol-related mortality rates for men in Scotland were double those for men in England and Wales (32 per 100,000 population compared to 16 per 100,000 population). A similar pattern is seen for women, with alcohol-related mortality rates notably higher in Scotland than in England and Wales (13 per 100,000 population compared to 8 per 100,000 population)⁴⁴.

Figure 3: Alcohol-related general hospital discharges, Scotland 1982/3 – 2010/11⁴⁵



⁴¹ Information Services Division (2012) *Alcohol related Hospital Statistics*, Edinburgh: NHS National Services Scotland <http://www.isdscotland.org/Health-Topics/Drugs-and-Alcohol-Misuse/Publications/2012-05-29/2012-05-29-AlcoholHospitalStats2012-Report.pdf>. Note: these data report discharges rather than admissions related to alcohol use. As further diagnostic information usually becomes available during the course of a hospital stay, the use of discharge data provides a more complete and accurate picture of a patient's condition(s)

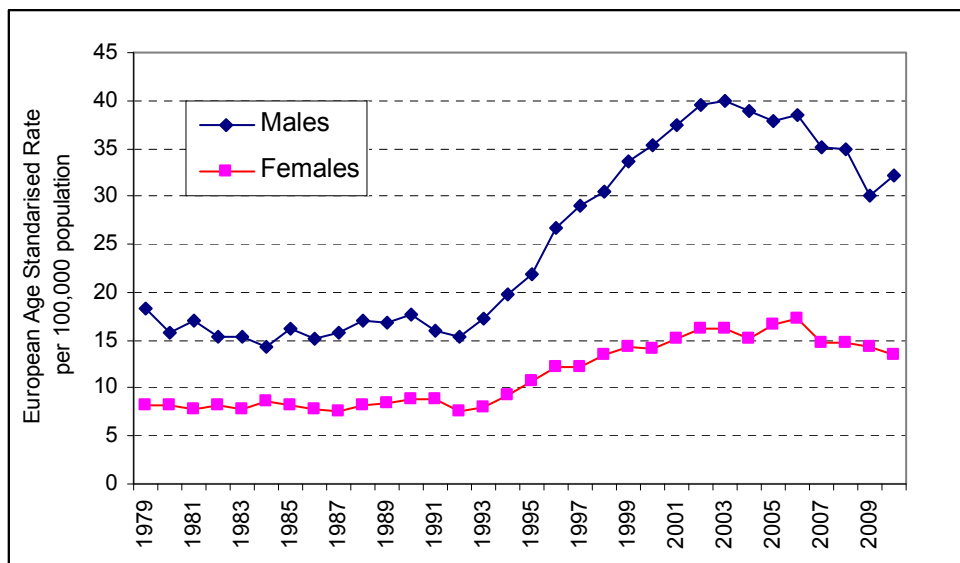
⁴² Beeston, C., Robinson, M., Craig, N., and Graham, L. (2011) *Monitoring and Evaluating Scotland's Alcohol Strategy. Setting the Scene: Theory of change and baseline picture*. Edinburgh: NHS Health Scotland

⁴³ Data supplied by National Records of Scotland (formally General Register Office for Scotland)

⁴⁴ Data from National Records of Scotland (Scottish figures) and Office for National Statistics (English and Welsh data).

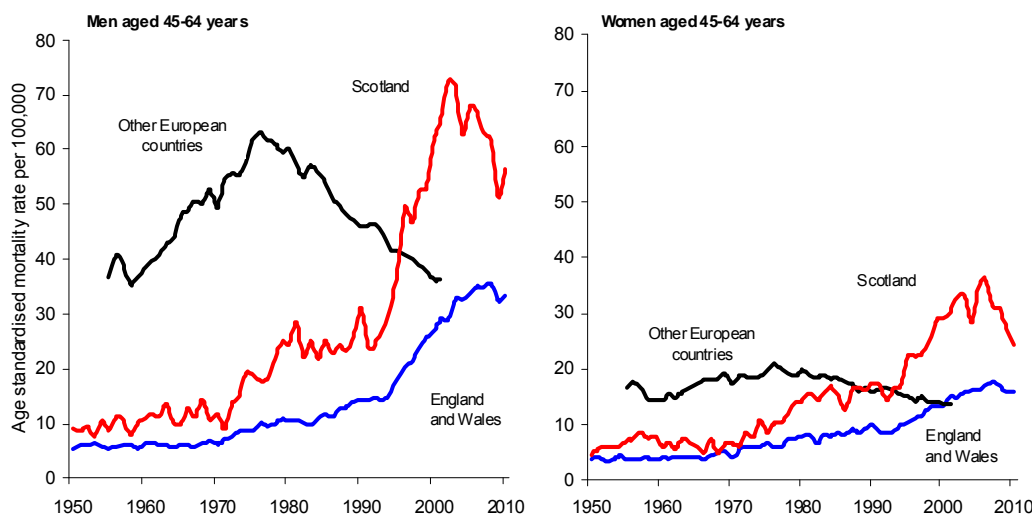
⁴⁵ Figures 3 and 4 are based on the longest time series currently available.

Figure 4: Alcohol-related mortality rates, Scotland 1979 – 2010



2.21 Over the last 30 years Scotland has had one of the fastest growing rates of chronic liver disease and cirrhosis in the world. Despite a fall in recent years, rates among 45-64 year olds are still around 5 times higher for men and 4 times higher for women than they were in the 1950s and 1960s, and increased again for men in 2010 (figure 5). This is against the backdrop of falling rates in many Western European countries.

Figure 5: Chronic liver disease and cirrhosis mortality rates per 100,000 population, 1950-2010⁴⁶



⁴⁶ Graphs based on Leon, D. and McCambridge, J. (2007) *Liver cirrhosis mortality rates in Britain from 1950 to 2002: an analysis of routine data*, The Lancet, Vol. 367, January 2007. Rates for Scotland and England & Wales updated to 2010 by the Scottish Government from data provided by National Records of Scotland and Office for National Statistics.

2.22 Research suggests that these mortality figures, being based on cases where alcohol use is considered to be the direct cause of death, may significantly underestimate the true scale of the problem. Following well established practice, the National Services Scotland Information Services Division report estimates that alcohol use is either the wholly or partly attributable⁴⁷ cause of death in 1 in 20 deaths in Scotland (almost twice as many as previously thought). A quarter of male deaths and a fifth of female deaths in the 35-44 year old age group are thought to be being alcohol attributable⁴⁸.

2.23 There is consistent evidence to suggest that alcohol consumption is associated with substantially increased risk of all-cause mortality even in people drinking lower than recommended limits, and especially among young people⁴⁹. Research involving almost 6,000 Scottish men conducted over the past 35 years, showed a clear relationship between the amount drunk and the likelihood of being admitted to hospital. The likelihood of being admitted increased when drinking as little as 8 units a week⁵⁰. Results from the *Million Women*⁵¹ study reported in March 2009, showed that for women, low to moderate alcohol consumption, drinking 1 to 2 units a day, increases the risk of certain cancers (breast, bowel, mouth, oesophagus, larynx, liver and pharynx). The more that is drunk, the higher the risk.

2.24 There are significant social and economic costs of excessive alcohol consumption. A recent systematic review found there to be a consistent and statistically significant effect of alcohol on violence and injury at even quite low levels of consumption⁵², while the WHO has similarly pointed to a strong association between alcohol consumption and an individual's risk of becoming a perpetrator or victim of violence⁵³. In Scotland half (50%) of all prisoners⁵⁴ and three-quarters (75%) of young offenders say they were drunk at the time of the offence⁵⁵. In the 2007 Prison Survey most (80%) of the Young Offenders who had used a weapon to injure someone stated that they were under the influence of alcohol at the time⁵⁶. A

⁴⁷ The study uses alcohol population attributable fractions. A population attributable fraction is an indirect quantification of mortality due to a specified risk factor. Partly attributable alcohol conditions are conditions (such as some cancers, injuries, etc.) where alcohol is causally implicated in a proportion but not all cases. It can be interpreted as the proportion of the total cases that would not have occurred in the absence of exposure to the risk factor (in this case alcohol use).

⁴⁸ Grant, I., Springbett A., and Graham L. (2009) *Alcohol attributable mortality and morbidity: alcohol population attributable fractions for Scotland*. Edinburgh: NHS National Services Scotland

⁴⁹ Booth, A et al (2008) *The Independent Review of the Effects of Pricing and Promotion: Summary of the Evidence to Accompany Report on phase 1: Systematic Reviews*, Sheffield: University of Sheffield

⁵⁰ Hart, C. and Davey Smith, G. (2009) *Alcohol consumption and use of acute and mental health hospital services in the West of Scotland Collaborative prospective cohort study*, The Journal of Epidemiology and Community Health

⁵¹ Allen, N. et al. (2009) *Moderate Alcohol Intake and Cancer Incidence in Women*, Journal of National Cancer Institute Vol. 101(4)

⁵² Booth, A. et al. (2008) *Independent Review of the Effects of Alcohol Pricing and Promotion Part A: Systematic Reviews*, Sheffield: University of Sheffield

⁵³ World Health Organisation (undated) *Interpersonal Violence and Alcohol Policy Briefing* http://www.who.int/violence_injury_prevention/violence/world_report/factsheets/ft_violencealcohol.pdf

⁵⁴ Carnie, J. and Broderick, R. (2011) *Prisoner Survey 2011*, Scottish Prison Service

⁵⁵ Carnie, J. and Broderick, R. (2011) *Young Offenders 2011*, Scottish Prison Service

⁵⁶ McKinlay, W., Forsyth, A. and Khan, F. (2009) *Alcohol and Violence among Young Male Offenders in Scotland (1979-2009)*, Scottish Prison Service

recent prison alcohol needs assessment study found that almost three-quarters (73%) of prisoners in the case study prison had an alcohol use disorder (as measured by the AUDIT screening tool), including over a third (36%) who were alcohol dependent⁵⁷. The vast majority (almost 90%) of those interviewed reported previous prison experience, suggesting ongoing alcohol and offending issues.

2.25 An audit found that at least 70% of assaults presenting to Emergency Departments may be alcohol-related, with the majority of these being concentrated at weekends and involving young men⁵⁸. In addition, 69% of those accused of homicide (and whose drug status was known) in 2009-10 were either drunk or drunk and under the influence of drugs at the time of the alleged offence⁵⁹. Scotland's worrying relationship between alcohol and offending is only too evident.

2.26 Alcohol misuse impacts on young people, putting themselves and others at risk of harm. Almost a fifth (19%) of 15 years olds who had drunk alcohol in the previous year reported getting into trouble with the police and 14% said they had tried drugs as a consequence of drinking alcohol⁶⁰. The findings of a recent report suggest that in the UK a disproportionately large number of calls received by ChildLine from children concerned about a significant other person's (e.g. parent, carer) drinking, come from Scotland⁶¹. New estimates suggest that between 36,000 and 51,000 children are living with parents (or guardians) whose alcohol use is potentially problematic⁶².

2.27 Aside from direct physical harms to the drinker, alcohol misuse also results in significant psycho-social harm to others. Heavy drinking is a common factor in family break-up. Research has shown that marriages where one or both partners have an alcohol problem are twice as likely to end in divorce as marriages where alcohol problems are absent, while one in three divorce petitions in the UK cite excessive drinking by a partner as a contributory factor⁶³. A recent quantitative

⁵⁷ Parkes, T. et al. (2011) *Prison health needs assessment for alcohol problems*, Edinburgh: NHS Health Scotland

⁵⁸ NHS Quality Improvement Scotland (2006) *Harmful Drinking Two: Alcohol and Assaults*, Edinburgh: NHS Quality Improvement Scotland

⁵⁹ Scottish Government (2010) *Homicide in Scotland 2009/10*, Edinburgh: Scottish Government <http://www.scotland.gov.uk/Publications/2008/12/15155727/0>

⁶⁰ Information Services Division (2011) *Scottish School Adolescent Lifestyle and Substance Use Survey (SALSUS) 2010: National Report*, Edinburgh: NHS National Services Scotland

⁶¹ Scottish Health Action on Alcohol Problems (SHAAP) / Childline (2009) *Untold Damage: Children's accounts of living with harmful parental drinking*

⁶² Analysis from the Scottish Health Surveys (SHeS) 2008-10. 'Problematic use' is defined as a positive response to one or more of the 3 physical dependency questions within the survey. Population data from National Records of Scotland are used to produce a Scotland level prevalence estimate using lower and upper 95% confidence intervals. By using a measure of physical dependence on alcohol, these new figures provide a stronger link to the potential risk experienced by children. The previous estimate of 65,000 (using SHeS 2003 data) adopted a wider definition of problem alcohol use based on 2 or more positive responses to the 6 item CAGE questionnaire. On this wider approach newly derived estimates (using 2008-10 SHeS data) suggest that 72,000-93,000 children may be affected by their parents' alcohol misuse. However, due to methodological improvements in how these figures are derived, these estimates are not comparable to the previous 65,000 figure. Comparisons between current and previous prevalence figures should therefore be avoided.

⁶³ Prime Minister's Strategy Unit (2003) *Alcohol Harm Reduction project: Interim Analytical Report*

research study from New Zealand demonstrated that individuals who were exposed to others' heavy drinking (e.g. as a friend or relative) had reduced wellbeing and health status. It suggested that living with a heavy drinker may place a burden similar to being a carer for someone with a chronic illness such as Parkinson's⁶⁴.

2.28 Scots view alcohol problems as one of the most serious issues currently facing the country. No fewer than 96% of respondents to the Scottish Crime and Justice Survey 2010-11 felt that 'alcohol abuse' was a problem in Scotland, including 74% who thought it was 'a big problem'. Indeed alcohol was rated as a bigger problem than crime, anti-social behaviour and unemployment⁶⁵. In addition, a 2007 survey found over half (51%) of people in Scotland believe alcohol is the drug which causes most problems for Scotland as a whole, compared with 22% saying heroin and 9% tobacco⁶⁶.

2.29 Whilst alcohol-related issues impact on all socio-economic groups, it is important to recognise the greatest harm is experienced by those who live in the most deprived areas. The reasons why alcohol has a more harmful effect on people living in deprived communities are complex and not fully understood. Risky and harmful alcohol use is likely to be both a cause and effect of social deprivation. What is clear is that the level of alcohol-related harm in deprived communities is substantial, with alcohol-related general hospital discharge rates in the 20% most deprived communities (as measured by the Scottish Index of Multiple Deprivation, SIMD) around 7.5 times higher than in the most affluent fifth. Similarly, alcohol-related mortality rates are 6 times higher in the most deprived areas⁶⁷. Tackling alcohol-related harm has the potential to help address Scotland's wider health inequalities.

2.30 The international evidence available clearly shows that if alcohol consumption falls, reductions in both acute (i.e. short term) harms (such as accidents and injuries) and chronic (i.e. long term) harm (such as liver cirrhosis) can follow within a relatively short time. Alcohol consumption in France has fallen over the last 20-30 years, as have chronic liver disease and cirrhosis deaths. In Italy a fall in average population alcohol consumption led to a reduction in alcohol-related mortality. The reduction in alcohol consumption in Russia in the late 1980s led to a dramatic fall in deaths, only to rise once consumption rose again in the mid nineties.

⁶⁴ Casswell, S., You R., and Huckle, T. (2011) *Alcohol's harm to others: reduced well being and health status for those with heavy drinkers in their lives*, Addiction 106. 1087-1094

⁶⁵ Scottish Government (2011) *Scottish Crime and Justice Survey 2010-11 (data tables)*, Edinburgh: Scottish Government <http://www.scotland.gov.uk/Topics/Statistics/Browse/Crime-Justice/Datasets/SCJS10-11vol1>

⁶⁶ Ormston, R. and Webster, C. (2008) *Scottish Social Attitudes Survey 2007: Something to be ashamed of or part of our way of life? Attitudes towards alcohol in Scotland*, Edinburgh: Scottish Government <http://www.scotland.gov.uk/Publications/2008/08/01112431/11>

⁶⁷ Information Services Division (2011) *Alcohol Statistics Scotland 2011*, Edinburgh: NHS National Services Scotland

The relationship between consumption and price: International evidence

2.31 There is strong evidence from numerous studies conducted in 15 European countries, America, Canada, New Zealand and elsewhere, that levels of alcohol consumption in the population are closely linked to the retail price of alcohol. As alcohol becomes more affordable, consumption increases. As the relative price increases, consumption goes down. The Wagenaar⁶⁸ study considered 100 separate studies reporting over 1,000 statistical estimates over the last 30 years and found that there was a consistent relationship between price and consumption of alcohol: when prices go down, people drink more and when prices go up, people drink less. A RAND Europe report supports the link between alcohol price/income/affordability and consumption, and on the direct link between alcohol price/income and harms, stating that this provides strong support for the use of alcohol pricing policies as a potentially effective measure to curb hazardous and harmful drinking in Europe⁶⁹.

2.32 In Switzerland in 1999 a 30% to 50% reduction in taxation on foreign spirits led to a 28% increase in consumption of spirits. There was no significant change in the consumption of wine or beer⁷⁰. In March 2004, Finland cut tax on alcohol (by one third) in an effort to reduce the level of cross-border shopping undertaken by Finns in other EU countries, particularly neighbouring Estonia, where the price of alcohol was much cheaper. Following the change, liver cirrhosis deaths were found to have risen by 30% in just one year, as alcohol consumption increased by 10%⁷¹. Finland subsequently reversed the measure although not until 2008, when alcohol taxes were raised by 15% for strong alcoholic beverages and by 10% for other alcoholic beverages. In 2009, excise taxes on alcoholic beverages were raised twice by 10%. Total consumption of alcoholic beverages fell by around 2%, there was a 5% reduction in alcohol-related periods of care in hospital and a drop in the number of alcohol-related deaths. These trends continued in 2010, with a 2% decrease in consumption, 8% reduction in alcohol-related periods of hospital care and 189 fewer alcohol-related deaths⁷².

2.33 In January 2011 RAND Europe published a report sponsored by the Home Office: *Preliminary assessment of economic impacts of alcohol pricing policy options in the UK*⁷³. The options it examined were minimum unit pricing, a ban on below cost sales and increases in alcohol excise duty rates. The review of the evidence

⁶⁸ Wagenaar, A.C., Salois, M.J., and Komro K.A (2009) *Effects of beverage alcohol taxes and prices on consumption: a systematic review and meta-analysis of 1003 estimates from 112 studies*, *Addiction*, 104, 2009

⁶⁹ Rabinovich, L et al. (2009) *The affordability of alcoholic beverages in the European Union: Understanding the link between alcohol affordability, consumption and harms*, RAND Europe

⁷⁰ Heeb, J.L. et al. (2003) *Changes in alcohol consumption following a reduction in the price of spirits: a natural experiment in Switzerland*. *Addiction*, Volume 98 (10) Pgs: 1433-1446

⁷¹ Herttua, K. et al. (2008) *Changes in alcohol-related mortality and its socio-economic differences after a large reduction in alcohol prices: a natural experiment based on register data*, *American Journal of Epidemiology*

⁷² National Institute for Health and Welfare, Official Statistics of Finland (2012) *Statistical Yearbook of Alcohol and Drug Statistics 2011*

⁷³ Hunt, P., Rabinovich, L., and Baumberg, B. (2011) *Preliminary assessment of economic impacts of alcohol pricing options in the UK*, RAND Europe

found that the research clearly indicated that increasing the price of alcohol can be effective in reducing alcohol harms.

2.34 The report highlights that minimum pricing circumvents retailers' ability to absorb price increase and that its impact clearly depends on the level set. It notes that it is likely to have most impact on young people, hazardous/harmful drinkers and low income groups. Taxation, although having the benefit of increased revenue to the government, is regressive; does not target the drinkers who cause the harms; may allow large off-trade retailers to absorb the increase thereby blunting any impact; and the authors point out that there is limited understanding of the exact effect of alcohol tax increase on alcohol prices. The literature on below cost selling is the least developed and any impact is likely to be small although it might lead to some reduction in hazardous/harmful drinking. However across all three options the report states that: *"...the strong association between alcohol policies and alcohol harms provides a compelling reason for considering a range of pricing policies for inclusion into a policy mix to tackle this problem"*⁷⁴.

2.35 Emerging research findings on the minimum pricing systems operating in two of the Canadian provinces provide the first empirical evidence of the effectiveness of minimum pricing in reducing consumption. Longitudinal estimates suggest that a 10% increase in the minimum price of an alcoholic beverage in British Columbia reduced its consumption relative to other beverages by 16.1%. Time series estimates indicate that a 10% increase in minimum prices reduced consumption of spirits and liqueurs by 6.8%, wine by 8.9%, alcoholic sodas and ciders by 13.9%, beer by 1.5% and all alcoholic drinks by 3.4%⁷⁵. The research further suggested a 10% increase in minimum drink prices resulted in a 4% reduction in acute alcohol-related hospitalisations⁷⁶.

Consumption, price and affordability: Scottish data

2.36 As noted previously, alcohol sales in Scotland have increased by 11% overall since 1994 and this increase is being driven by increasing sales in the off-trade⁷⁷. Off-trade sales increased by 52% between 1994 and 2010, compared to a fall of 29% in the on-trade. It is now estimated that around two-thirds of alcohol sold in Scotland is now sold through the off-trade (figure 6)⁷⁸.

⁷⁴ *Ibid*

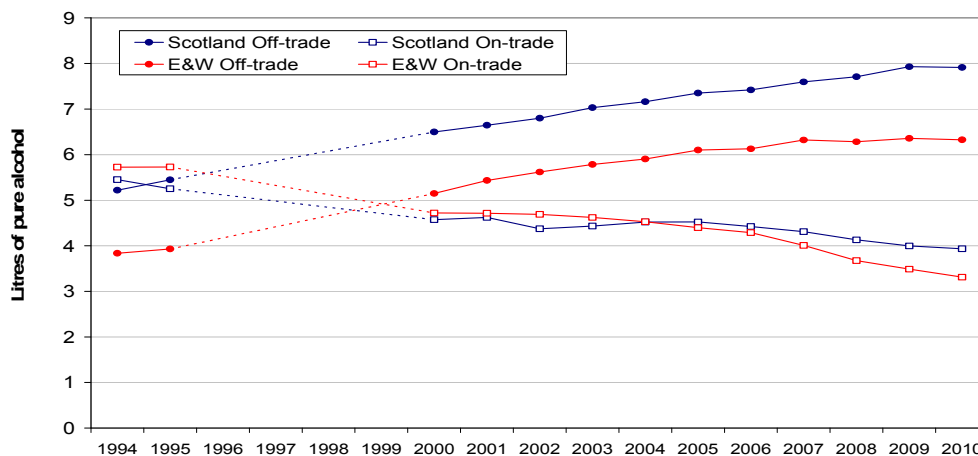
⁷⁵ Stockwell, T., Auld, M. C., Zhao, J. and Martin, G. (2012) *Does minimum pricing reduce alcohol consumption? The experience of a Canadian province*, *Addiction*, Volume 107, Issue 5, pp 912-920

⁷⁶ Prof. Stockwell in evidence to the Scottish Parliament's Health and Sport Committee, 10 January 2012 <http://www.scottish.parliament.uk/parliamentarybusiness/28862.aspx?r=6836&mode=pdf>

⁷⁷ Robinson, M., Craig, N., McCartney, G., Beeston, C. (2011) *Monitoring and Evaluating Scotland's Alcohol Strategy: An update of alcohol sales and price band analyses*. Edinburgh: NHS Health Scotland

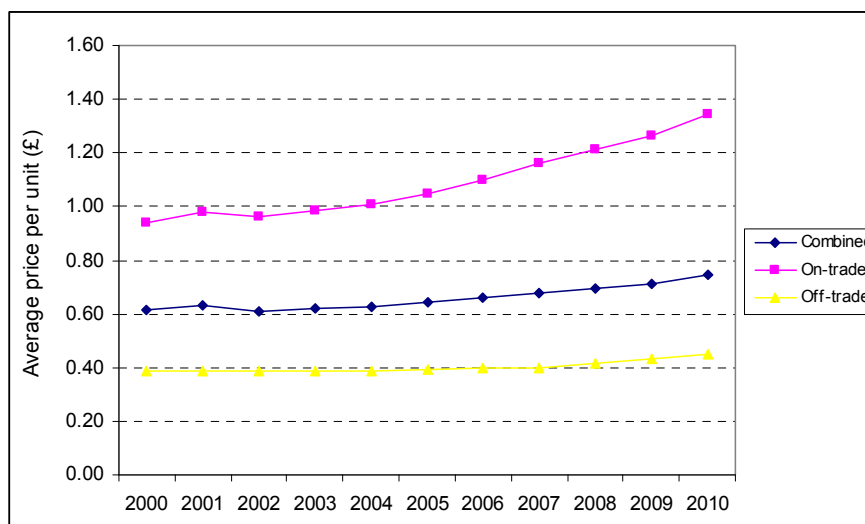
⁷⁸ *Ibid*

Figure 6: Litres of pure alcohol sold per capita (adults aged 16+) in Scotland and England & Wales, 1994-2010



2.37 The impact of differential prices across the off and on-trade in driving these trends is clear. The average price per unit in the on-trade in 2010 was 134p, compared to just 45p in the off-trade. As figure 7 demonstrates, the differential in average price per unit across sectors has increased significantly over the last decade. The on-trade has seen a 43% rise in average price per unit since 2000, compared to a 15% increase in the off-trade. Treasury data indicates that inflation during this period (1999-2000 to 2009-10) was 28%⁷⁹.

Figure 7: Average price per unit of alcohol sold in Scotland, by market sector, 2000-2010



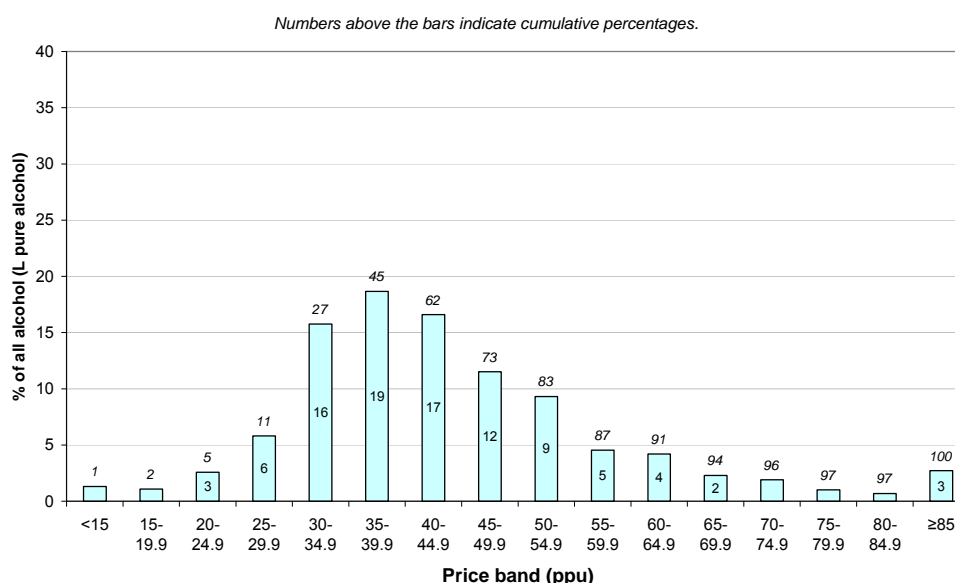
2.38 Whilst average price per unit is instructive, the price distribution is of most significance when considering the potential impact of minimum pricing. Data from the Nielsen Company on the price of alcohol sold through the off-trade were

⁷⁹ Calculated using GDP deflators: http://www.hm-treasury.gov.uk/data_gdp_index.htm

published by NHS Health Scotland in August 2011⁸⁰. Nielsen obtain weekly price data from most large multiple retailers (which Nielsen estimate comprise around three quarters of all alcohol off-sales) and a stratified random sample of independent and smaller multiple retailers⁸¹. The data comprise scanned readings at Electronic Points of Sale of the net retail price of each item along with its type and volume. The volume of each drink type was converted into units of pure alcohol using its percentage Alcohol by Volume (ABV) to derive the net retail price in pence per unit of alcohol. All items were then coded into one of fifteen price bands. Off-sales data will include alcohol sold to tourists and then taken out of the country but, equally, it excludes alcohol bought by Scots abroad for consumption back at home. It also excludes internet sales and alcohol bought at venues such as sporting events and festivals.

2.39 The 2010 price band data demonstrates that a considerable proportion of alcohol is sold very cheaply, with 11% of alcohol sold through the off-trade in Scotland retailing at below 30p per unit, 46% below 40p per unit and almost three-quarters (73%) under 50p per unit. Figure 8 shows the price distribution in percentage terms.

Figure 8: Price distribution (%) of pure alcohol sold off-trade in Scotland, 2010



2.40 The report analysed prices across a range of drink types and found significant variations across products. For instance:

- 45% of cider was sold at below 30p per unit, 72% below 40p per unit, and 85% below 50p per unit;

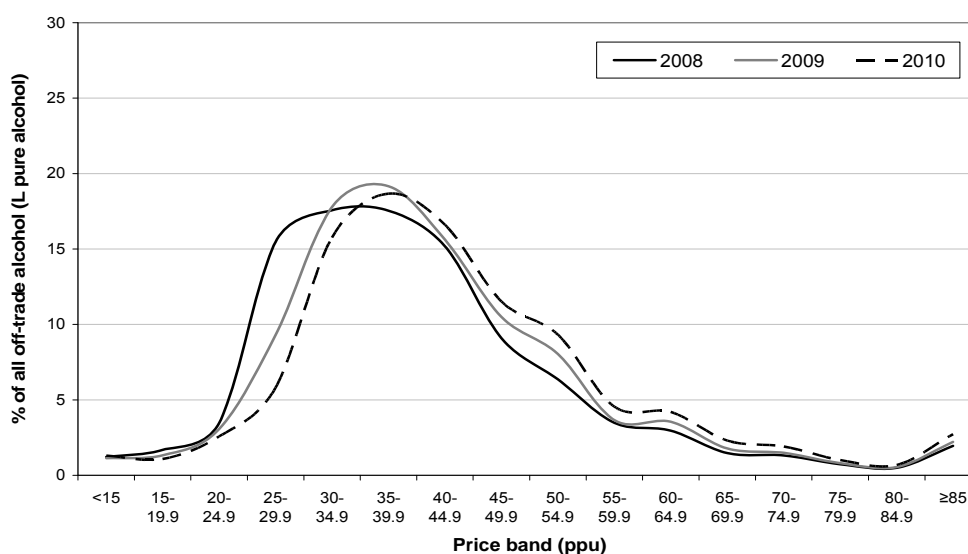
⁸⁰ Robinson, M., Craig, N., McCartney, G., and Beeston, C. (2011) *Monitoring and Evaluating Scotland's Alcohol Strategy: An update of alcohol sales and price band analyses*. Edinburgh: NHS Health Scotland. Similar data for the on-trade is not currently available.

⁸¹ Beeston, C., Robinson, M., Craig, N., and Graham, L. (2011) *Monitoring and Evaluating Scotland's Alcohol Strategy. Setting the Scene: Theory of change and baseline picture - Glossary and Appendices*, Edinburgh: NHS Health Scotland

- 1% of vodka was sold at below 30p per unit, 70% below 40p per unit and 92% below 50p per unit;
- 1% of whisky was sold at below 30p per unit, 49% below 40p per unit and 72% below 50p per unit;
- 20% of beer was sold at below 30p per unit, 50% below 40p per unit, and 77% below 50p per unit;
- 3% of light wine was sold at below 30p per unit, 27% below 40p per unit, and 63% below 50p per unit.

2.41 Over the last 3 years the distribution illustrated has been shifting to the right (figure 9). As prices have increased the amount sold below any particular price per unit has diminished. At the lower end of the distribution, for example, in 2008, 22% of all off-trade alcohol was sold at below 30p per unit. This fell to 11% in 2010. At the upper end, in 2008, 91% was sold below 60p per unit, falling to 87% in 2010. It is anticipated that this trend will have continued in 2011 and 2012 given inflation has been running at around 3-5% during this period⁸². This being the case the proportions quoted in the preceding paragraph e.g. 72% of whisky sold below 50p per unit, will now be smaller than they were in 2010.

Figure 9: Price distribution (%) of pure alcohol sold off-trade in Scotland, 2008-2010⁸³



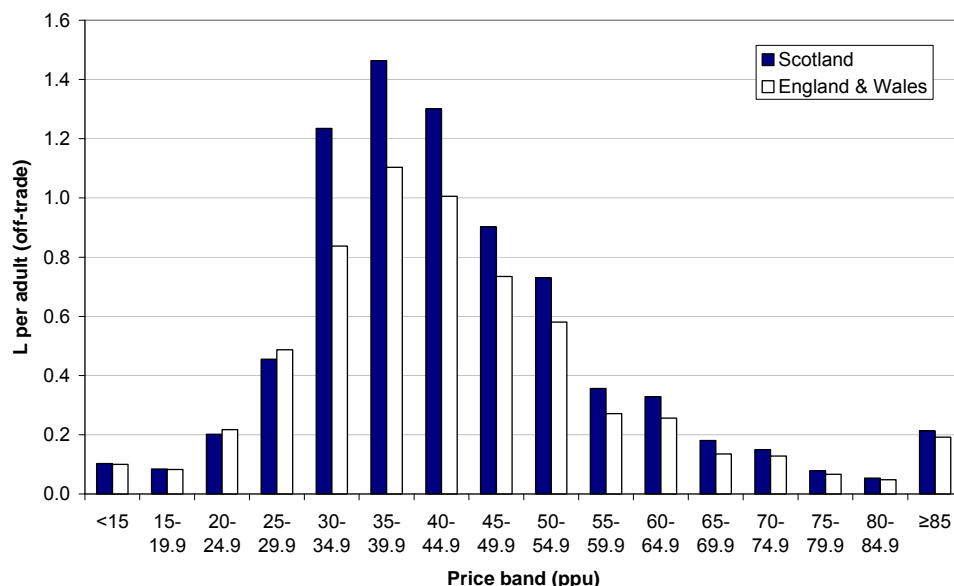
2.42 The Nielsen data further shows that of the additional 2.2 litres of pure alcohol sold per adult in Scotland in 2010 compared with England and Wales, 1.6 litres is due to higher off-trade sales. Two-thirds of this off-trade excess relates to alcohol sold in the 30-44.9p per unit price bands. This suggests that higher consumption in Scotland is to a large extent being driven by higher sales of cheap alcohol. Figure

⁸² ONS (2012) *Consumer Price Indices, April 2012* <http://www.ons.gov.uk/ons/rel/cpi/consumer-price-indices/april-2012/stb---consumer-price-indices---march-2012.html>

⁸³ Robinson, M., Craig, N., McCartney, G., and Beeston, C. (2011) *Monitoring and Evaluating Scotland's Alcohol Strategy: An update of alcohol sales and price band analyses*. Edinburgh: NHS Health Scotland.

10 illustrates this, showing the price distribution by litres of pure alcohol per head of population for both Scotland, and England and Wales.

Figure 10: Price distribution (L per adult aged ≥ 16) of pure alcohol sold off-trade in Scotland and England & Wales, 2010⁸⁴

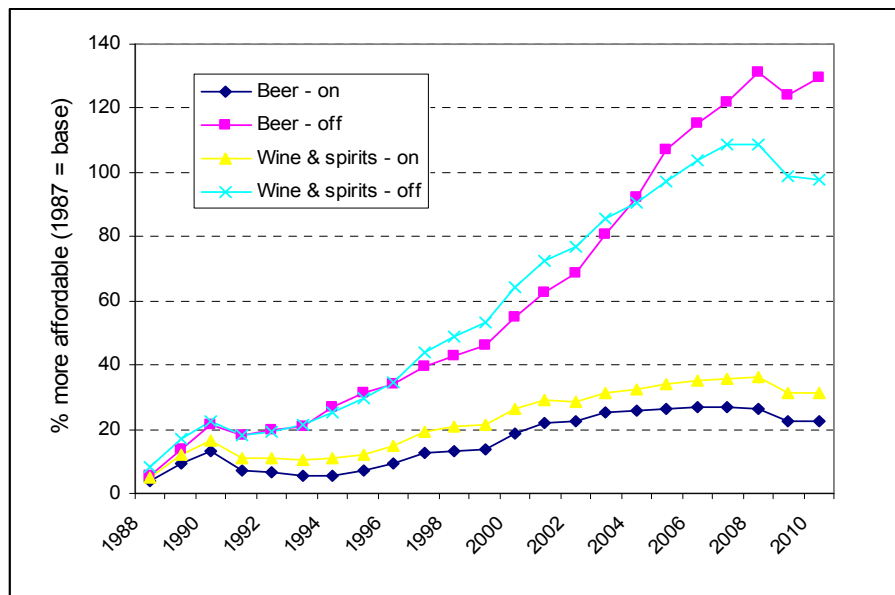


2.43 Price is a key component of affordability and it is relative affordability that drives consumption. In real terms (taking into account household disposable income per capita) the NHS Information Centre report that alcohol is now 45% more affordable in the UK than it was in 1980⁸⁵. However, changes in affordability are not uniform across sectors or drink types. Data from the Office for National Statistics demonstrate that while affordability of on-trade alcohol has increased only slowly since 1987 (and has changed little over the last decade), alcohol sold off-trade is significantly more affordable (figure 11). Beer sold off-trade is now almost 130% more affordable in real terms than in 1987, while the equivalent figure for wine and spirits is 98%. The impact of increasing affordability in the off-trade is clear: as affordability has increased off-trade sales have also increased significantly (by 52% since 1994, see figure 6 above) at the expense of the on-trade (where affordability has remained relatively static).

⁸⁴ *Ibid*

⁸⁵ The NHS Information Centre for Health and Social Care (2012) *Statistics on Alcohol: England, 2012*, Leeds: Health and Social Care Information Centre

Figure 11: The Affordability of On and Off-Sales Alcohol: UK, 1987-2010

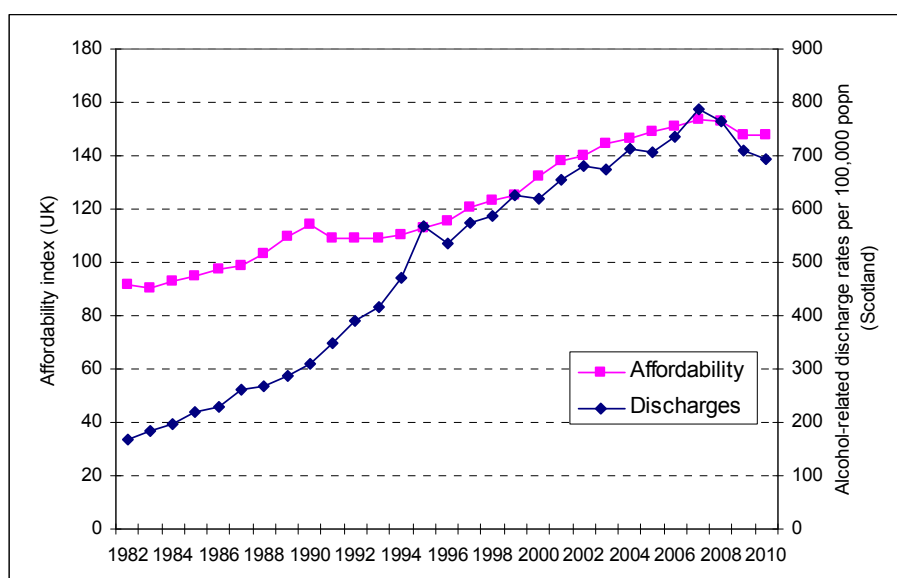


2.44 It is possible to illustrate the strong relationship between affordability and harm using alcohol-related general acute hospital discharge rates as an example. As figure 12 shows, as the affordability of alcohol in the UK has increased since the early 1980s so have Scottish discharge rates, following a particularly close trajectory since the 1990s⁸⁶. It is notable that as the rise in affordability has slowed in recent years and then fallen, discharge rates have followed a similar pattern⁸⁷.

⁸⁶ Source for affordability index: The NHS Information Centre for Health and Social Care (2012) *Statistics on Alcohol: England, 2012*, Leeds: Health and Social Care Information Centre; source for discharge rates: Information Services Division (2012) *Alcohol related Hospital Statistics*, Edinburgh: NHS National Services Scotland

⁸⁷ A number of caveats are noted. Affordability is measured on a calendar year, discharges on financial year. Discharge rates are assigned to the year from which the majority of the data comes – so for instance 1982/3 discharges rates are compared with the 1982 affordability index. The affordability index is for the UK but the discharge data covers Scotland. However, relative affordability is likely to be similar throughout the UK.

Figure 12: Affordability index (UK) versus alcohol-related discharge rates (Scotland), 1982-2010



Estimating the impact of minimum unit pricing: the Sheffield model

2.45 As minimum pricing is untested in the UK it is necessary to rely on econometric modelling to estimate the potential impact of the policy (as is often done with new initiatives). In September 2008, the School of Health and Related Research (SchHARR) at the University of Sheffield published a UK government commissioned systematic review of the evidence, an *Independent Review of the Effects of Alcohol Pricing and Promotion, part A*⁸⁸. The review found strong and consistent evidence to suggest that pricing policies can have a significant effect in reducing demand for alcohol. An increase in the price of alcohol was estimated to reduce hazardous and harmful alcohol consumption, the harm done by alcohol, and the harm done by alcohol to those other than the drinker. Subsequent to this, the results from a substantial piece of modelling work undertaken by the University of Sheffield, also commissioned by the UK Government, and based on data relating to alcohol consumption in England, was published in December 2008⁸⁹.

2.46 Following this review, the Scottish Government commissioned SchHARR at the University of Sheffield to undertake analysis using Scottish data, as far as possible, in order to model the potential effect of the introduction of minimum pricing per unit of alcohol, the potential effect of introducing a ban on price-based promotions in the off-trade and the potential effect of introducing minimum pricing

⁸⁸ *Independent Review of the Effects of Alcohol Pricing and Promotion, part A*, http://www.dh.gov.uk/en/Publichealth/Healthimprovement/Alcoholmisuse/DH_4001740.

⁸⁹ *Independent Review Of The Effects Of Alcohol Pricing And Promotion: Part B. Modelling the Potential Impact of Pricing and Promotion Policies for Alcohol in England: Results from the Sheffield Alcohol Policy Model* Version 2008, http://webarchive.nationalarchives.gov.uk/+www.dh.gov.uk/en/Publichealth/Healthimprovement/Alcoholmisuse/DH_4001740

simultaneously with an off-trade discount ban in Scotland⁹⁰. This was subsequently updated, as new data became available, in 2010⁹¹ and again in January 2012⁹². The potential impact of introducing minimum pricing is considered in more detail below, however the following points should be noted:

- The model showed a strong and consistent link between the price of alcohol and the demand for alcohol. Increasing the price of alcohol is estimated to reduce consumption and alcohol-related harm.
- The model demonstrated a link between price increases, reduced consumption and subsequent reductions in chronic and acute health harms.
- Minimum pricing targets price increases at alcohol that is sold cheaply. Cheaper alcohol tends to be bought more by harmful drinkers than moderate drinkers. So a minimum pricing policy might be seen as beneficial in that it targets the drinkers causing most harm to themselves and society. Studies also show that cheaper alcohol is attractive to young people⁹³.
- 'Moderate drinkers' (defined by the Sheffield report as those who drink within sensible drinking guidelines) are estimated to be only marginally affected, simply because they consume only a small amount of alcohol and also because they do not tend to buy as much of the cheap alcohol that would be most affected by minimum pricing.
- Although the driver for minimum pricing is the protection and improvement of public health, we note that the effects of price increases may not be disadvantageous to the alcohol industry as a whole because the estimated decrease in sales volume may be more than offset by the unit price increase, leading to overall increases in revenue.
- The economy is likely to benefit through a reduction in sick days per year for all categories of drinker (moderate, hazardous and harmful) and less unemployment among harmful drinkers.

2.47 SchARR specialises in health services and public health research and the application of health economics and decision science to the development of health services and the improvement of public health. The 2008 Research Assessment Exercise (RAE) confirmed SchARR as the UK's leading department for health

⁹⁰ Purshouse, R. et al. (2009) *Model Based Appraisal of Alcohol Minimum Pricing and Off-Licensed Trade Discount Bans in Scotland: A Scottish adaptation of the Sheffield Alcohol Policy Model version 2*, Sheffield: University of Sheffield <http://www.scotland.gov.uk/Publications/2009/09/24131201>

⁹¹ Meng, Y. et al. (2010) *Model-Based Appraisal of Alcohol Minimum Pricing and Off-Licensed Trade Discount Bans in Scotland using the Sheffield Alcohol Policy Model (v2): An Update Based on Newly Available Data*, Sheffield: University of Sheffield <http://www.scotland.gov.uk/Publications/2010/04/20091852/0>

⁹² Meng, Y. et al. (2012) *Model-based appraisal of alcohol minimum pricing and off-licensed trade discount bans in Scotland using the Sheffield Alcohol Policy Model (v.2): Second update based on newly available data*, Sheffield: University of Sheffield http://www.sheffield.ac.uk/polopoly_fs/1.1500211/file/scotlandupdatejan2012.pdf

⁹³ Booth, A. et al. (2008) *Independent Review of the Effects of Alcohol Pricing and promotion Part A: Systematic Reviews*, Sheffield: University of Sheffield http://www.sheffield.ac.uk/polopoly_fs/1.956171/file/PartA.pdf

services research. The RAE panel recognised the esteem in which SchARR is held globally for excellence in health services research and evaluated the research environment as predominantly world-leading or internationally excellent.

2.48 The Sheffield model is, by definition, complex. The team produced estimates of responsiveness to price increase of products (own price elasticities) and the impact of switching behaviour (cross price elasticities) for 16 different categories of alcohol, separately for moderate drinkers and harmful/hazardous drinkers. This produces a matrix with 256 elements for each category of drinker. In this respect Sheffield's model is more advanced than other research in this area, including the CEBR report (see below) which does not use such a complex breakdown of either product type or consumer.

2.49 The University of Sheffield researchers have received support for their approach from leading health economists and experts in the field of alcohol. The first of a number of journal articles – peer reviewed⁹⁴ – is in the respected journal *Addiction*:⁹⁵ where the authors outline the importance of accounting for all the complexity and differences in drinking and purchasing patterns across different groups when estimating policy impacts.

2.50 An article published in the *Lancet* in April 2010⁹⁶ outlining the main findings from the modelling output and an editorial article in the journal was highly supportive of the Sheffield approach⁹⁷. It argued that because of the scale of alcohol-related harm, governments should intervene for the public good, and that the Sheffield model provides “*evidence on which to base fair and effective pricing*” and it was “*imperative*” that it should be used.

2.51 The SABMiller brewing company funded the Centre for Economics and Business Research Ltd (CEBR) to produce a report “*Minimum Alcohol Pricing: A targeted measure?*” in June 2009⁹⁸. The report contained no new evidence but reviewed the University of Sheffield's work. The CEBR report does not dispute the link between the price of alcohol and consumption – and between consumption and harm – but questioned the Sheffield finding that harmful drinkers were more responsive to price change than moderate. An updated report was published in August 2010⁹⁹, critiquing the second version of the Sheffield modelling work for Scotland, using the same arguments.

⁹⁴ Peer reviewed publication remains the gold standard for academic credence

⁹⁵ Meier, P.S., Brennan, A., and Purshouse, R. (2010) *Policy Options for Alcohol Price Regulation: The Importance of Modelling Population Heterogeneity*, *Addiction*, Volume 105, Issue 3, pages 383-393

⁹⁶ Purshouse, R. et al (2010) *Estimated effect of alcohol pricing policies on health and health economic outcomes in England: an epidemiological model*, *The Lancet*, 375 (9723), pp.1355-64

⁹⁷ *Ibid*

⁹⁸ Centre for Economics and Business Research Ltd (2009) *Minimum Alcohol Pricing: A targeted measure?* London: Centre for Economics and Business Research Ltd

⁹⁹ Centre for Economics and Business Research Ltd (2010) *Minimum Alcohol Pricing: A targeted measure? Report to the Scottish Parliamentary Health and Sport Committee Final Report*. London: Centre for Economics and Business Research Ltd

2.52 The Sheffield team strongly dispute the central claim made by CEBR that the results of the Sheffield model overestimate the impact minimum pricing will have on heavy drinkers. They argue that CEBR's use of alternative estimates of consumers' responsiveness to price changes is overly simplistic as they do not include detailed breakdowns of product types or consumer behaviour, including heavier drinkers' tendency to trade down to lower cost products. Professor Ludbrook, a leading health economist, in oral evidence to the Scottish Parliament's Health and Sport Committee, strongly supported the Sheffield approach and their finding that heavier drinkers are more responsive to price changes, noting *"that evidence is widely accepted to have been an innovative and important contribution to the debate"*.

2.53 To counter arguments around the responsiveness of heavier drinkers, the Sheffield team ran a sensitivity analysis that assumed harmful drinkers were a third less responsive than moderate drinkers (which is unlikely to be the case). While this results in slightly reduced estimates of the effectiveness of a minimum price of 50p per unit, it still shows a greater reduction in harmful drinkers' consumption because they drink more of the type of alcohol affected by minimum price policies.

The quantity discount ban: preliminary findings

2.54 As noted above, the Scottish Government has already introduced one price based mechanism. The original intention of the 2010 Act had been to introduce a minimum unit price and a quantity discount ban simultaneously. The Scottish Parliament did not approve the introduction of a minimum unit price during the passage of the legislation, however the Act did introduce a ban on quantity discounts in the off-sales sector from 1 October 2011.

2.55 Initial analysis by NHS Health Scotland on the volume of pure alcohol sold off-trade in Scotland during the 33-week period following the introduction of the quantity discount ban shows a fall of 4.3% from the corresponding period the previous year¹⁰⁰. Off-trade spirit sales fell by 4.9%, beer by 4.7% and wine by 4.2% (cider sales increased by 0.4%). The equivalent figure for England and Wales (where a ban is not in place) was a reduction in off-trade sales of 3.3%. The decline in off-trade sales in Scotland since October 2011 has therefore been around 1% higher than in England and Wales.

2.56 However, Health Scotland's analysis suggests no clear change in weekly sales in Scotland immediately following the introduction of the ban, with a slight decline in sales apparent prior to introduction and continued (albeit at a faster rate) thereafter. The fall in sales could therefore reflect the effect of reducing affordability of alcohol due to the economic slowdown, or other external factors. The larger reduction in sales (of around 1%) in Scotland since October 2011 and the fact it came on the back of relatively stable trends during 2010 and 2011 may reflect an additional impact of the ban but data over a longer time period are required to derive robust conclusions.

¹⁰⁰ Curnock, E., Robinson, M., McCartney, G., and Beeston, C. (2012) *Monitoring and Evaluating Scotland's Alcohol Strategy: Preliminary descriptive analysis of the impact of the quantity discount ban on off-trade alcohol sales in Scotland*, Edinburgh: NHS Health Scotland

2.57 The discount ban modelling carried out by Sheffield was on the basis that all price-based promotions in the off-trade are banned i.e. quantity discounts and straight price reductions. The data was not available to differentiate straight discounting from list price from quantity discounts. The Sheffield modelling therefore goes further than what has been implemented in Scotland. The model estimates that a total ban on off-trade price-based promotions will reduce overall consumption by 3%. Since the ban is on quantity discounts only, the effect on consumption is likely to be less than 3% (as suggested in the preliminary NHS Health Scotland analysis).

Rationale for government intervention

2.58 The Scottish Government considers that the continuing scale of alcohol problems in Scotland is such that strong action is required if we are to reduce alcohol consumption in Scotland and hence reduce alcohol-related harm. Whilst recognised as a UK problem, the evidence shows that alcohol misuse is more severe in Scotland (see paragraphs 2.11 - 2.12, 2.15 - 2.17) and that is why we consider it is now time to introduce bold measures in order to rebalance our relationship with alcohol. Despite an economic recession in recent years and a record investment in prevention and treatment initiatives in Scotland, consumption and harm remain at historically high levels. A cultural change is therefore needed in order to influence future attitudes and relationships with alcohol, and tough measures are required in order to trigger these changes. The policy aim is to reduce consumption generally, but in particular, target a reduction in consumption of cheaper alcohol relative to its strength. Evidence shows that this type of product is more favoured by hazardous and harmful drinkers.

2.59 Culture is a result of a complex and dynamic interaction of legislation, formal and informal controls, general and specific environmental influence and personal belief systems. The low price of high strength alcohol is now part of the culture that has to be addressed, and this cannot be tackled without addressing price. The increasing levels of consumption and alcohol-related harm in recent decades demonstrates that education alone is not a powerful enough factor to change behaviour and culture. We already know from experience on seatbelts and on smoking in public places that such culture change is possible and that legislation can make a significant contribution to delivering it by encouraging changes in behaviour.

2.60 We recognise that no single action will bring about cultural change which is why we set out a package of over 40 measures in our Framework for Action which seek to reduce consumption, to support families and communities, encourage more positive attitudes and positive choices and to improve treatment and support services. As outlined above, this broader approach also focuses on education, diversionary activity, support for families and communities, and preventive public health measures such as alcohol brief interventions. However, crucially what is currently missing from Scotland's alcohol strategy is an intervention that significantly impacts on the price of alcohol. We are firmly of the view that without minimum unit pricing we will be unable to address the historic rates of alcohol-related harm and change our relationship with alcohol for good.

2.61 We are not alone in seeing the potential public health, social and economic gains from introducing a mechanism to increase the price of alcohol. The WHO report *Alcohol: No ordinary commodity*¹⁰¹, published in 2003, covering a 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. We consider that the introduction of minimum pricing will have a high impact on reducing consumption as it involves the pricing of alcohol.

2.62 The WHO's Global Strategy on Alcohol¹⁰² adds to this by acknowledging the link between affordability and consumption and concludes that "*increasing the price of alcoholic beverages is one of the most effective interventions to reduce harmful use of alcohol*" and encourages Member States to consider implementing minimum pricing.

2.63 In addition, the UK's National Institute for Health and Clinical Excellence (NICE), commissioned by the UK Government, published public health guidance on the prevention and early identification of alcohol-use disorders in adults and adolescents in June 2010. The guidance, *Alcohol-use disorders: preventing harmful drinking*¹⁰³, set out a number of recommendations including consideration of introducing a minimum price per unit. NICE further advises that the unit price should be reviewed regularly to ensure alcohol does not become more affordable over time.

2.64 The Scottish Government has used legislative measures over recent years to tackle alcohol misuse. The Licensing (Scotland) Act 2005 (the "2005 Act"), which came fully into force in September 2009, introduced a new licensing system setting out five objectives, tackling under-age drinking, and cracking down on binge drinking. It largely focussed on the on-sales environment and availability of alcohol with irresponsible drinks promotions, such as quantity discounts, in the on-trade being banned and a 'premises by premises' approach to opening hours. The Alcohol etc. (Scotland) Act 2010 (the "2010 Act"), which came into force in October 2011, focussed on the off-sales environment. The main measures in the 2010 Act are a ban on quantity discounts in off-sales that encourage customers to purchase more than they might have; a restriction on where material promoting alcohol may be displayed; the involvement of health boards in licensing issues; a requirement for an age verification policy which is to be set at 25; and the setting out of a broad

¹⁰¹ Babor, T. et al. (2003) *Alcohol: No Ordinary Commodity*, Oxford: Oxford University Press

¹⁰² World Health Organization (2010) *Global Strategy to Reduce the Harmful Use of Alcohol*, Geneva: World Health Organization http://www.who.int/substance_abuse/alcstratenglishfinal.pdf (para 32)

¹⁰³ National Institute for Health and Clinical Excellence (2010) *Alcohol-use disorders: preventing harmful drinking*, London: National Institute for Health and Clinical Excellence <http://guidance.nice.org.uk/PH24/Guidance/pdf/English>

framework for a Social Responsibility Levy. The first of these, the quantity discount ban, replicates what was already in place for the on-trade environment through the 2005 Act.

2.65 The Scottish Government's original intention had been to introduce a ban on quantity discounts in the off-trade together with minimum pricing in the 2010 Act as it was considered that without minimum pricing alongside a quantity discount ban, retailers may offer straight discounts from list price by simply lowering the price of individual alcohol products. Indeed, since the 2010 Act has come into force, we have seen retailers sell individual bottles of wine for £3.33 where previously they would have sold them as 3 for £10. Without a minimum price, retailers are able to offer straight discounting as low as they wish as there is no 'floor' price which they cannot go below. Minimum pricing did not receive sufficient support during the passage of the previous Alcohol Bill.

Minimum price per unit of alcohol

2.66 The Government is proposing that alcohol must not be sold on the premises at a price below its minimum price. This will be a mandatory condition for all premises and occasional licences issued under the 2005 Act.

2.67 The formula for calculating the minimum price of alcohol is set out in section 1 of the Bill. The minimum price of alcohol takes account of the strength of alcohol, which is determined by the Alcohol By Volume (ABV) measure, and the volume of the alcohol in litres. The formula for calculating the minimum price will apply to all products equally regardless of whether the products are domestically produced or imported.

2.68 The minimum price for a product is calculated as follows:

$$\text{price per unit of alcohol} \times \text{strength of product (ABV)} \times \text{volume of product} \times 100^*$$

* Note: the need to multiply by 100 is because ABV is expressed as a percentage

2.69 For example, for a 50p minimum price, a standard sized bottle of spirits (70cl) at 40% ABV would be £14.00 ($0.50 \times 40.0/100 \times 0.7 \times 100$). A bottle of wine (75cl) at 12% would be £4.50 ($0.50 \times 12.0/100 \times 0.75 \times 100$).

3. CONSULTATION

Public consultation

3.1 A public consultation *Changing Scotland's relationship with alcohol: a discussion paper on our strategic approach*¹⁰⁴ was launched on 17 June 2008 and closed on 9 September 2008. Minimum pricing was one of the measures included in the consultation. Given the proximity of the introduction of this Bill to the Alcohol Bill (which contained a minimum pricing measure at introduction in November 2009) the findings of the previous consultation are still relevant. There is no significant change in the proposed minimum pricing measure in this Bill to the previous Bill.

3.2 A total of 472 written responses¹⁰⁵ to the discussion paper were submitted to the Scottish Government. This included 259 responses from individuals, 207 responses from organisations and six combined or group responses. In addition, Scottish Government Ministers received 53 letters or emails on issues relating to the discussion paper from members of the public. What is clear from the responses is that most people agree that alcohol misuse is a profound problem in Scotland and they welcome the leadership the Scottish Government has shown in trying to address it.

3.3 The 207 organisations that submitted responses were broken down into 26 groups. All organisational responses were considered in the analysis but in order to provide comparative information about the views of key sectors, three main groupings of organisations were identified:

- Health promotion and addictions groups (62) – including 20 Alcohol and Drugs Addictions Teams, 19 addictions and lifestyle groups, 8 NHS Boards, 11 professional bodies / Royal Colleges;
- Trade and business sector organisations (58) – including 17 small retailers, 9 large retailers, 6 retail associations, 13 producers, and 10 miscellaneous trade and business organisations; and,
- Local Government and related bodies (41) – including 13 Councils, COSLA, 10 Licensing Boards, 6 Licensing Forums, 4 professional associations and 3 Community Councils.

3.4 In addition, responses were received from 46 'other' organisations, including national agencies and forums, youth organisations, voluntary groups and charities.

3.5 The quantitative analysis of the consultation responses was provided by independent consultants, Hexagon Research & Consulting¹⁰⁶. On minimum pricing, most respondents commented on whether minimum retail pricing should be introduced rather than on the proposed principles on which a scheme should be established as the discussion paper requested. Almost two thirds (65%) of all

¹⁰⁴ Scottish Government (2008) *Changing Scotland's relationship with alcohol: a discussion paper on our strategic approach*, Edinburgh: Scottish Government

¹⁰⁵ Available at: <http://www.scotland.gov.uk/Publications/2008/11/26115423/Contents>

¹⁰⁶ Hexagon Research and Consulting (2009) *Analysis of Responses to the Consultation on the Scottish Government's Strategic Approach to Changing Scotland's relationship with Alcohol*, Edinburgh: Scottish Government

responding organisations were in favour, while just under a quarter (23%) were opposed. Nine out of ten (90%) health organisations supported introducing minimum pricing, as did over eight out of ten (84%) local government bodies. Six out of ten (61%) trade and business sector organisations were opposed. Views amongst individual respondents were more mixed, with 49% who expressed an opinion in favour and 43% against.

3.6 Those in favour generally supported the rationale put forward in the discussion paper, that the increasing affordability of alcohol is one of the main drivers in higher consumption and harm. Various reasons were given by those who expressed opposition, including that minimum pricing was just a form of taxation; it would impact on 'responsible' drinkers and people on low income; and general opposition to the government setting prices.

3.7 Most of the organisations that supported minimum retail pricing did not comment on the principles outlined in the discussion paper but those that did suggested that minimum prices should be based on alcoholic strength and should apply across both off and on-sales.

Business

3.8 During the consultation and policy development process numerous discussions took place on the proposals in the Alcohol Bill with stakeholders. As regards minimum pricing, the discussions were on the principles of minimum pricing and not on any specific minimum price per unit.

3.9 Discussions on the principles of minimum pricing took place with the following stakeholders:

- Alcohol Concern
- Alcohol Focus Scotland
- Aldi GmbH
- Anheuser-Busch InBev
- Asda Stores Ltd
- Association of Chief Police Officers Scotland
- British Liver Trust
- British Medical Association
- Convention of Scottish Local Authorities
- Co-op
- Diageo plc
- The Edrington Group Ltd
- Federation of Small Businesses
- William Grant & Sons
- Marks and Spencer plc
- Wm Morrison Supermarkets plc
- J Sainsbury plc
- The Scottish Grocers' Federation
- Scottish Health Action on Alcohol Problems
- The Scottish Licensed Trade Association

- The Scotch Whisky Association
- Tesco plc
- The Wine and Spirits Trade Association
- Whyte and MacKay Ltd

3.10 In addition, discussion of the proposals took place at the meetings of the Scottish Government Alcohol Industry Partnership (SGAIP) and with the Law Society of Scotland Licensing Committee. The European Commission and the Office of Fair Trading were kept informed of the proposals throughout the development process. The SGAIP was formed in February 2007 in recognition of our shared aim to reduce alcohol misuse in Scotland. The Scottish Government and the alcohol industry agreed a number of actions to deliver a long term collaborative approach to tackling alcohol misuse in Scotland. The SGAIP has functioned and delivered successfully over the past 5 years, achieving its original objectives and effectively progressing individual work streams. Membership of the SGAIP includes both alcohol producers and retailers (covering both on and off-sales) and meetings are held quarterly, providing a constructive forum for members to work together to tackle alcohol misuse in Scotland, to promote responsible drinking and to understand the potential impact of our proposals on all concerned.

3.11 During progress of the Alcohol Bill, a further group was set up, the Retailers' Working Group, comprising Scottish Government, the Wine and Spirits Trade Association (WSTA), the Scottish Grocers Federation (SGF) and the Scottish Retail Consortium (SRC) to discuss how the proposals included in the Alcohol Bill would affect their members. This group represents the majority of alcohol retailers in Scotland. The WSTA represents businesses which work across the entirety of the supply chain in wines and spirits in Scotland and the UK. Their membership includes producers, importers, wholesalers, brand owners and off-licence retailers including supermarkets and specialist stores. The SGF is the trade association for the Scottish convenience store sector, representing most of the Scottish Co-ops, Somerfield, SPAR and local independent retailers. The SRC is a retail trade association and includes major high street retailers and supermarkets to trade associations representing smaller retailers.

3.12 Discussions were held with the Scotch Whisky Association (SWA) – a trade association - on the potential impact of the proposals. Its members do not all exclusively produce Scotch Whisky. For example, Diageo produces a wide range of other spirits such as vodka and gin.

3.13 The Scottish Government also had discussions with the Scottish Licensed Trade Association which represents the licensed trade in Scotland. Its membership includes hotels, public houses, restaurants, refreshment premises, entertainment premises and some off-sales premises.

3.14 As part of the wider consultation, the Scottish Government commissioned Young Scot to seek the views of young people aged 11-26 and a total of 492 responses were received. The Scottish Government also held a summit on underage drinking and as a legacy of that event, Ministers asked Young Scot to establish a Youth Commission on Alcohol to explore the issues for young people. The Commission presented its final report and findings to the Minister for Public

Health and Sport in March 2010 which is supportive of the Scottish Government's stance on a number of issues including action to address availability of cheap alcohol.

3.15 Although the re-introduction of a Bill on minimum pricing was not a change or addition to the strategic approach, the Scottish Government was keen to continue to have a dialogue with the alcohol industry. Both through the SGAIP, and directly with individual companies involved in the alcohol industry, the Scottish Government has continued to solicit views on the principle of minimum pricing throughout the summer/autumn of 2011. Specifically, members of the SGAIP were invited to provide an assessment of what they consider the likely impact of a minimum price per unit of alcohol might have on their business. Twelve responses were received from members: the Scottish Licensed Trade Association, Scottish Grocers' Federation, Chivas Brothers Ltd and Pernod Ricard UK, Scotch Whisky Association, Heineken UK, Molson Coors, Scottish Beer and Pub Association, Whyte & Mackay, Scottish Retail Consortium, Wine & Spirits Trade Association, Ian Macleod Distillers Ltd, and SABMiller. Views are included in the relevant paragraphs in section 5. Discussions also took place with the Office of Fair Trading regarding the proposals.

3.16 In addition, Scottish Government officials (Head of Public Health Division, Head of Legal Division for Health and Principal Legal Officer for Public Health) met relevant contacts in Brussels in October 2011 in order to inform them about minimum pricing and also to receive feedback on the proposals. The relevant contacts included those from Directorate General Health and Consumers (Sanco), Directorate General Trade, Directorate General Enterprise and Industry. Following this, the Cabinet Secretary for Health, Wellbeing and Cities Strategy, who leads on minimum pricing, met relevant contacts in February 2012 – Directorate General Health and Consumers Health Commissioner and officials from Directorate General Enterprise and Industry.

4. OPTIONS

4.1 In considering options for reducing alcohol consumption by increasing the price of alcohol, a number of price-based policy options were considered: the ‘do nothing’ option; introduce a prohibition of selling alcohol below a specific minimum price per unit; increase the tax on alcohol products and prevent the sale of alcohol below the price of any duty and value added tax (VAT). These options were considered in the impact assessment that accompanied the introduction of the Alcohol (Minimum Pricing) (Scotland) Bill¹⁰⁷ but are reproduced here for completeness.

‘Do nothing’ option

4.2 As previously mentioned, alcohol consumption in the UK has more than doubled since 1950 (illustrated in figure 1). Alcohol sales data from the Nielsen Company shows that enough alcohol was sold in Scotland in 2010 (and indeed every year since at least 2000) to enable every man and woman over the age of 16 to exceed the sensible weekly drinking limits for men every week of the year and, according to NHS Health Scotland, even these figures are likely to be under-estimates¹⁰⁸. In addition, these data also suggest that Scots, on average, are consuming almost 4.3 units (or 23%) per person per week more alcohol than their counterparts in England and Wales¹⁰⁹. The most recent estimate shows that alcohol misuse in Scotland cost an estimated £2.5bn to £4.6bn in 2007, with a midpoint estimate of £3.6bn¹¹⁰. For the midpoint estimate, this includes around £870m in lost productivity, a cost of around £270m to the NHS and around £730m in crime costs. “Do nothing” is not a feasible option. Despite recession and a record investment in prevention initiatives, alcohol sales in Scotland have been stable over the last few years and it would not be unreasonable to assume that unacceptably high levels of alcohol-related harm – and the cost associated with it – will persist without action.

‘Increase the tax on alcohol products’ option

4.3 The Scottish Government has noted the suggestion that the policy objective of protecting and improving public health by reducing alcohol consumption could, in theory, be achieved through increasing alcohol duty and taxation, and is often cited as a less intrusive method of achieving public health objectives. However, each case needs to be considered separately and the Scottish Government does not consider the option of taxation, on its own, with the current duty regime to be an effective alternative approach for the reasons set out below. It is interesting to note

¹⁰⁷ Scottish Government (2011) *Regulatory Impact Assessment for Alcohol (Minimum Pricing) (Scotland) Bill*, Edinburgh: Scottish Government
<http://www.scotland.gov.uk/Resource/Doc/1094/0122806.pdf>

¹⁰⁸ Thorpe, R., Robinson, M., McCartney, G., and Beeston, C. (2012) *Monitoring and Evaluating Scotland’s Alcohol Strategy: A review of the validity and reliability of alcohol retail sales data for the purpose of Monitoring and Evaluating Scotland’s Alcohol Strategy*, Edinburgh: NHS Health Scotland

¹⁰⁹ Robinson, M., Craig, N., McCartney, G., and Beeston, C. (2011) *Monitoring and Evaluating Scotland’s Alcohol Strategy: An update of alcohol sales and price band analyses*. Edinburgh: NHS Health Scotland

¹¹⁰ York Health Economics Consortium (2010) *The Societal Cost of Alcohol Misuse in Scotland for 2007*, Edinburgh: Scottish Government

that the UK Government is also pursuing a minimum pricing approach in order to tackle the cheap price of alcohol in the off-trade.

- There is evidence that across the board taxation increases do not have a targeted effect on the consumption of alcohol of those most at risk of alcohol-related harm¹¹¹. This is because harmful and hazardous drinkers consume a disproportionate amount of cheaper products¹¹². A minimum price is a measure that is targeted at products priced cheaply relative to their high strength.
- A straightforward increase in existing duty would impact on high price products as well as cheap ones and so would have a proportionately greater effect on moderate drinkers than a minimum price. When they are passed on, taxes affect all drinkers¹¹³, while minimum pricing only impacts on consumers who currently purchase alcohol below the minimum unit price. Minimum pricing recognises that many people in Scotland have a balanced, positive and enjoyable relationship with alcohol.
- Recent sales data¹¹⁴ estimates that about two-thirds (67%) of all pure alcohol sold in Scotland in 2010 was sold through the off-trade. The average price of a unit of alcohol sold through the off-trade in Scotland was 45p per unit and through the on-trade, 134p per unit. Minimum pricing and duty increases apply equally to both the on and off-trade. However, given that more alcohol is consumed in the off-trade than the on-trade and the price of a unit of alcohol is far cheaper in the off-trade, a pricing measure that predominantly affects the off-trade is likely to be more effective at tackling alcohol harms.
- Increases in taxation of alcohol will not necessarily result in a proportionate or indeed any increase in the price of alcohol as alcohol tax and duty increases are not always reflected in the price the consumer pays. For example, the Competition Commission's paper¹¹⁵ on pricing practices noted that ten grocery retailers (9 of whom operate across Scotland) engage in below cost selling to varying extents. The Competition Commission further notes that for most grocery retailers, the majority of below-cost sales relates to two or three products groups, alcohol being one. This suggests that tax increases are sometimes absorbed by the retailer, absorbed by the producer or offset against other products. This means the price paid by the

¹¹¹ E.g. Gruenwald et al. (2006) developed a model which shows that price increases targeted at the lowest cost brand would produce a greater reduction in sales than across the board price increases; Gruenwald, P.J., Ponicki, W.R., Holder, H.D., and Romelsjö, A. (2006) *Alcohol Prices, Beverage Quality, and the Demand for Alcohol: Quality Substitutions and Price Elasticities*, *Alcoholism Clinical and Experimental Research* 30 1: 96-105

¹¹² Booth, A. et al. (2008) *Independent Review of the Effects of Alcohol Pricing and Promotion Part A: Systematic Reviews*, Sheffield: University of Sheffield

¹¹³ Hunt, P., Rabinovich, L., and Baumberg, B. (2011) *Preliminary assessment of economic impacts of alcohol pricing options in the UK*, RAND Europe

¹¹⁴ Robinson, M., Craig, N., McCartney, G., and Beeston, C. (2011) *Monitoring and Evaluating Scotland's Alcohol Strategy: An update of alcohol sales and price band analyses*, Edinburgh: NHS Health Scotland

¹¹⁵ Competition Commission (2008) *Grocery inquiry: below cost selling*, See appendix 5.6 http://www.competition-commission.org.uk/rep_pub/reports/2008/fulltext/538_5_6.pdf

consumer can remain static, or reduce, resulting in no reduction in consumption and no reduction in harm. To the extent that prices are offset, customers are paying more for other groceries to subsidise alcohol consumption. Absorption also means that the level of tax needed to achieve the same reduction in harms as a minimum price per unit of 50 pence is difficult to ascertain.

- For a tax system to result in increases in the price of low-priced products but not in the price of high-priced products, the rate of tax would have to be higher for low-priced products. A tax increase based on price would disproportionately affect the market because low-priced, relatively low strength products would increase as much as that of low-priced, relatively high strength products; and depending on the level that the tax is set at, only the price of some alcohol products sold cheaply relative to their strength may increase.
- A scheme of taxation that was levied on a unit of alcohol and so treated products of the same strength in the same way would not comply with the current system of excise duty required by EU law. EU directives limit the ability to align duty with alcoholic content. Directives 92/83/EEC and 92/84/EEC make provision for minimum rates of excise duty on alcohol and specify methods for calculating the rate of duty. These Directives mean a rate of duty for wine needs to be based on the range of the alcoholic strength of each particular wine, rather than on the actual alcoholic strength of the wine and so prevent there being a scheme of taxation levied on a unit of alcohol. For example, wines of strength 8.5% to 15% would attract the same duty rate.
- Even if it was possible to formulate a scheme of taxation proportionate to the number of units of alcohol in a product, it would remain possible for retailers (particularly large supermarket chains) to absorb this tax by loss leading on alcohol and putting up the price of other products. The wholesale cost of individual alcohol products varies from time to time and, particularly in the context of retailers carrying different lines from individual suppliers, is susceptible to manipulation. Absorption could not be prevented by prohibiting sales below cost plus tax because cost would always be susceptible to manipulation. A prohibition on absorption would, in fact, only prevent absorption of tax. In order to have the same effect as a minimum price per unit, taxation would have to be set at the same level. This would result in a tax rate across all alcohol products at a considerably higher rate of tax than is currently in place.
- A minimum price per unit has the advantage of certainty. It is not open to absorption. It does not encourage cross-subsidisation between different products and product groups. Due to its simplicity, it is easier to understand, measure and enforce.
- Taxation might benefit the Scottish Government's budget. On the other hand, evidence suggests that minimum pricing may increase revenue across the drinks industry. However, the Scottish Government already has powers in other legislation to impose a social responsibility levy on retailers

'Prevent the sale of alcohol below the price of any duty and VAT' option

4.4 The Scottish Government has never considered that banning sales below a price comprised of duty plus VAT is an effective alternative approach to minimum pricing per unit of alcohol for a number of reasons. Based on current VAT and duty rates, this approach would create a minimum price which would be so low as to have little or no effect on public health and so would not achieve the Scottish Government's objective of reducing alcohol-related harm. Since taxes are not fixed by reference to their anticipated effects on health and, because taxes are not imposed uniformly, this approach may have a disproportionate effect on some products and not others. For example, the total tax on whisky is currently around 34p per unit and the tax on strong cider is approx 11p per unit. In the most recent Scottish modelling work a minimum price of 30p per unit is estimated to reduce consumption by 0.4%¹¹⁶, with no benefits for health harms in the first year, 13 fewer deaths over 10 years, and a reduction of 200 crimes a year.

4.5 The current UK Government had originally intended to introduce a pricing policy to prevent the sale of alcohol below cost. They experienced some difficulties, however, with determining what would constitute 'cost' and whether this information is commercially confidential. Such a policy would also be likely to discriminate against imported products as the 'cost' of an imported product compared with the equivalent domestic product would presumably be higher as it would include additional shipping costs. The UK government then announced in January 2011 that it was to introduce a ban on sales of alcohol below the rate of duty plus VAT¹¹⁷. This was due to come into force in April 2012. Their Impact Assessment stated that the policy would affect 0.4% of products (all in the off-trade), and that consumption would reduce by 0.34%. A report published in November 2011 by the Institute for Fiscal Studies¹¹⁸ stated that the ban on 'below-cost' sales (interpreted as duty and VAT) is "a very small policy in terms of its likely overall impact. We estimate it will affect only 1% of off-licence alcohol units, with virtually no impact on ciders and alcopops." The UK Government published their new Alcohol Strategy in March 2012¹¹⁹ setting out their commitment to introduce a minimum unit price, and confirming they were not taking forward their policy of banning the sale of alcohol below duty and VAT.

'Introduce a prohibition on sales of alcohol below a minimum price per unit' option

¹¹⁶ Meng, Y. et al. (2012) *Model-Based Appraisal of Alcohol Minimum Pricing and Off-Licensed Trade Discount Bans in Scotland using the Sheffield Alcohol Policy Model (v2): Second Update Based on Newly Available Data*, Sheffield: University of Sheffield

¹¹⁷ Written ministerial statement was laid in the House of Commons by James Brokenshire, Parliamentary Under-Secretary of State for Crime and Safety at the Home Office, and in the House of Lords by Baroness Neville-Jones on 18 January 2011, <http://www.publications.parliament.uk/pa/cm201011/cmhansrd/cm110118/wmstext/110118m0-001.htm#11011870000012>

¹¹⁸ Leicester, A. (2011) *Small Beer? Assessing the Government's alcohol policies* Institute for Fiscal Studies, <http://www.ifs.org.uk/publications/5923>

¹¹⁹ Home Office (2012) *The Government's Alcohol Strategy*, London: HM Government

4.6 This is the option being progressed by the Scottish Government as it is considered to be the most robust option available in meeting our goals of reducing alcohol consumption in Scotland (in particular, the consumption of cheaper alcohol), and addressing the harm alcohol misuse does to public health, crime, public services, productivity and the economy as a whole. In addition, it is the simplest option to understand and enforce and is transparent. The Sheffield studies show that there is strong and consistent evidence linking the price of alcohol to the demand for alcohol – increasing the price of alcohol reduces consumption and alcohol-related harm. In the most recent Scottish modelling work a minimum price of 50p per unit is estimated to reduce consumption by 5.7%¹²⁰.

4.7 The Sheffield study estimates that a 50p minimum price (exclusive of a discount ban) will lead to reductions in health, crime and employment harms. The greatest health benefits accrued from minimum pricing are seen amongst hazardous and harmful drinkers as they disproportionately consume more of the lower cost, high strength products. Table 1 summarises some of the main benefits estimated from a range of minimum prices based on the modelling carried out by the University of Sheffield¹²¹.

Table 1: Examples of Estimated Benefits from minimum price scenarios¹²²						
Policy	Health				Crime	Workplace
	Deaths		Hospital admissions		Total crimes	Days absence
Minimum price per unit	Yr 1	Yr 10	Yr 1	Yr 10	Per annum	Per annum
25p	+2	-4	+100	-100	-100	-700
30p	0	-13	0	-300	-200	-1,900
35p	-5	-38	-100	-800	-600	-4,500
40p	-17	-99	-500	-2,100	-1,200	-10,200
45p	-36	-196	-1,000	-4,100	-2,200	-19,600
50p	-60	-318	-1,600	-6,500	-3,500	-32,300
55p	-89	-464	-2,300	-9,300	-5,100	-48,200
60p	-120	-615	-3,100	-12,300	-6,800	-65,900
65p	-151	-759	-3,900	-15,200	-8,600	-84,000
70p	-182	-902	-4,800	-18,100	-10,500	-102,800

¹²⁰ Meng, Y. et al. (2012) *Model-based appraisal of alcohol minimum pricing and off-licensed trade discount bans in Scotland using the Sheffield Alcohol Policy Model (v.2): Second update based on newly available data* Sheffield: University of Sheffield
http://www.sheffield.ac.uk/polopoly_fs/1.1500211/file/scotlandupdatejan2012.pdf

¹²¹ *Ibid*

¹²² For health chronic conditions, there will be a 'time lag' between a reduction in consumption and the associated reduction in harm. This time lag is likely to vary across conditions. Following a review of the international literature Sheffield adopted a mean lag time of 10 years for all health conditions. The full effect of minimum pricing in reducing chronic health harms is therefore assumed to accrue after 10 years.

5. COSTS AND BENEFITS

5.1 The option being progressed by the Scottish Government is the introduction of a minimum price per unit of alcohol. The preferred level of minimum price is 50p per unit which is intended to be implemented in 2013. Following careful consideration of the available evidence on the scale of alcohol-related harms, the price distribution of alcohol sold in Scotland and the potential benefits accrued from different minimum unit prices the Scottish Government considers a 50p per unit minimum price provides a proportionate response to tackling alcohol misuse as it strikes a reasonable balance between public health and social benefits and intervention in the market. This section deals with the costs and benefits of this option.

Costs

5.2 In developing an understanding of how the proposal on minimum price in the Bill might impact on the various sectors affected, the Scottish Government found that much of the information which might have assisted this process is not in the public domain because it is commercially sensitive information held by individual companies. As noted in section 3, the Scottish Government has consulted with those groups that are likely to be affected and invited them to provide information in order to better understand their position. In particular, groups representing the alcohol industry have provided information relating to the costs of implementing minimum pricing. In many cases, however, the Scottish Government was not able to carry out an independent verification of this.

Benefits

5.3 As previously mentioned, the Sheffield report, *Model-based appraisal of alcohol minimum pricing and off-licensed trade discount bans in Scotland using the Sheffield Alcohol Policy Model (v.2): Second update based on newly available data*¹²³, forms part of this impact assessment. However, it should be noted that while this is an econometric model it is based on strong empirical evidence on the relationship between consumption, price and harm. Estimates of the harm reduction across a range of minimum prices, with particular emphasis on the impact for a 50p minimum unit price, are provided throughout the following section.

5.4 As set out above, the Scottish Government has already introduced one price based mechanism, an off-sales quantity discount ban. The discount ban modelling carried out by Sheffield was on the basis that all price-based promotions in the off-trade are banned i.e. quantity discounts and straight price reductions. The Sheffield modelling therefore goes further than what has been implemented in Scotland. The model estimates that a total ban on off-trade price-based promotions will reduce overall consumption by 3%. Since the ban is on quantity discounts only, the effect on consumption is likely to be less than 3% (as suggested in the preliminary NHS Health Scotland analysis – see paragraphs 2.54-2.57). The estimated impact of a

¹²³ Meng, Y. et al. (2012) *Model-based appraisal of alcohol minimum pricing and off-licensed trade discount bans in Scotland using the Sheffield Alcohol Policy Model (v.2): Second update based on newly available data*, Sheffield: University of Sheffield

50p minimum price plus a discount ban is provided in the following sections where relevant but caution is required when interpreting these data.

Robustness of modelling results

5.5 As regards margins of uncertainty around the costs and benefits, the Sheffield report details the range of sensitivity analyses undertaken including probabilistic sensitivity analysis around the elasticity values. The elasticity results proved to be robust and subject to very narrow confidence intervals.

5.6 In the original and previous updated analyses a set of sensitivity analyses were included to attempt to account for some key uncertainties. Further testing and adjusting of the baseline results took place using alternative assumptions around the differential responsiveness of moderate and heavier drinkers using a modelling assumption made by Chisholm et al (2004)¹²⁴. This showed that even where hazardous and harmful drinkers are assumed to be one third less responsive to price changes than moderate drinkers, the model results still show harmful drinkers as more responsive to minimum price policies¹²⁵. This effect arises because harmful drinkers are estimated from the Expenditure and Food Survey data to purchase more of the types of alcohol that are impacted by minimum price policies.

5.7 Sensitivity analyses were also carried out using an alternative data source for drinkers' preferences for off-trade versus on-trade consumption; differing assumptions around the risk functions for coronary heart disease; and alternative measures of attribution of crimes to alcohol consumption providing estimates based on a range of scenarios.

5.8 In addition, in the most recent update to the modelling, sensitivity analysis was carried out adjusting for unrecorded consumption in survey data. The most reliable source of information on total alcohol consumption in a population is considered to be data on average per capita consumption derived from official production, sales and/or customs figures (e.g. HMRC customs data for the UK, Nielsen sales data for Scotland)¹²⁶. The main alternative is from population-wide surveys (e.g., SHeS) which are known to substantially underestimate population level alcohol consumption¹²⁷. The Sheffield Alcohol Policy Model requires individual-level data which can only be obtained from survey data. There are formidable practical challenges in correcting survey data for under-coverage and a lack of available methodologies in the wider literature. Recently, however, researchers have proposed a method to adjust survey consumption¹²⁸. The

¹²⁴ Chisholm, D., Rehm, J., Van Ommeren, M., and Monteiro, M. (2004) *Reducing the global burden of hazardous alcohol use: a comparative cost-effectiveness analysis*, Journal of Studies on Alcohol and Drugs, 65(6):782-93

¹²⁵ Meng, Y. et al. (2012) *Model-based appraisal of alcohol minimum pricing and off-licensed trade discount bans in Scotland using the Sheffield Alcohol Policy Model (v.2): Second update based on newly available data*, Sheffield: University of Sheffield

¹²⁶ Gmel, G., and Rehm, J. (2004) *Measuring alcohol consumption*, Contemporary Drug Problems, 31: 467-540.

¹²⁷ Catto, S. and Gibbs, D (2009) *How much are people in Scotland really drinking?* Edinburgh: NHS Health Scotland

¹²⁸ Rehm, J. et al. (2010) *Statistical modelling of volume of alcohol exposure for epidemiological studies of population health: the US example*, Population Health Metrics, 8:3

researchers used this approach to carry out sensitivity analyses but it is likely to be subject to further revision and they consider it too early to adopt this methodology as standard. Results of all these sensitivity analyses are available in the annexes to the Sheffield reports. The description of the methodology for adjusting survey data is in section 2.6.2 of the 2012 Sheffield report and the results in Appendix 13. An overview of the sensitivity analyses is provided in paragraphs 5.34 and 5.35 below.

Sectors and groups affected

5.9 The proposals have the potential to impact on society as a whole given that alcohol misuse is estimated to have cost £2.5bn to £4.6bn (with a midpoint estimate of £3.6bn) in Scotland in 2007. The midpoint estimate of £3.6bn includes around £870m in lost productivity, a cost of around £270m to the NHS and around £730m in crime costs. Harms are not just experienced solely by the drinker but also by family and friends, communities, employers, and Scotland as a whole.

5.10 Minimum pricing will directly impact on consumers of alcohol and those involved in the alcohol industry: producers, distributors and retailers in both the off and on-trade. There will also be effects on those in the public sector responsible for enforcing the proposals such as Licensing Standards Officers, Licensing Boards, and the police. Any change in the volume of alcohol purchased will affect the UK Exchequer in the form of the duty and taxation collected by the UK Government. Alcohol-related harm affects rates of ill health, crime and employment. There will therefore be potential savings for the NHS through a change in the number of deaths, hospital admissions for acute and chronic illnesses and primary care consultations for alcohol problems; on the justice system this includes the police, the criminal justice system and victims of crime; and on the workplace in the form of the number of unemployed due to alcohol misuse and the sickness absence rate.

Consumers

5.11 Consumers who currently purchase alcohol priced at less than the minimum price per unit will be directly affected. Although all groups of consumers are predicted to alter their behaviour, modelling has demonstrated that those likely to be most affected are hazardous and harmful drinkers. This is supported by the findings from literature that young people and hazardous and harmful drinkers are most likely to consume low cost alcohol. Consumers will also be affected by any change in the level of societal harm associated with alcohol.

On and off-sales

5.12 Both on-sales and off-sales premises will be affected by setting a minimum unit price for alcoholic drinks. It is likely to have a greater impact on off-sales premises than on on-sales as the price of off-sales alcohol is generally lower than the price of on-sales alcohol (see figure 7 above). Off-sales may experience a reduction in the volume of sales and consumers may switch to purchasing some of their alcohol from on-sales premises.

5.13 In the UK, the retail sector (off-trade) consists of a small number of large supermarkets who dominate alcohol sales, a number of smaller supermarkets, a decreasing number of specialist retailers, and a large number of smaller grocers and corner shops. Nielsen maintains a database of all licensed trade premises in Great

Britain. In 2010 there were around 44,000 outlets. Of these, over 10,500 were multiple retailers and over 33,000 were classed as smaller “impulse” retailers: i.e. a store that is not the main grocery shop for consumers but one used for impulse or top up purchases¹²⁹. The hospitality sector (on-trade) consists of a small number of national chains and a large number of small pubs, clubs and restaurants. Independent pubs are increasingly being taken over by large beer producers¹³⁰.

Wholesalers and producers

5.14 Wholesalers and producers of alcohol will be affected as the volume of alcohol purchased at less than the minimum price per unit is expected to decline. The extent of the impact will depend on the quantity of alcohol they produce and sell that is priced at less than the minimum unit price.

5.15 Within Scotland production consists of a number of multinationals producing a range of products for worldwide markets and a large number of smaller producers. These firms source inputs from a number of smaller firms both in Scotland and abroad.

Production supply chain

5.16 In 2010 the whisky sector was the largest consumer of grain in Scotland using around 40% of the wheat and barley crop¹³¹. Barley is also used in the production of beer. If the reduction in domestic sales as a result of any minimum pricing were large enough, there could be a reduction in demand for grain from Scottish farmers. However, we note that over 90% of Scotch Whisky is exported so any decline in Scottish sales is likely to have a minimal impact on grain producers.

Local government

5.17 Local government will be affected as it will be the responsibility of Licensing Standards Officers to ensure compliance with minimum pricing and Licensing Boards to take action against businesses breaching the conditions.

UK Exchequer

5.18 The UK Exchequer will be affected through a change in the level of the duty and VAT associated with any changes in the volume and pattern of purchasing of alcohol products.

¹²⁹ Thorpe, R., Robinson, M., McCartney, G., and Beeston, C. (2011) *Monitoring and Evaluating Scotland's Alcohol Strategy: A review of the validity and reliability of alcohol retail sales data for the purpose of Monitoring and Evaluating Scotland's Alcohol Strategy*, Edinburgh: NHS Health Scotland

¹³⁰ Petrie, D. et al. (2011) *Scoping study of the economic impact on the alcohol industry of pricing and non-price policies to regulate the affordability and availability of alcohol in Scotland*. Edinburgh: NHS Health Scotland

¹³¹ Bell J (2010) *The Scotch whisky sector and grain supply and demand in Scotland*. SAC Consulting

Minimum price of alcohol

Benefits

Benefits to consumers

Health

5.19 In terms of health, the evidence is that increasing the price of alcohol (thereby reducing affordability) leads to a reduction in harm¹³². The University of Sheffield modelling estimates that there will be a reduction in both death and illness, and consequently hospital admissions, for all minimum prices over 30p. Table 2 shows estimates of some of the health benefits that could be achieved, with the impact for the preferred minimum price of 50p unit price highlighted.

Table 2: Health benefits of minimum price scenarios						
Policy	Deaths		Hospital admissions		QALYs¹³³ saved	
Minimum price per unit	Yr 1	Yr 10	Yr 1*	Yr 10	Yr 1	Yr 1-10**
25p	+2	-4	+100	-100	0	+100
30p	0	-13	0	-300	0	-200
35p	-5	-38	-100	-800	0	-1,100
40p	-17	-99	-500	-2,100	-100	-3,000
45p	-36	-196	-1,000	-4,100	-200	-6,000
50p	-60	-318	-1,600	-6,500	-300	-9,800
55p	-89	-464	-2,300	-9,300	-500	-14,400
60p	-120	-615	-3,100	-12,300	-700	-19,300
65p	-151	-759	-3,900	-15,200	-900	-24,000
70p	-182	-902	-4,800	-18,100	-1,100	-28,800

* Figures for hospital admissions are rounded to the nearest 100

** Figure is cumulative over 10 years and discounted at 3.5% consistent with current Her Majesty's Treasury advice.

5.20 For a 50p per unit minimum price, it estimated that deaths will reduce by around 60 within the first year of implementation and after 10 years there will be a full effect of around 318 fewer deaths per annum (equivalent to an annual reduction of 17% in overall alcohol-related mortality in Scotland). In the 10 year effect, deaths are differentially distributed across the groups with around 15 amongst moderate drinkers, around 135 amongst hazardous drinkers and around 169 amongst harmful drinkers. Alcohol-related illness is also predicted to decrease with an estimated reduction of around 1,200 chronic and acute illnesses within the first year. In the full 10 year effect, illnesses are expected to reduce by around 3,700 per annum differentially distributed across the groups with around 500 amongst moderate drinkers, around 1,300 amongst hazardous drinkers, and around 1,900 amongst

¹³² Booth, A. et al. (2008) *Independent Review of the Effects of Alcohol Pricing and Promotion Part A: Systematic Reviews*, Sheffield: University of Sheffield

¹³³ A quality adjusted life year is a measure of health outcome which combines quantity of life with quality: where 0 = death and 1 = 1 year in full health. Measured in this way a QALY of 0.5, for example, could be 6 months at full health or 1 year in a health state valued at 0.5.

harmful drinkers (data not shown). Hospital admissions are estimated to reduce by around 1,600 in the first year, and a full effect in year 10 of around 6,500 (equivalent to an annual reduction of 10%) differentially distributed across the groups with around 700 amongst moderate drinkers, around 2,100 amongst hazardous drinkers, and around 3,600 amongst harmful drinkers.

5.21 For a 50p per unit minimum price plus a discount ban deaths in the first year are estimated to reduce by 83 and by year 10 by 427 per annum. Illnesses are forecast to reduce by around 1,700 in year 1 and around 5,000 by year 10; hospital admissions by around 2,200 in year 1 and by around 8,600 in year 10.

5.22 Associated with a reduction in health harms are cost savings. Table 3 illustrates the estimated value of these for the range of minimum price scenarios modelled. With a minimum price of 50p per unit, healthcare service costs are estimated to reduce by around £6.7m in the first year, with a Quality Adjusted Life Years (QALY) gain valued at around £17.2m. For the full 10 year effect, the healthcare service costs are estimated to reduce by around £114m, with a QALY gain valued at around £492m.

Table 3: Value of health harm reduction (£million)						
Policy	Year 1 costs			Year 1 – 10 cumulative costs*		
Minimum price per unit	Health care costs	Health QALY value	Total	Health care costs	Health QALY value**	Total
25p	+0.4	+1.0	+1.4	+2	+7	+9
30p	+0.1	+0.3	+0.4	-2	-9	-11
35p	-0.5	-1.4	-1.9	-12	-53	-65
40p	-2.0	-5.1	-7.1	-35	-151	-186
45p	-4.0	-10.4	-14.4	-70	-301	-371
50p	-6.7	-17.2	-23.9	-114	-492	-606
55p	-9.9	-25.6	-35.5	-167	-720	-887
60p	-13.4	-34.7	-48.1	-224	-963	-1187
65p	-16.9	-44.0	-60.9	-280	-1,201	-1481
70p	-20.6	-53.6	-74.2	-338	-1,442	-1780

* Cumulative totals (year 1-10) are rounded to the nearest million

** Figure is cumulative over 10 years and discounted at 3.5% consistent with current HM Treasury advice

5.23 In the 50p per unit minimum price plus a discount ban scenario, the value of the reduction in health care costs is estimated to be £9.3m in year 1 (£33.5m including QALY valuation) and £156m (£826m including QALY) cumulatively, over 10 years.

Health benefits for those on low incomes

5.24 Whilst there is insufficient data to enable the reduction in health harms across different income groups to be modelled, the MESAS baseline report confirmed strong income/deprivation patterns to alcohol-related health harm¹³⁴. In 2009-10, alcohol-related discharge rates in the most deprived quintile (as measured by the Scottish Index of Multiple Deprivation (SIMD)) were 7.5 times greater than in the least deprived quintile, with a greater increase in rates in the more deprived quintiles since 2000-01. Alcohol-related mortality rates in the most deprived SIMD category were over 6 times higher than in the least deprived category. Analysis of SHeS 2008 and 2009 found that while 76% of men and 84% of women in the lowest income quintile did not drink or drank moderately, this group were also the most likely to drink at harmful levels (9% of men and 6% of women)¹³⁵. And significantly, average weekly consumption among low income harmful drinkers was much higher than among other harmful drinkers (93 units for men and 69 for women compared to 69 and 52 units respectively for harmful drinkers in the highest income group). This helps to explain the differential harm patterns described above. In addition those on low incomes are likely to be more responsive to minimum pricing¹³⁶. Given this, it is therefore likely that those in lower income/more deprived groups will benefit from the greatest reduction in health harms.

Crime

5.25 Overall, crime volumes are estimated to fall following the introduction of a minimum unit price. For a 50p per unit, this would be by around 3,500 offences per annum as shown in table 4. The distribution of the effect varies across the drinker groups with reductions in this case of around 800 offences from moderate drinkers, around 900 from hazardous drinkers and around 1,700 offences from harmful drinkers. The harm avoided in terms of victim quality of life¹³⁷ is valued at around £2.2m in the first year and around £20m over 10 years. Direct costs of crime are estimated to reduce by around £2.9m in the first year and by around £24m over 10 years (table 6 below).

¹³⁴ Beeston, C., Robinson, M., Craig, N., and Graham, L. (2011) *Monitoring and Evaluating Scotland's Alcohol Strategy. Setting the Scene: Theory of change and baseline picture*, Edinburgh: NHS Health Scotland

¹³⁵ Scottish Government (2010) *Scottish Health Survey 2009 - Volume 1: Main report* Edinburgh: Scottish Government <http://www.scotland.gov.uk/Publications/2010/09/23154223/0>

¹³⁶ Hunt, P., Rabinovich, L., and Baumberg, B. (2011) *Preliminary assessment of economic impacts of alcohol pricing options in the UK*, RAND Europe

¹³⁷ Following on from Dubourg et al (2005), direct physical and emotional impacts on victims of crime are valued at £81,000 per QALY.

Table 4: Estimated crime outcomes from minimum price scenarios (per annum)					
Minimum price per unit	Violent crime	Criminal damage	Other crime	Total crimes	QALYs of crime victims
25p	-0	-0	-100	-100	-0
30p	-0	-100	-100	-200	-0
35p	-100	-200	-300	-600	-0
40p	-200	-300	-700	-1,200	-0
45p	-300	-700	-1,200	-2,200	-0
50p	-500	-1,100	-1,900	-3,500	-0
55p	-800	-1,600	-2,800	-5,100	-0
60p	-1,000	-2,100	-3,700	-6,800	-100
65p	-1,300	-2,700	-4,700	-8,600	-100
70p	-1,600	-3,300	-5,700	-10,500	-100

5.26 A minimum unit price of 50p plus a discount ban is estimated to result in 4,700 fewer crimes per annum overall.

Employment

5.27 Workplace harms are estimated to reduce for all minimum prices modelled. The economy is estimated to benefit from a reduction in alcohol-related absence and from a reduction in the number of unemployed. For a minimum price of 50p per unit, this would be by around 1,300 fewer unemployed people and around 32,300 fewer sick days per year (table 5). The estimated reduction in unemployment is modelled for the harmful drinking group only. Sick days are differentially distributed across the groups with a reduction of around 11,000 amongst moderate drinkers, around 8,900 amongst hazardous drinkers and around 12,200 amongst harmful drinkers. For the first year after implementation, the cost of sick days is estimated to fall by around £3m and the cost of unemployment by £32.1m. The cost of sick days and unemployment is estimated to reduce by around £292m over 10 years.

Table 5: workplace outcomes from minimum price scenarios		
	Per annum	
Minimum price per unit	Days absence	Unemployed people
25p	-700	-100
30p	-1,900	-200
35p	-4,500	-300
40p	-10,200	-600
45p	-19,600	-900
50p	-32,300	-1,300
55p	-48,200	-1,700
60p	-65,900	-2,000
65p	-84,000	-2,300
70p	-102,800	-2,600

5.28 A minimum unit price of 50p plus a discount ban is estimated to result in 46,800 fewer days absence and 1,500 fewer unemployed.

Summary of financial benefits

5.29 The societal value of these harms can also be estimated from the modelling. The value is disaggregated as follows: NHS cost reductions, value of QALYs saved, crime costs saved, value of crime, QALYs saved and employment related harms avoided. In addition the societal value of these harm reductions over the 10 year period is estimated across the different drinker groups: moderate, hazardous and harmful.

5.30 Table 6 summarises the total estimated effects on individuals across a range of minimum price per unit scenarios. This illustrates the estimated financial value of harm reductions in health, crime and employment in the first year and over 10 years.

Table 6: Summary of financial valuation on health, crime and employment alcohol-related harms (£million)								
Minimum price per unit	Health (including QALYs)		Crime (including QALYs)		Employment		Total value of harm reduction (including QALYs)	
	Year 1	Over 10 years	Year 1	Over 10 years	Year 1	Over 10 years	Year 1	Over 10 years
25p	+1.4	+9	-0.2	-2	-2.4	-20	-1.2	-12
30p	+0.4	-11	-0.4	-3	-5.0	-42	-4.9	-56
35p	-1.9	-65	-0.8	-7	-9.5	-79	-12.3	-150
40p	-7.1	-186	-1.7	-15	-16.3	-135	-25.0	-336
45p	-14.4	-371	-3.1	-27	-25.0	-208	-42.5	-606
50p	-23.9	-606	-5.1	-44	-35.1	-292	-64.0	-942
55p	-35.5	-887	-7.4	-64	-46.0	-383	-88.8	-1,334
60p	-48.1	-1187	-10.0	-86	-56.0	-466	-114.1	-1,739
65p	-60.9	-1481	-12.6	-110	-64.0	-532	-137.6	-2,123
70p	-74.2	-1780	-15.4	-134	-71.9	-598	-161.5	-2,512

Note: Valuation over 10 years rounded to nearest £m

5.31 For a minimum price of 50p per unit plus a discount ban the reduction in health harm is estimated at £34m in year 1 and £826m over 10 years; the reduction in crime harm is estimated at £7m in year 1 and £59m over 10 years; the reduction in employment harm is estimated at £41m in year 1 and £342m over 10 years; with the total value of harm reduction estimated at £81m in year 1 and £1,227m over 10 years.

5.32 Table 7 illustrates that the harm reduction occurs in all drinker groups (over a 30p threshold) but predominantly in the harmful drinking group. All consumers (and indeed non drinkers) will benefit from a reduction in the level of alcohol-related harm within society.

Table 7: Value of harm reduction (including QALYs) by drinker group (£million)						
	Moderate		Hazardous		Harmful	
Minimum price per unit	Year 1	Over 10 years	Year 1	Over 10 years	Year 1	Over 10 years
25p	+1.3	+15	+0.4	+5	-2.9	-32
30p	+1.1	+11	+0.1	+1	-6.1	-67
35p	-0.0	-5	-0.5	-12	-11.7	-133
40p	-2.1	-37	-2.5	-57	-20.4	-242
45p	-5.1	-84	-5.7	-133	-31.6	-388
50p	-9.3	-147	-10.1	-235	-44.5	-558
55p	-14.5	-227	-15.5	-361	-58.3	-742
60p	-20.5	-315	-21.6	-499	-71.3	-920
65p	-27.0	-409	-27.9	-639	-81.7	-1,068
70p	-34.0	-508	-34.2	-778	-92.2	-1,216

Note: Valuation over 10 years rounded to nearest £m

5.33 A similar distribution of the impact is seen for a 50p minimum price per unit plus a discount ban: for moderate drinkers, the value of harm reduction in year 1 is estimated at £14m and over 10 years at £220m; for hazardous drinkers, the value of harm reduction in year 1 is estimated at £15m and over 10 years at £346m; for harmful drinkers, the value of harm, reduction is estimated at £52m in year 1 and over 10 years at £656m.

Benefit to consumers: sensitivity analyses

5.34 As outlined in paragraph 5.8 a number of sensitivity analyses were carried out by the University of Sheffield researchers. Table 8 outlines the results of these across key harm reduction outcomes. These are sourced from the detailed tables in the annexes for the 2012 Sheffield modelling report¹³⁸, which should be referred to for a fuller description of the methodology used in the sensitivity analyses and the results.

5.35 As previously described these sensitivity results are based on varying key variables within the model:

- a) Moderate vs. heavy drinkers: varies the assumption around the responsiveness of harmful drinkers. The sensitivity analysis assumes that they are a third less responsive than moderate drinkers. This results in reduced effectiveness of the policy but still shows a greater reduction in harmful drinkers' consumption because they drink more of the type of alcohol affected by minimum price policies.

¹³⁸ Meng, Y. et al. (2012) *Model-based appraisal of alcohol minimum pricing and off-licensed trade discount bans in Scotland using the Sheffield Alcohol Policy Model (v.2): Second update based on newly available data*, Sheffield: University of Sheffield

- b) Protective effect of Chronic Heart Disease (CHD): uses an alternative risk function of CHD which assumes a greater protective effect for moderate levels of alcohol consumption. This has a small effect on chronic illness, slightly reducing the estimated number of hospital admissions and deaths.
- c) Higher and lower crime alcohol attributable fractions (AAFs): varying the assumption around the alcohol attributable crime fractions impacts on the estimated number of crimes avoided due to minimum pricing. Even using a lower crime AAF results in a substantial estimated reduction in crime volumes.
- d) Nielsen preference for off-trade: the 2010 Nielsen sales figures suggest a lower percentage of sales in the off-trade than the Living Costs and Food Survey / Expenditure and Food Survey data: using the Nielsen figures reduces the estimated reduction in harm slightly.
- e) Survey data revised for under-recording: uplifting the survey data to a new baseline assumption on consumption levels results in a larger number of harms becoming attributed to alcohol and the policy becomes more effective. For instance, the reduction in consumption increases from 5.7% to 6.4% and the number of deaths avoided from 318 to 430 (per annum after 10 years).

Table 8: sensitivity results for some key outcome measures for a 50p minimum price policy							
Sensitivity analysis	Reduction in consumption (%)	Reduction in consumption – harmful drinkers (%)	Hospital admissions (year 10)	Deaths (year 10)	Crimes (per annum)	Days absence (per annum)	Total value of harm reduction (yrs 1- 10)
Baseline results	-5.7%	-10.7%	6,500	-318	-3,500	-32,300	£942m
a) Mod vs. heavy drinkers	-3.7%	-5.8%	4,300	-203	-2,400	-23,900	£608m
b) Protective effect of CHD	-5.7%	-10.7%	5,900	-269	-3,500	-32,300	£894m
c) Higher crime AAFs	-5.7%	-10.7%	6,500	-318	-8,600	-32,300	£1,003m
c) Lower crime AAFs	-5.7%	-10.7%	6,500	-318	-1,700	-32,300	£915m
d) Nielsen preference for off-trade	-5.0%	-10.4%	5,800	-288	-2,900	-26,200	£848m
e) Survey data revised for under-recording	-6.4%	-10.9%	9,200	-430	-4,500	-45,100	£1,667m

Benefits to retailers – off-trade

5.36 Minimum pricing is estimated to result in increased revenue to the alcohol industry as a whole. Table 9 shows the estimated increase associated with a range of minimum prices. For a minimum price of 50p there would be increased revenue (excluding VAT and duty) of around £98m per annum – £68m of which would accrue to the off-trade.

Table 9: Estimated change in total spending on alcohol (£million)					
Minimum price per unit	Off retail (excl duty +VAT)	On retail (excl duty +VAT)	Off: duty + VAT	On: duty + VAT	Total spending change
25p	+3.8	+1.9	-0.1	+0.7	+6.3
30p	+7.9	+4.2	-0.6	+1.4	+13.0
35p	+15.4	+8.0	-2.0	+2.7	+24.0
40p	+29.2	+13.7	-5.7	+4.7	+41.8
45p	+48.0	+21.1	-12.1	+7.3	+64.3
50p	+68.3	+29.3	-20.6	+10.1	+87.2
55p	+88.2	+38.3	-31.6	+13.2	+108.1
60p	+104.6	+47.7	-44.5	+16.5	+124.3
65p	+118.3	+57.6	-58.0	+19.8	+137.7
70p	+126.5	+68.5	-72.9	+23.3	+145.4

5.37 For a 50p per unit minimum price plus a discount ban the estimate is £124m in total with £91m accruing to the off-trade and £33m to the on-trade, excluding duty and VAT.

5.38 These are high-level estimates of revenue changes, and it is important to note that this is revenue and not profit. We do not know where the change in revenue may accrue i.e. whether the estimated increases benefit retailers, wholesalers or producers, or all of them to some extent. The alcohol market is highly segmented and this makes it particularly difficult to identify potential effects. For different products, where the additional revenue accrues will depend, to some extent, on the relative market power of different parts of the supply chain. The total increase in revenue at a minimum price of 50p represents 4.2% of the estimated value of total alcohol sales for both the on and off-trade sectors (£3,810m¹³⁹) in Scotland in 2010. It is worth noting that several of the responses received from industry indicated they did not consider the introduction of minimum pricing would result in additional revenue to the industry.

5.39 A minimum unit pricing policy is likely to affect the off-trade sector more than the on-trade sector as the average price of alcohol is lower in the off-trade sector. The average price of a unit of alcohol in the on-trade in 2010 was £1.34 whilst for the off-trade it was 45p¹⁴⁰. The majority of off-sales are from the large supermarket chains. Nielsen estimate that at least 70% of all alcohol off-sales are from “large multiple retailers” – Asda, Morrison’s, Tesco and Sainsbury’s¹⁴¹. The off-sales market is increasingly split between supermarket purchases at low prices (supermarkets have substantial buying power and the ability to negotiate lower prices from suppliers and producers) and impulse and convenience purchases from small shops with many traditional specialist off-licence retailers such as Oddbins or

¹³⁹ NHS Health Scotland: *datasetAlcoholSalesScotland EnglandAndWales 1994 –2010*
<http://www.healthscotland.com/documents/5435.aspx>

¹⁴⁰ Robinson, M., Craig, N., McCartney, G., and Beeston, C. (2011) *Monitoring and Evaluating Scotland’s Alcohol Strategy: An update of alcohol sales and price band analyses*. Edinburgh: NHS Health Scotland

¹⁴¹ Communication with NHS Health Scotland

Haddows forced to exit the industry¹⁴². A minimum price per unit may allow smaller chains and independent shops to better compete with the supermarkets in terms of price.

5.40 SWA¹⁴³ consider that any increased revenue is likely to be retained by retailers and do not consider any will be shared with producers. However, SWA also state that if retailers hold down the price of premium products and so undermine the brand's position in the market, producers will seek to raise prices to retailers in order to maintain the brand's position. Chivas Brothers Ltd, Pernod Ricard UK¹⁴⁴, and Heineken UK¹⁴⁵ consider retailers would retain any additional revenue. WSTA¹⁴⁶ consider, if there is any additional revenue, how it is shared will be part of a commercial conversation between retailer and suppliers. The RAND report for the Home Office¹⁴⁷ concluded that the evidence from the UK alcohol market suggested that major retailers of alcohol, operating in an oligopolistic market, have a relatively stronger bargaining position than producers.

5.41 Convenience stores' representatives¹⁴⁸ have said that they need to try to maintain low prices to compete with supermarkets, particularly as supermarkets continue to develop their "convenience store" format (such as Tesco Metro and Sainsbury's Central). They suggest a minimum unit price would reduce the ability of large supermarkets to undercut prices in smaller shops and allow the smaller shops to compete on non-price elements such as convenience. SGF consider at a minimum price of 45p and above, prices will increase through the inability of retailers to promote cheaper prices regularly as happens now. The convenience store sector should benefit from this through the creation of a 'level playing field' with supermarkets on alcohol.

5.42 As previously noted, some grocery retailers sell goods, including alcohol, at below-cost as a competitive strategy¹⁴⁹. This means that where this practice occurs those that drink moderately, or not at all, are subsidising those that drink heavily and purchase very low price alcohol. If this practice is no longer possible through the implementation of a minimum price per unit, it has been suggested that these retailers could consider lowering prices on other goods which are currently cross-

¹⁴² IBIS World Off-Licence Alcoholic Beverage Retailers Market Research Report | SIC G47.250 | July 2011 <http://www.ibisworld.co.uk/market-research/alcoholic-beverage-retailers.html>

¹⁴³ Scotch Whisky Association input to Business and Regulatory Impact Assessment through correspondence with Scottish Government, September 2011

¹⁴⁴ Chivas Brothers Ltd and Pernod Ricard UK input to Business and Regulatory Impact Assessment through correspondence with Scottish Government, September 2011

¹⁴⁵ Heineken UK input to Business and Regulatory Impact Assessment through correspondence with Scottish Government, September 2011

¹⁴⁶ Wine and Spirits Trade Association input to Business and Regulatory Impact Assessment through correspondence with Scottish Government, September 2011

¹⁴⁷ Hunt, P., Rabinovich, L., and Baumberg, B. (2011) *Preliminary assessment of economic impacts of alcohol pricing options in the UK*, RAND Europe

¹⁴⁸ Op. cit., correspondence with Scottish Government, September 2011

¹⁴⁹ Competition Commission (2008) Grocery inquiry: below cost selling (appendix 5.6), http://www.competition-commission.org.uk/rep_pub/reports/2008/fulltext/538_5_6.pdf

subsidising low prices on alcohol¹⁵⁰ such as CDs, DVDs, books, non-alcoholic beverages, confectionery, and health and beauty products.

5.43 SGF¹⁵¹ considered it was unlikely that retailers would use any additional revenue to reduce the prices of other commodities, however if this did happen they would be concerned if these products included bread and milk where there is near-price parity between supermarkets and smaller retailers.

5.44 Minimum pricing per unit could encourage an increase in advertising which may run counter to the aims of the legislation. The Scottish Government acknowledges that the imposition of minimum pricing will constrain price competition and that this may lead to an increase in non-price competition, including increased advertising or marketing. Through the evaluation of minimum unit pricing (see section 9) research will be commissioned to consider the impact on, and response of, the alcohol industry to minimum pricing.

Benefits to retailers – on-trade

5.45 Although, on average, on-trade prices are well above any potential minimum price, table 9 above illustrates they too are expected to see increased revenue. A 50p per unit minimum price results in estimated increased revenue to the alcohol industry (excluding VAT and duty) of around £98m per annum – £29m of which would accrue to the on-trade (£124m for a 50p minimum price with a discount ban with £33m accruing to the on-trade). Again it is unclear where the change in revenue may accrue i.e. whether the estimated increases benefit licensed premises, wholesalers or producers, or all of them to some extent. The alcohol market is highly segmented and this increases the difficulty in identifying potential effects. For different products, where the additional revenue accrues will depend, to some extent, on the relative market power of different parts of the supply chain.

5.46 The average price of a unit of alcohol in the on-trade in 2010 was £1.34 whilst for the off-trade it was 45p¹⁵². A minimum pricing policy is therefore likely to affect the off-trade sector more than the on-trade sector. SLTA¹⁵³ considers that few products in the on-trade would be affected at a 50p per unit minimum price. The on-trade sector revenue increases result from switching effects – as the differential between prices in the off-trade and on-trade reduces, the modelling predicts that some drinkers switch from purchasing in the off-trade to purchasing in the on-trade. This applies particularly to beer sales.

¹⁵⁰ Record, C. and Day, C. (2009) *Britain's alcohol market: how minimum alcohol prices could stop moderate drinkers subsidising those drinking at hazardous and harmful levels*, Clinical Medicine vol 9(5), 2009

¹⁵¹ Op. cit., through correspondence with Scottish Government, September 2011

¹⁵² Robinson, M., Craig, N., McCartney, G., and Beeston, C. (2011) *Monitoring and Evaluating Scotland's Alcohol Strategy: An update of alcohol sales and price band analyses*. Edinburgh: NHS Health Scotland

¹⁵³ Scottish Licensed Trade Association input to Business and Regulatory Impact Assessment through correspondence with Scottish Government, September 2011

Benefits to wholesalers

5.47 Minimum pricing is estimated to result in increased revenue to the alcohol industry as a whole. A 50p per unit minimum price generates an estimated increase (excluding VAT and duty) of £98m per annum with increases in both the off and on-trade sectors (£124m for a 50p minimum price with a discount ban). This is a high-level estimate of revenue changes and does not directly equate to increased profit. It is difficult to predict how this increase might be distributed across the supply chain. Wholesalers deal mainly with smaller retailers, and consider they will see very little change. In common with SGF, they consider that the introduction of minimum pricing may result in their customers being better able to compete with larger retailers.

Benefits to producers

5.48 Minimum pricing is estimated to result in increased revenue to the alcohol industry as a whole. A 50p minimum unit price generates an estimated increase (excluding VAT and duty) of £98m per annum with increases in both the off and on-trade sectors (£124m for a 50p minimum price with a discount ban). This is a high-level estimate of revenue changes. It was beyond the remit of the modelling to consider where the change in revenue may accrue. We do not know how that will be distributed across the supply chain within this highly segmented market and the extent to which producers may benefit.

5.49 There is no consistent view from the industry as to what the effect of a minimum price might be on producers. SWA¹⁵⁴ consider that any increased revenue is likely to be retained by retailers and do not consider any will be shared with producers. However, SWA also state that if retailers hold down the price of premium products and so undermine the brand's position in the market, producers will seek to raise prices to retailers in order to maintain the brand's position. Chivas Brothers Ltd and Pernod Ricard UK¹⁵⁵ state that, in their experience, retailers will not discuss retail pricing policy with their suppliers so consider it highly unlikely that retailers would seek to share the increased revenue with producers. Heineken UK¹⁵⁶ agree that any increased revenue would be retained by the retailer, although do mention it is difficult to assess the likely impact on the supply chain. However, SGF¹⁵⁷ consider producers would take the opportunity to increase their prices to the trade so they can benefit from the increased revenue. WSTA¹⁵⁸ consider, if there is any additional revenue, how it is shared will be part of a commercial conversation between retailer and suppliers.

Benefits to local government

5.50 As outlined in paragraphs 5.19 to 5.28, there are likely to be substantial savings in terms of health, crime and employment. Local authorities, for example, would benefit from the estimated reductions in crime and associated police and court costs. It is not possible to place an accurate cost on the potential saving to local authorities.

¹⁵⁴ Op. cit., correspondence with Scottish Government, September 2011

¹⁵⁵ Op. cit., correspondence with Scottish Government, September 2011

¹⁵⁶ Op. cit., correspondence with Scottish Government, September 2011

¹⁵⁷ Op. cit., correspondence with Scottish Government, September 2011

¹⁵⁸ Op. cit., correspondence with Scottish Government, September 2011

Benefits to central government

5.51 As outlined in paragraphs 5.19 to 5.28, there are likely to be substantial savings in terms of health, crime and employment. Central government, for example would benefit from the estimated reductions in NHS demand and an increase in the productivity of the workforce more generally. It is not possible to provide an accurate estimate of the amount of saving directly accrued by central government.

Costs

Costs to consumers

5.52 On the introduction of a minimum unit price, consumers directly affected will be those who previously purchased products priced below this (in particular, the evidence suggests that this will be hazardous and harmful drinkers). Consumers can be expected to respond to changes in price by reducing their consumption of an alcoholic product if the price increases, or by switching to alternative products (substitutes) whose relative price has decreased. The extent to which this happens will depend on consumers' price responsiveness, known as own-price elasticity (PED) and cross-price elasticities (XED) of demand, which will determine change in consumption and switching behaviour.

5.53 Knowledge of price elasticities is crucial in, for example, determining the impact of the change in duty rates. HMRC has a costing model in which price elasticities are one of the most important inputs. Their most recent work estimating elasticities, *Econometric Analysis of Alcohol Consumption in the UK*¹⁵⁹, lists over 30 studies¹⁶⁰ which they consider show that “*there is fairly conclusive and longstanding evidence that price has a negative impact on alcohol consumption in the UK*”¹⁶¹.

5.54 Estimates of elasticity are crucial to the Sheffield model which essentially works in two stages. The first stage models elasticities taking into account on and off-trade, different types of products and different categories of drinker. This produces detailed tables which show that most products are substitutes to each other so a price increase in one product leads to increased consumption of other goods (switching).

5.55 The Sheffield modelling separated drinkers into the categories moderate, hazardous and harmful. The results show that whilst the introduction of a minimum price for a unit of alcohol leads to a decrease in consumption, it would result in an increase in consumers' spending, particularly for hazardous and harmful drinkers as they consume the most alcohol and tend to consume cheaper products. The model takes into account switching behaviour through incorporating elasticities which provide information on the responsiveness of the population to price changes. The effects are slightly larger for hazardous and harmful drinkers than for moderate drinkers i.e. they are more responsive to price change. Table 10 shows the estimated effect on consumption and consumers' spending for all drinkers for a range of minimum prices and table 11 shows the estimated effect on consumers' spending disaggregated by drinker group. For a 50p minimum unit price, spending by moderate drinkers is estimated to increase by around £8 per annum, hazardous drinkers by £54, and harmful drinkers would increase their spending on alcohol by around £123 per year. Hazardous and harmful drinkers are also estimated to reduce their consumption the most (by 4.8% and 10.7% respectively).

¹⁵⁹ Collis, A., Grayson, A., and Johal, S. (2010) *Econometric Analysis of Alcohol Consumption in the UK: HMRC Working paper 10*, London: HMRC

¹⁶⁰ *Ibid*, Table 1

¹⁶¹ *Ibid*, page 7

Table 10: minimum price: impact on consumption and spending			
Minimum price per unit	Change in mean annual consumption for all drinkers – all beverages	Change in spend for all drinkers per annum	Total spending change for all consumers
	(%)	(£)	(£m)
25p	-0.1	+1.70	+6.3
30p	-0.4	+3.53	+13.0
35p	-0.8	+6.52	+24.0
40p	-1.9	+11.36	+41.8
45p	-3.5	+17.46	+64.3
50p	-5.7	+23.67	+87.2
55p	-8.3	+29.36	+108.1
60p	-11.1	+33.74	+124.3
65p	-14.0	+37.40	+137.7
70p	-16.9	+39.49	+145.4

5.56 For a minimum price of 50p per unit plus a discount ban the estimate is a reduction of 7.8% with an increased spend of £29.56 per drinker per annum, and a total spending change of £108.9m for all consumers.

Table 11: minimum price: impact on consumption and spending by drinker type						
Minimum price per unit	Moderate drinkers		Hazardous drinkers		Harmful drinkers	
	Change in mean annual consumption per drinker – all beverages	Change in spend per drinker per annum	Change in mean annual consumption per drinker – all beverages	Change in spend per drinker per annum	Change in mean annual consumption per drinker – all beverages	Change in spend per drinker per annum
	(%)	(£)	(%)	(£)	(%)	(£)
25p	+0	+0.50	-0	+3.89	-0.6	+10.35
30p	-0	+0.96	-0.1	+8.35	-1.2	+21.18
35p	-0.2	+1.80	-0.3	+15.44	-2.5	+38.69
40p	-0.7	+3.31	-1.2	+26.54	-4.5	+66.43
45p	-1.5	+5.51	-2.7	+40.33	-7.3	+97.76
50p	-2.8	+8.19	-4.8	+54.31	-10.7	+123.42
55p	-4.3	+11.17	-7.5	+67.14	-14.6	+138.71
60p	-6.1	+14.06	-10.5	+76.78	-18.6	+142.74
65p	-8.0	+16.65	-13.6	+83.87	-22.2	+147.74
70p	-10.0	+18.82	-16.7	+87.94	-25.9	+140.04

5.57 For a minimum price of 50p per unit plus a discount ban the moderate drinker is estimated to reduce mean annual consumption by 4.3% with an increase in spend of £11.41 per annum; the hazardous drinker is estimated to reduce mean annual consumption by 7.3% with an increase in spend of £65.17 per annum; the harmful

drinker is estimated to reduce mean annual consumption by 12.8% with an increase in spend of £147.54 per annum.

5.58 In terms of consumer spending, for a minimum price of 50p per unit the figures represent an increased spend of approximately 4.2% per year – split by 2.8%, 5.3% and 4.9% for moderate, hazardous and harmful drinkers respectively. The effect of a 50p per unit minimum price is estimated to increase overall spend by consumers by around £87m per annum(including duty and VAT), as shown in table 12, with moderate drinkers spending around £21m more per annum, hazardous drinkers around £43m more per annum and harmful drinkers around £22m more per annum. This additional spend needs to be balanced against the cost saving associated with reduced harms.

Table 12: Effect on drinkers for total population (£m): 50p per unit minimum price					
		Scotland	Moderate	Hazardous	Harmful
Total change in value of sales for population	Off-trade per annum	+47.7	+13.3	+23.1	+11.1
	On-trade per annum	+39.4	+7.8	+20.0	+11.4
	Total per annum	+87.2	+21.1	+43.1	+22.4

5.59 For a minimum unit price of 50p per unit plus a discount ban the estimated total increase in spend for the population is £109m.

5.60 Chivas Brothers Ltd and Pernod Ricard UK¹⁶² consider product ranges could be reduced thereby resulting in less choice for consumers. Retailers are only able to display alcohol in a pre-determined alcohol display area so they could be forced to reduce the product range in order to concentrate on those products that deliver consistent sales. It is not known which products these might be given it is not known what the shift in consumer behaviour might be. WSTA¹⁶³ consider, as many logistics operations are UK wide, significant changes will have to be made as a result of minimum pricing which will incur excess cost to the industry and will result in less consumer choice.

Consumers on low incomes

5.61 Using increased price to manage the demand for alcohol is recommended by the WHO as one of the most effective interventions available to reduce consumption and associated harm. However without an accompanying increase in income (which would negate the effect) it is likely to be regressive. That is, proportionately, the impact is likely to be greater on those with lower incomes who purchase alcohol as the cost of any alcohol will make up a larger proportion of their income.

5.62 Analysis of Scottish Health Survey 2008 and 2009 (combined) data shows that those with the lowest household income are most likely to drink nothing, or very

¹⁶² Op. cit., correspondence with Scottish Government, September 2011

¹⁶³ Op. cit., correspondence with Scottish Government, September 2011

heavily. Men in the lowest household income quintile in Scotland are five times more likely to abstain from drinking than those in the most affluent quintile (20% compared to 4%) and women more than three times (23% compared to 7%) and therefore will not be affected by minimum pricing. A further 56% of men and 61% of women of those on the lowest income drink moderately, with average weekly consumption of 6.9 and 3.1 units respectively¹⁶⁴. This group will be largely unaffected by minimum pricing by virtue of the small amount of alcohol consumed.

5.63 However, 9% of men and 6% of women in the lowest household income quintile drink at harmful levels, the largest percentage of any income quintile. And these harmful drinkers drink significantly more (an average of 93 units for men and 69 units for women, per week) compared with those with the highest incomes (69 and 52 units respectively per week)¹⁶⁵. Those consumers drinking at very high levels will clearly be affected by the introduction of minimum pricing. The exact impact will depend on the proportion of alcohol currently being bought below any minimum price threshold and their responsiveness to price changes. The aim of the policy includes, in particular, targeting a reduction in consumption of alcohol by such harmful drinkers.

5.64 Analysis on expenditure data published by SHAAP¹⁶⁶ showed that all income groups purchase low price off-sales alcohol and confirmed that low income households are less likely to purchase off-sales alcohol at all. Further, it concluded that the relationship between income group and the amount of alcohol purchased at the cheapest price (below 30p a unit) is not particularly strong and that middle-to-higher income groups are the main purchasers of alcohol priced between 30p and 50p. When propensity to purchase alcohol is taken into account the lowest income groups are among the least likely to buy cheap alcohol. However, for those in low income groups who do buy alcohol, cheap alcohol makes up a proportionally larger share of the total alcohol bought.

5.65 A recent paper¹⁶⁷ also demonstrated that low-income households are not the predominant purchasers of any alcohol or even of cheap alcohol. It found that at the population level minimum pricing in the UK is unlikely to be significantly regressive. It concluded that minimum pricing will affect the minority of low-income households that purchase off-trade alcohol and, within this group, those most likely to be affected are households purchasing at a harmful level.

5.66 In oral evidence to the Health and Sport Committee of the Scottish Parliament, a senior research consultant at the Institute for Fiscal Studies (IFS) described how their work had estimated that, while minimum unit pricing could

¹⁶⁴ Scottish Government (2010) *Scottish Health Survey 2009 - Volume 1: Main report*, Edinburgh: Scottish Government <http://www.scotland.gov.uk/Publications/2010/09/23154223/0>

¹⁶⁵ *Ibid*

¹⁶⁶ Ludbrook, A. (2010) *Purchasing patterns for low price off-sales alcohol: evidence from the Expenditure and Food Survey*, Edinburgh: SHAAP

¹⁶⁷ Ludbrook, A. at al. (2012) *Tackling Alcohol Misuse: Purchasing Patterns Affected by Minimum Pricing for Alcohol*, Applied Health Economics and Health Policy, Volume 10, Number 1

potentially have a slightly bigger effect on lower-income groups, this would not be substantial¹⁶⁸.

Costs to retailers – off-trade

Sales

5.67 For all minimum price scenarios the University of Sheffield modelling estimates an increase in revenue to the alcohol industry as a whole (note revenue not profit). For a 50p unit minimum price it is estimated to result in an increase (excluding VAT and duty) of £98m per annum – £68m to the off-trade. Any effect on retailers would need to take into account that this overall impact is estimated to be as a result of a reduction in the volume of sales but with increased prices.

5.68 Alcohol industry sales data¹⁶⁹ shows that 51.1 million litres of pure alcohol was sold through both the on and off-trade in Scotland in 2010. Of this 67% was sold through the off-trade and approximately a third (33%) through the on-trade. Within the off-trade sector:

- 32% was sold as spirits (including 41% as vodka and 25% as blended whisky);
- 33% as light wine;
- 24% as beer;
- 7% as cider;
- 4% as 'other'.

5.69 For a minimum price of 50p per unit, the modelling estimates that for sales of spirits in the off-trade there would be a reduction of approximately 15 units per drinker per year¹⁷⁰ – or less than two thirds of a bottle¹⁷¹. The modelling also estimates a marginal increase in the amount of spirits sold via the on-trade. Using the baseline population and consumption data in the Sheffield report (shown for example in table 3.1 of the 2012 report, a drinking population of 3,683,040 consuming an average of 123.6 units of spirits from off-sales per annum and 41.7 from on-sales) and the model results in terms of the reduction in units across different types of drink (shown in table 3.7 of the 2012 report), the overall reduction is estimated at around 9% of total spirit consumption (on and off-trade) shown in the model. This represents around 2 million bottles of spirits a year across all types of spirits (assuming an ABV of 37.5%) and both imported and domestic products. For a minimum price of 50p plus a discount ban the reduction is estimated to be around 10%.

¹⁶⁸ Andrew Leicester, Senior Research Consultant, Institute for Fiscal Studies in oral evidence to the Health and Sport Committee, 24 January 2012

<http://www.scottish.parliament.uk/parliamentarybusiness/28862.aspx?r=6852&mode=pdf>

¹⁶⁹ Robinson, M., Craig, N., McCartney, G., and Beeston, C. (2011) *Monitoring and Evaluating Scotland's Alcohol Strategy: An update of alcohol sales and price band analyses*. Edinburgh: NHS Health Scotland

¹⁷⁰ Meng, Y. et al. (2012) *Model-based appraisal of alcohol minimum pricing and off-licensed trade discount bans in Scotland using the Sheffield Alcohol Policy Model (v.2): Second update based on newly available data*, Sheffield: University of Sheffield, Table 3.1.4.

¹⁷¹ Assuming a bottle = 700mls with an ABV of 37.5%.

5.70 The modelling was not able to estimate the potential impact at the level of different types of spirit but the price band data, referred to in paragraphs 2.39 to 2.42, provides detail on the price distribution of off-sales in 2010. It indicates that, in terms of pure alcohol, vodka has the largest share of the off-trade spirits market in Scotland, and that 92% of those vodka sales were below 50p per unit, equivalent to £13.13 per 70cl bottle (with almost 40% below 35p per unit, equivalent to £9.19 per 70cl bottle). For whisky, the percentage sold at below 50p per unit was 72%, equivalent to £14 per 70cl bottle (with 15% retailing at below 35p per unit, equivalent to £9.80 per 70cl bottle). Again as noted in paragraph 41, due to general increases in price, we would anticipate that these percentages will be lower in 2011 and 2012.

5.71 For beer and cider the model estimates that with a minimum price of 50p per unit there would be a reduction in consumption of around 27 units per drinker per year from off-sales. The modelling does not distinguish between different types or strengths of beer. It estimates that the reduction in off-sales of beer would be offset to a degree by switching to the on-trade. Again, based on the baseline population and consumption figures in the Sheffield 2012 report, and the model results in terms of the reduction in units across different types of drink, the overall decrease in beer and cider sales would be around 6%. For a 50p minimum price plus a discount ban the reduction would be nearer 7%.

5.72 At a minimum price of 50p per unit, the modelling estimates a small decrease in wine sold as off-sales and a marginal increase in on-sales. Using similar methodology the decrease in off-sales of wine is estimated to be around 3%. For a minimum price of 50p plus a discount ban the estimate is a reduction of 8%.

5.73 Large and small retailers are likely to be affected differently. Larger retailers sell large volumes of popular brands (often priced very competitively) and also a greater range of products. Convenience stores' representatives¹⁷² have said that they need to maintain low prices to compete with supermarkets, particularly as supermarkets continue to develop their "convenience store" format (such as Tesco Metro and Sainsbury's Central) putting pressure on independent retailers to compete with them on price. Action by large retailers to lower the price of individual items following the implementation of the quantity discount ban in the Alcohol etc. (Scotland) Act 2010, which came into force on 1 October 2011, illustrates how difficult it can be for smaller retailers to compete on price. For example, some large retailers, prior to the implementation of the Act, were selling 3 bottles of wine for £10 on offer. Since this has now been banned, some retailers have reduced prices and are selling some bottles of wine for £3.33 each.

5.74 In their response to the minimum pricing proposals, SGF members¹⁷³ consider that a minimum price of between 25p-49p would impact on up to 30% of products (mainly cider and cheaper spirits); a minimum price of between 50p-69p would impact on up to 90% of products; a minimum price of 70p or over would impact on all products. In their previous response, SGF estimated that a minimum

¹⁷² Op. cit., correspondence with Scottish Government, September 2011

¹⁷³ *Ibid*

price of 50p would result in a reduction in sales of 10%. SWA¹⁷⁴ estimate that a minimum price of 50p would result in a reduction of Scotch Whisky sales in Scotland by 15% which equates to a reduction in sales of £23m (using the Wagenaar elasticities) and will have a significant impact on the Scottish market. They also consider the effect on sales will have a throughput effect on suppliers of such items as bottles, labels, cases etc. and further down the line it will impact on transport, farmers, maltsters and ultimately investment.

5.75 In their response, SGF¹⁷⁵ considered it was unlikely that retailers would use the additional revenue to reduce the prices of other commodities, however if this did happen they would be concerned if these products included bread and milk where there is near-price parity between supermarkets and smaller retailers.

Implementation cost

5.76 There will be costs to retailers associated with the implementation of a minimum pricing scheme such as re-pricing products, altering bar codes and shelf tickets. The costs to retailers that operate only in Scotland will form part of their usual operational practice when altering prices. Those retailers that operate on a UK-wide basis may incur costs associated with a different pricing and promotion regime operating in Scotland. These retailers are predominantly large supermarket chains who potentially have the resources available to investigate the most cost effective method of implementing differential pricing across stores in different parts of the UK. Given large retailers may also increase their revenue on the introduction of minimum pricing, we do not believe implementation costs will be substantial.

5.77 A study on how often prices change for products in supermarkets, using weekly scanning data collected by Nielsen (including alcohol), shows that around 40% of prices in supermarkets change frequently. Around 25% of changes are adjusting for temporary reductions and, in any one week, 29% of alcohol prices rose and 29% fell¹⁷⁶. Any changes in alcohol duty imposed by the UK government also result in the need to re-price, and often at very short notice (for example, midnight that day). The 50p per unit minimum price will determine the proportion of products which will require re-pricing following the introduction of a minimum price (the price distribution shown in paragraph 2.39 provides an indication). Prior to implementation the Scottish Government will work with retailers in order to identify how best to achieve implementation and to discuss any issues which might need addressed. The Scottish Government will produce guidance for the Bill. It would appear, however, that altering prices is not an unusual activity.

5.78 Additional costs are unlikely to be significant for stores with head office support; however for independent / unattached retailers this may be equivalent to one member of staff for several days. If it is assumed that one shopfloor worker earning £6.08 per hour (national minimum wage for 21 years and over)¹⁷⁷ is

¹⁷⁴ Op. cit., correspondence with Scottish Government, September 2011

¹⁷⁵ Op. cit., through correspondence with Scottish Government, September 2011

¹⁷⁶ Ellis, C (2009). *Do supermarket prices change from week to week?*, Bank of England Working Paper No. 378

¹⁷⁷ http://www.direct.gov.uk/en/employment/employees/thenationalminimumwage/dg_10027201, accessed 14 June 2012

employed for 16 hours this would cost the employer approximately £117 per worker (including costs). It is unclear how many retailers would be affected in this way. In 2010-11 there were around 16,300 premises licence in operation in Scotland¹⁷⁸. The data does not allow identification of how many of these were off-sales. In 2007, 3,224 of the 17,021 premises licences in force in Scotland were off-sale liquor licences¹⁷⁹. Assuming proportions remain roughly the same, applying this cost to all gives a total incurred of around £377,000.

5.79 SGF¹⁸⁰ consider the wholesale distributor would be required to calculate all products' prices in order to determine the wholesale selling price and retail selling price to ensure compliance with the minimum price and that "fair profit" was shared between wholesale and retail. The Scottish Government considers it would not be *necessary* for wholesalers to check prices as they will not be subject to any minimum pricing requirement (due to their trade-to-trade sales). Wholesalers may choose to increase prices in the knowledge that retail prices of certain goods have increased but that will be for individual companies within the supply chain to determine.

5.80 Heineken UK¹⁸¹ considers there will be increased costs in allowing for two different pricing systems north and south of the border. Multiple grocers would potentially be able to absorb these costs, but the "average independent retailer" would be potentially less able to, so their overall business performance could be impacted. WSTA¹⁸² point out that retailers have already incurred significant costs relating to the 2010 Act coming into force and minimum pricing will result in a further cost. Chivas Brothers Ltd and Pernod Ricard UK¹⁸³ consider it is possible that large retailers will seek compensatory funding from suppliers in order to recoup facilitation and implementation costs. The Scottish Government considers this is unlikely given large retailers may increase their revenue on the introduction of minimum pricing, so will be well able to absorb facilitation and implementation costs. An alternative approach for those that operate on a UK-wide basis would be to use the Scottish pricing regime across the whole of the UK thus minimising the cost of operating different pricing structures.

Cross-border

5.81 There may be a loss of trade for Scottish retailers due to an element of cross-border alcohol tourism in order to take advantage of those areas in the UK that do not have minimum pricing in place, or have a lower level of minimum pricing. In other jurisdictions where there are different costs on either side of a border, which may be due to different currencies, different taxation regimes, or as in Canadian provinces, minimum pricing for alcohol, there is an incentive to cross the border to

¹⁷⁸ Scottish Government (2012) *Statistical Bulletin Crime and Justice Series: Scottish Liquor Licensing Statistics 2010-11*, Edinburgh: Scottish Government
<http://www.scotland.gov.uk/Topics/Statistics/Browse/Crime-Justice/Datasets/DatasetsLiquor/LiqLic2010-11>

¹⁷⁹ Scottish Government (2008) *Statistical Bulletin Crime and Justice Series: Scottish Liquor Licensing Statistics, 2007* <http://www.scotland.gov.uk/Publications/2008/08/11160147/12>

¹⁸⁰ Op. cit., through correspondence with Scottish Government, September 2011

¹⁸¹ Op. cit., correspondence with Scottish Government, September 2011

¹⁸² Op. cit., correspondence with Scottish Government, September 2011

¹⁸³ Op. cit., correspondence with Scottish Government, September 2011

purchase goods. This is most likely to occur when it is easy and convenient to do so, thus incurring little cost; and/or where the incentive i.e. the price differential, is great enough to counterbalance any additional cost incurred. In Scotland this will be around the border where it is convenient to shop in England. The majority of the Scottish population live a considerable distance from the English border, with only 5%¹⁸⁴ of the population living in the regions adjacent to the English border – Scottish Borders and Dumfries and Galloway.

5.82 The majority of the population (around 70%) live in the Central Belt with Glasgow and Edinburgh being the most populated cities. A round trip from Glasgow to Carlisle (the nearest large town across the English border) involves a journey of just under 200 miles. Assuming an average of 40 miles per gallon, and a fuel cost per gallon of around £6.47 (equivalent to 142.2p per litre¹⁸⁵) the journey would cost over £32 in petrol/diesel alone and take a minimum of 3-4 hours. Additional running costs of around 45p per mile¹⁸⁶ (based on an annual mileage of 15,000 miles and an engine size of 1.2 – 1.6l) adds £90 to the cost. So, in order to justify a £120 travel cost, assuming that the purchased alcohol in England costs an average of 40p per unit, with a minimum price of 50p per unit in Scotland, the consumer would need to buy the equivalent of 1,200 units of alcohol (equivalent to 43 bottles of whisky or 45 bottles of vodka or 133 bottles of wine at 12% ABV) simply to break even. This estimate does not include a cost for the time element involved. Even a round trip from Dumfries (one of the main towns in the Scottish border region) to Carlisle involves a journey of nearly 70 miles. So although there may be an element of cross border activity, for most Scots, purchasing in England would incur both a time and travel cost (e.g. petrol and depreciation). This is likely to outweigh any savings on the price of alcohol.

5.83 The WSTA cite the example of higher sales of alcohol in Northern Ireland due to the increase in the numbers of people travelling from the Republic of Ireland to Northern Ireland to take advantage of cheaper alcohol deals. This issue of cross-border shopping has been addressed in a report conducted by the Office of the Revenue Commissioners and the Central Statistics Office for the Irish Department of Finance¹⁸⁷. The report notes that the main causes of price differentials between goods in Northern Ireland and the Republic of Ireland were operating costs, profit margin, taxes and, in particular, the rapid depreciation of Sterling against the Euro (depreciation of around 30% between January and December 2008). These are specific circumstances where it is not just alcohol that is cheaper – people are travelling to do their whole grocery shop.

¹⁸⁴ From General Register Office for Scotland, *Mid 2010 Population Estimates Scotland*, Table 2. <http://www.gro-scotland.gov.uk/statistics/theme/population/estimates/mid-year/2010/tables.html>

¹⁸⁵ AA *Fuel Price Report April 2012*, Average Scotland price for unleaded fuel http://www.theaa.com/motoring_advice/fuel/index.html

¹⁸⁶ AA Running Costs tables: http://www.theaa.com/allaboutcars/advice/advice_rcosts_petrol_table.jsp

¹⁸⁷ Office of the Revenue Commissioners and the Central Statistics Office (2009) *The Implications of Cross Border Shopping for the Irish Exchequer* <http://www.finance.gov.ie/documents/publications/reports/2009/crossborderefb09.pdf>

5.84 The Quarterly National Household Survey on Cross Border Shopping by the Irish Central Statistics Office¹⁸⁸ shows that groceries and not alcohol are the main driver for cross-border shopping. At least one trip to Northern Ireland in the last year was made by 16% of households and on their most recent trip, 80% bought groceries, 44% bought alcohol, 42% bought clothing and consumer durables, 26% bought cosmetics and 19% bought other goods. On the most recent trip of those surveyed, an average of €286 was spent with only €32 of this being spent on alcohol. Cross-border shopping also extends to services such as hairdressing, dentists and opticians.

5.85 Different tax regimes in Scandinavian countries have led to flows of goods across borders. For example one study analysed sales of alcohol and tobacco in Norway in stores both close to the border with Sweden (where the tax is lower) and at a distance. Revenue from these products was lower for Norwegian stores near the border but consumers there report higher consumption than those further away. This suggests cross border shopping by a number of Norwegian households. They also found that measures of externalities were higher near the border. The authors concluded that large tax differentials near borders induce tax avoidance behaviour¹⁸⁹.

5.86 As set out in section 9, the Scottish Government is committed in legislation to evaluate the impact of minimum pricing 5 years after the implementation of the policy. While evaluation plans are still evolving we envisage that the extent of cross border purchasing will be considered as part of the research portfolio.

Internet sales

5.87 Minimum pricing will apply to all sales of alcohol licensed under the 2005 Act. This includes premises in Scotland providing internet sales. So consumers who regularly buy their weekly groceries online, including alcohol, would be affected by minimum pricing as these orders are normally despatched locally i.e. within Scotland. Where alcohol is purchased through the internet or mail order and despatched from outside Scotland, these sales are not subject to the 2005 Act and so minimum pricing will not apply. Like the potential for cross border shopping, the incentive to buy from outwith Scotland via the internet will be greater the bigger the price differential between the price of alcohol in Scotland and elsewhere, combined with the volume of goods being purchased.

5.88 The Office for National Statistics estimate that internet sales account for 8.5 per cent of all retail sales values excluding automotive fuel¹⁹⁰; A separate figure for alcohol sales via the internet is not available from ONS. Market research reports show that during 2011 online sales of wines, spirits and beer grew by 20%,

¹⁸⁸ Central Statistics Office (2010) *Quarterly National Household Survey, Cross Border Shopping, Quarter 2, 2010*, Dublin: Central Statistics Office

¹⁸⁹ Beatty, T., Larsen, E., and0 Sommervoll D. (2009) *Driven to Drink. Sin taxes near a border*, Journal of Health Economics, 28, 1175 - 1184

¹⁹⁰ ONS. Retail Sales – March 2012 <http://www.ons.gov.uk/ons/rel/rsi/retail-sales/march-2012/stb-march-2012.html#tab-Internet-Sales>

outperforming overall market growth of 16%¹⁹¹. Growth may now be slowing, however. In February 2012 the IMRG Cap Gemini e-retail Index, at 10% year-on-year growth, was at its lowest since January 2010. For alcohol the figure was 9%¹⁹². Whyte & Mackay estimate that approximately 5% of all alcohol sales are through the internet and mail order routes¹⁹³, and the expectation is that this will increase.

5.89 The Scottish Government is aware of this possible purchasing route but considers that the type of alcohol that will be largely affected by a minimum pricing policy is not routinely purchased through the internet. Wine is the most successful online category with Tesco, for example, establishing its “wine by the case” sales, launching Wine Select, a wine subscription service costing from £24 per month, and offering a range of fine wines¹⁹⁴. The relatively expensive nature of the product being offered, coupled with the subscription cost, means that a minimum price of 50p per unit is unlikely to impact on this service.

5.90 There is a time cost involved in purchasing from the internet, and a time lag between purchasing and receiving the goods which means it is not suitable for immediate or impulse purchases. This makes it less likely as a source for both routine purchases (e.g. small amounts made as part of a weekly supermarket shop) and for those for whom widely available cheap alcohol both facilitates and encourages regular and impulse purchases.

5.91. The Scottish Government is aware that online sales are increasing and that minimum pricing could provide an incentive to purchase alcohol via the internet from outwith Scotland. The extent to which this happens will be kept under review through the evaluation of minimum pricing.

Illegal sales

5.92 Illicit alcohol could be either alcohol on which the appropriate tax and duty has not been paid or counterfeit alcohol products. The former could, at present, be goods brought in from other parts of the EU where duty is lower and sold on illegally. Under minimum pricing, these could be goods bought in other parts of the UK and sold on under the minimum price. This would be illegal. The Scottish Crime and Drug Enforcement Agency (SCDEA) does not consider there is a significant problem with illicit alcohol in Scotland. This is confirmed by both HMRC and Trading Standards¹⁹⁵. It is worth noting however, that recent estimates from the

¹⁹¹ Harpers wine and spirits trade review, March 2012. <http://www.harpers.co.uk/news/news-headlines/11955-online-wine-sales-outperforming-the-market-says-imrg.html>

¹⁹² See: http://www.uk.capgemini.com/news-centre/news/february-fallout-for-online-following-strong-january_pr2326/

¹⁹³ Whyte & Mackay input to Business and Regulatory Impact Assessment through correspondence with Scottish Government, September 2011

¹⁹⁴ The Drinks Business UK Market Review: Wine online, September 2011 <http://www.thedrinksbusiness.com/2011/09/wine-online/2/>

¹⁹⁵ Scottish Government discussions with SCDEA which also covered HMRC and Trading Standards

HMRC suggest that the illicit market in spirits is in the region of 3% of the spirits consumed in the UK and an upper bound of 10-14% for beer¹⁹⁶.

5.93 Like individual purchases of alcohol from across the border, the incentive for trafficking on any scale would depend on the price differential between Scotland and the rest of the UK. The Scottish Government does not consider that the differential is likely to be such as to incentivise this kind of activity. In giving evidence to the Health and Sport Committee during 2010, Chief Constable Pat Shearer of Dumfries and Galloway stated that illegal sales have never been a major issue, but they would assess whether it was becoming one after the introduction of minimum pricing¹⁹⁷. The potential for illegality is not a justification for failing to introduce a policy estimated to deliver significant individual and societal benefits, including a reduction in crime.

Home production

5.94 Home production of alcohol is currently considered to be undertaken on an insignificant scale and it is unlikely that any minimum price level set would be so high that it would result in a major increase in this activity.

Costs to retailers – on-trade

5.95 There are no anticipated costs to the on-trade. Rather the on-trade is predicted to benefit from a switch in consumption from off-trade, mainly in beer sales. As the Scottish Government's preferred minimum price of 50p per unit falls well short of the average price of £1.34¹⁹⁸ per unit in on-trade premises in 2010 so any negative impact on the on-trade is likely to be non-existent or negligible. The alcohol market is complex and changes in price induce changes in behaviour including switching between products and between on and off-sales. Overall at a 50p unit price the on-trade could be expected to experience an increase in revenue after duty and VAT of around £39m per annum (see table 12).

Costs to wholesalers

5.96 Wholesalers will not be directly affected as minimum pricing will not affect trade-to-trade sales. Minimum pricing is estimated to result in increased revenue to the alcohol industry as a whole. It was beyond the scope of the Sheffield modelling to consider where the change in revenue may accrue i.e. whether the estimated increases benefit retailers, wholesalers or producers, or all of them to some extent (the data is simply not available to make robust estimates). The alcohol market is highly segmented and this makes it more difficult to identify potential effects. For different products, where the additional revenue accrues will depend, to some extent, on the relative market power of different parts of the supply chain.

¹⁹⁶ Thorpe, R., Robinson, M., McCartney, G., and Beeston, C. (2011) *Monitoring and Evaluating Scotland's Alcohol Strategy: A review of the validity and reliability of alcohol retail sales data for the purpose of Monitoring and Evaluating Scotland's Alcohol Strategy*, Edinburgh: NHS Health Scotland

¹⁹⁷ Chief Constable Pat Shearer in oral evidence to Health and Sport Committee on 17 March 2010, col 2982

¹⁹⁸ Robinson, M., Craig, N., McCartney, G., and Beeston, C. (2011) *Monitoring and Evaluating Scotland's Alcohol Strategy: An update of alcohol sales and price band analyses*. Edinburgh: NHS Health Scotland

5.97 Wholesalers may be affected indirectly by the decrease in the volume the modelling estimates although there will be an increase in the value of sales. This decrease varies across types of alcohol. For a 50p per unit minimum price the modelling estimates that for sales of all spirits in the off-trade there would be a reduction of approximately 15 units per person per year – or about two thirds of a bottle of vodka¹⁹⁹. This would be offset by a marginal increase in drinking in the on-trade. Using the population and consumption data in the Sheffield report, (as detailed in table 3.1, a drinking population of 3,683,040 consuming an average of 123.6 units of spirits from off-sales per annum and 41.7 from on-sales) the overall reduction is estimated at 9% of total spirit consumption (on and off-trade) shown in the model. This represents around 2 million bottles of spirits a year across all types of spirits (vodka, gin, whisky, rum etc.) and both imported and domestic products. The reduction associated with a minimum price of 50p plus a discount ban is 10%.

5.98 For beer and cider the model estimates that with a minimum price of 50p per unit there would be a reduction in consumption of around 18 units per drinker per annum. A reduction of 27 units per drinker from off-sales would be offset by some switching to the on-trade of approximately 8 units per drinker per year. This represents a reduction of around 6%. The modelling does not distinguish between different types or strengths of beer. Assuming an ABV of 4%, this reduction is equivalent to approximately 30 million pints (568ml) per annum. The impact on wholesalers is difficult to predict, partly because it is unclear to what extent they would benefit from the offset. A minimum price of 50p per unit plus a discount ban is estimated to reduce consumption of beer and cider by around 7%.

5.99 At a minimum price of 50p per unit, the modelling estimates a small decrease in wine sold as off-sales and a marginal increase in on-sales. The overall decrease is estimated to be just over 3% of current wine sales. A minimum price of 50p plus a discount ban is estimated to reduce consumption by 8%, with a much larger decrease in off-sales of 19 units per drinker per annum.

Costs to producers

5.100 Minimum pricing is estimated to result in increased revenue to the alcohol industry as a whole. For a 50p per unit minimum price, the modelling estimates increased revenue to the alcohol industry (excluding VAT and duty) of £98m per annum. It was beyond the remit of the modelling to consider where the change in revenue may accrue i.e. whether the estimated increases benefit retailers, wholesalers or producers, or all of them to some extent. The alcohol market is highly segmented and this makes identifying potential effects difficult. For different products, where the additional revenue accrues will depend, to some extent, on the relative market power of different parts of the supply chain.

5.101 The supply side reaction to the introduction of a minimum price is not known, and there are differing views within the industry. It is therefore difficult to predict the impact on producers including which types of producer are likely to be most affected. It is possible that minimum pricing will incentivise producers to produce lower strength alcohol products as these would retail more cheaply (although this is

¹⁹⁹ Assuming a bottle = 700mls with an ABV of 37.5%.

not an option for Scotch whisky production which must have a minimum bottling strength of 40%).

5.102 Producers that are likely to be most affected by a minimum price are those whose production consists of a significant volume of products which routinely retail below 50p per unit. It has proved difficult to obtain comprehensive information about which producers produce the relatively 'cheap' alcohol and own label alcohol. It is also possible that companies may change their product emphasis, for example, moving from producing cheaper alcohol to more premium products. In the case of ciders, some of the cheaper brands are produced by global companies such as Constellation Brands and Heineken which are major drinks companies producing a whole range of alcohol products. These companies are likely to be affected to a very minimal extent by minimum price due to the diversity of their products and their international sales base. It has not been possible to source the producers of own label cider.

5.103 For own label spirits, it appears two companies are significantly involved in own label whisky production in Scotland: Whyte & Mackay and Glen Catrine. This is borne out by the Scotch Whisky Association's letter of 19 February 2010²⁰⁰ to the Scottish Parliament's Finance Committee in which they state that *"while there are a number of companies involved in this trade [cheap or own label] two companies in particular rely heavily on this segment of the market"*. The letter goes on to mention Whyte & Mackay and Glen Catrine.

5.104 Whyte & Mackay claims to be a leading supplier of own label whisky for the UK, with an estimated 80% share of that market. In discussions with Whyte & Mackay they estimated that 30% of their production is own label whisky and that 25% of this is for the Scottish market (suggesting 7-8% of total production)²⁰¹. They consider their own label and value brands would be "decimated" by the introduction of minimum pricing. It is unclear where own label brands will be positioned in the marketplace following the introduction of minimum pricing. Much will depend on decisions on marketing and retail pricing for brands, including their own.

5.105 The other company mentioned as being heavily involved in value brands and own label production is Glen Catrine. Glen Catrine's website²⁰² states it now has the largest independent bottling plant in Scotland. Amongst a multitude of brands, they produce the 5th highest selling whisky in the UK (High Commissioner Scotch Whisky) and the 2nd highest selling vodka in the UK (Glen's Vodka). Glen Catrine also bottle own label whisky, rum, brandy, gin and vodka for many retailers. This would appear to put Glen Catrine in a similar position as that of Whyte & Mackay in that it is a leading supplier of own label whisky and vodka to the whole of the UK and not just Scotland.

5.106 The Sheffield modelling estimates that there will be an increase in the value of sales but a decrease in the volume overall. The impact varies across types of alcohol and between on and off-trade. As noted above, for a 50p per unit minimum

²⁰⁰ Scottish Parliament reference FI/S3/10/7/2

²⁰¹ Scottish Government discussions with Whyte and Mackay

²⁰² See: <http://www.lochlomonddistillery.com/>

price the modelling estimates that for sales of all spirits in the off-trade there would be a reduction of approximately 15 units per person per year – or about two thirds of a bottle of vodka²⁰³. This would be offset by only a marginal increase in drinking in the on-trade. Using the population and consumption data in the Sheffield report, (as detailed in table 3.1, a drinking population of 3,683,040 consuming an average of 123.6 units of spirits from off-sales per annum and 41.7 from on-sales) the overall reduction is estimated at 9% of total spirit consumption (on and off-trade) shown in the model. This represents around 2 million bottles of spirits a year across all types of spirits (vodka, gin, whisky, rum etc.) and both imported and domestic products. The reduction associated with a minimum price of 50p plus a discount ban is 10%.

5.107 It should be noted that, for Scotch Whisky, less than 9% is sold in the UK domestic market. SWA suggest that around 20% of the UK domestic sales are in Scotland, so around 2% of total production is sold in Scotland²⁰⁴. If the same percentage decrease applied across all spirit categories this would mean a reduction of less than 0.2% of total whisky production as a result of the introduction of minimum pricing. This should be considered in the wider context of record export figures, with the value of whisky exports increasing by 23% between 2010 and 2011, according to the Scotch Whisky Association²⁰⁵.

5.108 A decrease in beer consumption in the off-trade may be partially offset by an increase in the on-trade, for example at a minimum price of 50p per unit the modelling results suggest that around 30% of the decrease in consumption of beer from the off-trade would be offset by an increase in on-trade premises. With any minimum price there is likely to be an overall reduction in consumption but the impact on brewers is difficult to predict, as is their response to changing market conditions. The modelling does not distinguish between different types of beer. They could respond by switching to products with a lower ABV for example.

5.109 The recent growth in low strength products (e.g. Diageo's mid strength Guinness, Becks Premier Light and Carling C2) is likely to have been assisted by the 50% duty discount on beer with ABV of 2.8% or less from 1 October 2011²⁰⁶. Figures suggest that Tesco has seen an increase of 47% in sells of non and low-strength alcohol (below 2.8%) beer in the year to November 2011, and they forecast further increases of 10 to 15% in 2012²⁰⁷. The introduction of a minimum price per unit may further accelerate this growth given that such products are likely to be unaffected by minimum pricing by virtue of their low unit content.

5.110 In recent years we have seen a drift towards higher strength wine. The introduction of minimum pricing may help reverse this trend given the price incentive in limiting the ABV. For instance, for a 50p minimum price per unit a 75cl bottle of

²⁰³ Assuming a bottle = 700mls with an ABV of 37.5%.

²⁰⁴ Scotch Whisky Industry Review 2009, p.12

²⁰⁵ Scotch Whisky Association (2012) *Scotch Whisky Exports Break New Records* <http://www.scotch-whisky.org.uk/news-media/media-press/press-releases/press-release/1641/scotch-whisky-exports-break-new-records/>

²⁰⁶ HMRC Alcohol Duty Rates from 1 October 2011, www.hmrc.gov.uk/budget2011/taxes-main-announcements.pdf

²⁰⁷ <http://www.tescopl.com/index.asp?pageid=17&newsid=591>

12% ABV wine would retail for a minimum of £4.50 compared to £5.25 for a wine with a 14% ABV.

Jobs

5.111 SWA estimate that supermarket and value brands account for around 26% of the Scottish off-trade market, and that 250-400 jobs²⁰⁸ could be at risk for Scottish companies supplying own label and/or value brands. In 2010 Whyte & Mackay estimated that for a minimum price of 50p there are likely to be immediate job losses of 83²⁰⁹ with indirect job losses of 250 (using SWA's estimate of 3 jobs indirectly supporting each direct job in the whisky industry²¹⁰). They suggest job losses would be unlikely if the minimum price was 40p. Whyte & Mackay anticipated their bottling plant at Grangemouth would close with the loss of 200 jobs and 100 jobs would be lost at distilleries with the reduction in production. However, previously, Whyte and MacKay have also said that they see the future of the company being driven by the 'premiumisation' of their brands – moving away from competing mainly on price, in accordance with the view that Scotch whisky is a premium product and should be marketed as such.

5.112 There are currently no specific estimates available as to the Scotland-wide impact on employment of the introduction of a minimum price per unit of alcohol although the Sheffield model estimates that minimum price of 50p per unit would reduce unemployment among harmful drinkers by 1,300 per annum.

5.113 In written evidence to the Health and Sport Committee, NHS Scotland²¹¹ refers to evidence that declining alcohol consumption may not affect employment in the way considered. While the analysis conducted by Anderson and Baumberg²¹² is on the Europe-wide alcohol market, they stress that, for each domestic market, there are a number of factors other than quantity demanded which will impact on the employment level in the drinks sector. Amongst these factors are consumer preferences (consumption of domestic versus foreign produced goods), consumers' choice of whether to drink in on-trade facilities or at home, labour productivity, wage rates, the cost of capital associated with the production process, etc. While acknowledging that further research is needed, the study analyses Eurostat data and finds no relationship between trends in employment in hotels, restaurants and catering (and bars) and alcohol consumption. In several countries (e.g. Italy) employment and consumption levels even go in opposite directions.

Effect on market

5.114 There is no consensus from industry on what will happen to pricing of products and hence the effect on the market in relation to the introduction of a minimum price per unit of alcohol. Some consider all prices will be affected i.e. those above a minimum price will also be adjusted, others believe it will only be

²⁰⁸ Op. cit., correspondence with Scottish Government, September 2011

²⁰⁹ John Beard, Chief Executive, Whyte & Mackay in oral evidence at Health and Sport Committee on 17 March 2010

²¹⁰ Op. cit., correspondence with Scottish Government, September 2011

²¹¹ Written evidence to the Scottish Government's Health and Sport Committee

²¹² Anderson, P. and Baumberg, B. (2006) *Alcohol in Europe*, London: Institute of Alcohol Studies (page 57)

those below the minimum price that will be affected, and others consider it will be somewhere in between. SWA²¹³ consider that all price fixing measures will distort the market. At a minimum price of 50p per unit they argue the premium of standard blends over value brands is reduced and estimate a standard blended whisky will become £20 a bottle, with consumers likely to switch to other drinks categories. However, they also state that consumers may switch to premium brands if the differential between the premium brand and the value brand is small. In their response to the Scottish Government, SWA²¹⁴ state that supermarket own label and value brands account for around 26% of the Scottish off-trade market, with standard blended whisky accounting for around 59% of the off-trade market. In their response, Whyte & Mackay²¹⁵ consider the own label market will be “decimated”. At a 50p minimum price, they consider own label will lose its competitive advantage over premium brands to which most consumers would switch. They claim they “have it on good authority” that supermarkets would likely de-list own label products if the competitive advantage was lost and demand shifted to premium brands. In their response, SGF²¹⁶ consider own label may be de-listed. The Scottish Government has no way of verifying these claims but the impact of the market will form part of the evaluation of minimum pricing (see section 9).

5.115 There is no clear consensus on whether supermarkets would continue to sell own label spirits when a minimum price is introduced. This could be conditional on the price differential between own label and the lower-priced premium brands which would result. One leading supermarket maintained own label products would disappear whereas another leading supermarket still considered there was a place for own label products. Not all own label products are cheap. For example, Tesco Finest 12 year old blended whisky, selling at around £16 for a standard 70cl bottle, competes on price with mainstream brands and will not be directly affected by a 50p per unit minimum price as the minimum price for a 70cl bottle of whisky will be £14. SWA²¹⁷ believe retailers have considerable control over what is sold and they may decide to remove the own label products from the shelves, or maintain the pricing differential between own label and standard blends and so increase their return, or hold down the price of premium products thereby undermining the brand’s position in the market.

5.116 Chivas Brothers Ltd and Pernod Ricard UK²¹⁸ also consider product ranges could be reduced. Retailers are only able to display alcohol in a pre-determined alcohol display area so they could be forced to reduce the product range in order to concentrate on those products that deliver consistent sales. They were unable to identify which products these might be given any shift in consumer behaviour is unknown. WSTA²¹⁹ consider suppliers will find it harder to bring new products onto the market, particularly where the costs of production of a new product are lower.

²¹³ Op. cit., correspondence with Scottish Government, September 2011

²¹⁴ *Ibid*

²¹⁵ Op. cit., correspondence with Scottish Government, September 2011

²¹⁶ Op. cit., correspondence with Scottish Government, September 2011

²¹⁷ Op. cit., correspondence with Scottish Government, September 2011

²¹⁸ Op. cit., correspondence with Scottish Government, September 2011

²¹⁹ Op. cit., correspondence with Scottish Government, September 2011

5.117 The volume of whisky production released for the domestic market is approximately 9%²²⁰. The SWA stated in evidence that around 20% of that is sold in Scotland (equates to less than 2% of production). The SWA said in Stage 1 evidence on the Alcohol etc. (Scotland) Bill that value from *whisky* sold in Scotland has been “*going down quite dramatically*” and there has been “*virtually no added value to the industry in terms of Scottish sales*”²²¹. Own label whisky comprises around 30% of that, or 0.5% of total production. The average price of cheap and own label whisky is in the region of £10 a 70cl bottle (confirmed by SWA in their oral evidence) which makes it around 36p per unit. The retail price of own brand whisky will have to rise therefore, with a minimum price of 50p, to £14.

5.118 Heineken UK²²² consider it is not possible to currently forecast what the cost will be to their business before seeing what the shift in consumer behaviour is. Given Heineken UK’s portfolio of premium brands of beer and cider, they consider there will be no or little impact on the selling price of the majority of their products. No information was provided on wine.

Off-sales market: product range

5.119 Scottish consumers benefit from a wide range of alcohol products available to them. These are sourced across a number of countries worldwide and, as shown by the sales data, cover a range of prices. Minimum pricing will apply to all products, irrespective of which country produces them. As previously outlined, it is anticipated that the measure will impact mainly on the off-sales segment of the licensed trade. The 2010 sales data suggested that 73% of off-sales were retailing at below 50p per unit. Of these sales, 35% were spirits, 28% wine, 26% beer, 8% cider and 3% other. It has proved extremely difficult to access the level of data required to analyse which individual products are likely to be most affected, and the country of origin of such products. We summarise the available data below but will continue to explore potential new sources of information.

Spirits

5.120 Spirits are both domestically produced and imported. Whisky is predominantly domestically produced (95%) and accounts for around 10% of total alcohol sales. Imported whisky accounts for 5% of sales of whisky. Across all types of whisky, 72% is sold at under 50p per unit with 85% of blended whisky (domestically produced) falling into this category and 3% of malt (domestically produced) compared with 28% of imported whisky. A minimum price of 50p per unit would, therefore, impact on both domestic production and imports, with the former being impacted more.

5.121 Vodka, the majority of which (81%) retailed below 50p per unit in 2010, makes up 13% of total sales, and 17% of all sales below 50p per unit. The top selling vodka in the UK in terms of sales value is Smirnoff Red, followed by Glen’s vodka (produced by Glen Catrine in Scotland)²²³. These 2 brands were ranked 1st

²²⁰ Scotch Whisky Industry Review 2009 <http://www.scotchwhiskyindustryreview.com/>, p.12

²²¹ Oral evidence to Finance Committee by Gavin Hewitt, SWA, on 9 February 2010, col 1883-4

²²² Op. cit., correspondence with Scottish Government, September 2011

²²³ Off licence news (2011) *Brands Report 2011*, 4 March 2011 (page 26) http://www.offlicencenews.co.uk/news/categoryfront.php/id/37/Brands_Report.html

and 3rd in terms of the value of sales of spirits in the UK, split by Bell's whisky in 2nd place. Glen Catrine also produces vodka for supermarket own label brands, for example, Tesco everyday value vodka at £8.72 per bottle²²⁴ (33p per unit). A minimum price of 50p per unit will impact on both domestic production and imports, however given the sales profile noted above it will predominantly be domestic.

5.122 Gin accounts for 3% of total sales with almost all (87%) falling below 50p per unit. Gin is both domestically produced and imported. Similarly, rum, which is predominantly imported although there is some domestic production, makes up about 1% of sales, with golden rum generally retailing at higher prices than white or dark rum.

5.123 Table 13 shows the top 15 selling spirit products in Scotland (for the 4 weeks ending 28 April 2012) which make up around 50% of the spirits market by volume and over 40% by value. Of these, only one, at that time, was retailing at a price equivalent to the minimum price of 50p per unit – the remainder were below the minimum price. It is worth noting the relative ranking of products in Scotland differs from the data presented on the UK market in paragraph 5.121 with Glen's and own label vodka being the three top sellers (Smirnoff Red in 6th).

Table 13: top selling 15 spirits, Scotland April 2012 ²²⁵		
Product	Production	Meets minimum price (May 2012)?
Glen's vodka 1 litre	UK	No
Private label vodka 70cl	UK	No
Private label vodka 1 litre	UK	No
The Famous Grouse 1 litre	UK	No
Bell's Original 1 litre	UK	No
Smirnoff red label 1litre	UK	No
Private label blended Scotch 70cl	UK	No
Private label blended Scotch 1litre	UK	No
Bacardi Superior 1 litre	Imported	No
Gordon's 1 litre	UK	No
Private label vodka 35cl	UK	No
Gordon's 70cl	UK	No
Smirnoff Red Label 70cl	UK	No
Morgan's Spiced 1 litre	Imported	No
The Famous Grouse 70cl	UK	Yes

Wine

5.124 The vast majority of wine is imported and, in common with the rest of the UK, the off-sales market in Scotland includes a breadth of products from a large number of countries retailing across the range of prices. Information on the top 10 importing countries (in terms of share of the UK wine market) is set out in the following

²²⁴ Mysupermarket.co.uk, accessed 25 May 2012

²²⁵ Communication with Nielsen, May 2012

table²²⁶. The average price of a bottle of wine from each country is calculated using a “typical” strength; the equivalent cost at a 50p minimum price per unit is included in table 14 for information.

Table 14: characteristics of top 10 selling wines in UK market (2011)						
UK ranking	Country of origin	Market share (%)	Average bottle price (£)	Typical ABV²²⁷	Minimum price of a typical bottle at 50p per unit (£)	Increase required to meet minimum price of 50p per unit (£)
1	Australia	21.5	4.63	13.65	5.12	0.49
2	USA	14.3	4.52	13.65	5.12	0.60
3	Italy	14.2	4.25	12.88	4.83	0.58
4	France	13.9	5.15	12.90	4.84	None
5	South Africa	9.1	4.19	13.42	5.04	0.85
6	Chile	8.6	4.35	13.43	5.04	0.69
7	Spain	7.5	4.36	13.22	4.96	0.60
8	New Zealand	5.3	6.02	13.15	4.94	None
9	Germany	2.3	3.68	11.00	4.13	0.45
10	Argentina	1.2	4.85	13.55	5.09	0.24

5.125 The differences between the average price of a bottle of wine by country and the minimum price required to comply with 50p per unit varies by country. Using the information in table 14, the average price of a bottle of wine from Australia, USA, Italy, South Africa, Chile, Argentina, Spain and Germany, failed to reach the 50p per unit threshold, with the largest differences lying with South African and Chilean wines. The average price of a bottle from France and New Zealand already met or exceeded the minimum price of 50p per unit. It should be noted that these average bottle prices quoted were published in 2011 and there will be a time lag before implementation of minimum pricing which is scheduled for 2013 at the earliest. By that time, the differential between the average bottle price and that required to comply with a minimum price of 50p per unit may well decrease. For instance, in March 2012, 8 of the top 15 selling wines in Scotland already retailed above a price equivalent to 50p per unit²²⁸. In addition, these data are average prices only and therefore do not tell us anything about the price distribution.

Beer and Cider

5.126 Beers are both domestically produced and imported. Lager makes up by far the largest proportion of beer sales, constituting around 22% of total alcohol sales. Around 80% of lager retails below 50p per unit. Ales make up around 9% of the

²²⁶ Nielsen (2011) *Wine Report 2011* <http://www.offlicencenews.co.uk/files/Reports/OLN-Wine-Report-2011.pdf>

²²⁷ <http://www.guardian.co.uk/news/datablog/2011/jul/05/wine-strengths-country#data>
https://docs.google.com/spreadsheet/ccc?key=0AonYZs4MzIZbdDlqQkxpVkJZET3l6cU5QUUJoNjJsUIE&hl=en_US#gid=0

²²⁸ Communication with Nielsen, May 2012

beer category (2% of total sales) and are all domestically produced. The majority of ales (65%) sell at below 50p per unit.

5.127 Cider, of which 85% retails for under 50p per units (a third below 25p per unit), accounts for 8% of sales under 50p per unit. Although there are a wide variety of brands available in the UK, the market is dominated by Heineken owned and domestically produced *Strongbow*²²⁹.

5.128 Of the top 15 selling beers and ciders in the Scottish market in April 2012, accounting for over a third of the market by volume and just under a third by value, none complied with the preferred 50p minimum price.

Table 15: top selling 15 beers, Scotland April 2012²³⁰		
Product	Production	Meets minimum price (at May 2012)?
Strongbow 12 x 440 ml can	UK	No
Fosters 20 x 440 ml can	UK	No
Tennent's 20 x 440 ml can	UK	No
Fosters 12 x 440 ml can	UK	No
Tennent's 12 x 440 ml can	UK	No
Tennent's 15 x 440 ml can	UK	No
Carling 12 x 440 ml can	UK	No
Tennent's 10 x 440 ml can	UK	No
Stella Artois 10 x 440 ml	UK	No
Stella Artois 4 x 440 ml	UK	No
McEwan's Export 12 x 500 ml	UK	No
MGD 12 x 330 ml	EU	No
Stella Artois 4 x 568 ml	UK	No
Budweiser 12 x 300ml	UK	No
Stella Artois 12 x 284 ml	UK	No

Other

5.129 The "other" category mainly includes fortified wines, and makes up around 3% of total alcohol sales. They are both domestically produced and imported.

5.130 Table 16 illustrates some market share information based on sales data from 2010²³¹.

²²⁹ Off licence news (2011) *Brands Report 2011*, 8 July 2011

²³⁰ Communication with Nielsen, May 2012

²³¹ Robinson, M., Craig, N., McCartney, G., and Beeston, C. (2011) *Monitoring and Evaluating Scotland's Alcohol Strategy: An update of alcohol sales and price band analyses*. Edinburgh: NHS Health Scotland

Table 16: Scotland off-sales 2010 market shares

Drink category	production #		% of total sales by pure alcohol	% of sales below 50p	% of total market affected	% of all those sales below 50p
	Domestic	Imported				
Total market				73%		
SPIRITS			32%	81%	25%	35%
VODKA	Y	Y	13%	92%	12%	17%
BLENDED WHISKY	Y		8%	85%	7%	10%
GIN	Y	Y	3%	87%	2%	3%
CREAM LIQUEUR	Y	Y	1%	51%	0%	0%
FRENCH GRAPE BRANDY		Y	1%	82%	1%	1%
WHITE RUM	Y	Y	1%	78%	1%	1%
IMPORTED WHISKY		Y	1%	28%	0%	0%
LIQUEUR	Y	Y	1%	48%	0%	1%
MALT WHISKY	Y		1%	3%	0%	0%
DARK RUM	Y	Y	1%	83%	1%	1%
COGNAC		Y	0%	13%	0%	0%
GOLDEN RUM	Y	Y	1%	56%	0%	1%
BEER			24%	77%	19%	26%
NON/LOW ALCOHOL	Y	Y	0%	0%	0%	0%
COMMODITY	Y	Y	0%	76%	0%	0%
STANDARD	Y	Y	10%	88%	9%	12%
PREMIUM	Y	Y	13%	70%	9%	12%
SUPER STRENGTH	Y	Y	1%	96%	1%	2%
CIDER	Y	Y	7%	85%	6%	8%
WHITE/STRONG	*	*	2%	99%	1%	2%
REGULAR	*	*	5%	81%	4%	6%
WINE			33%	63%	21%	28%
TABLE WINE	Y	Y	31%	66%	20%	28%
SPARKLING WINE	Y	Y	2%	27%	0%	1%
CHAMPAGNE		Y	0%	0%	0%	0%
OTHER			4%	56%	2%	3%
FORTIFIED WINE	Y	Y	3%	63%	1%	1%
RTD	Y		1%	6%	0%	0%
PERRY	Y	Y	1%	99%	0%	0%
ref: published Nielsen data set						
Price distribution of alcohol (L pure alcohol) sold off-trade (Scotland, 2010)						
* no information on imports						
# information supplied by Nielsen						

International markets: discrimination

5.131 SWA²³² is concerned that any minimum pricing policy runs the risk of international “copy-cat” discrimination. They claim suggestions that minimum pricing would not discriminate or be protectionist and so not present a precedent for governments abroad fails to recognise that it is the breach of trade law, not the nature of the Scottish system, that threatens Scotch Whisky exports and thus the wider Scottish economy. They argue that if a precedent of overriding trade rules is set, a domino effect of ‘health-based’ restrictions on Scotch Whisky can be expected. SWA estimate “copy-cat” action could reduce Scotch Whisky exports by up to £0.5bn a year – equivalent to 14.5% of 2010 exports. SWA further claim that Scotch Whisky is already treated unfairly in around 140 countries and that such action is, and would remain, completely unjustifiable. No information has been provided in respect of which countries are contemplating or are likely to pursue such discriminatory action.

5.132 It is not possible to predict the reaction of other jurisdictions. The Scottish Government’s proposal treats all products fairly, whether imported or domestic. Where other countries have imposed barriers that are against international trade laws, the SWA will continue to have the Scottish Government’s full support in tackling any discrimination and unlawful trade barriers.

Costs to local government

5.133 The position of Licensing Standards Officers (LSOs) was created through the Licensing (Scotland) Act 2005. LSOs work on behalf of local authorities and are responsible for the monitoring and enforcement of the new licensing regime which became fully operational from 1 September 2009. LSOs ensure compliance with any conditions attached to premises licences. The Licensing (Scotland) Act 2005 and associated secondary legislation sets out a number of conditions that are attached to a premises licence including such conditions covering an operating plan, premises manager, staff training, pricing and promotion of alcohol, payment of fees, display of notices, and alcohol display areas. Minimum pricing would be added to this number. The Scottish Government considers business advice to licence holders will be required on the introduction of a minimum price per unit, and has agreed to fund this initial set up cost in order to assist LSOs and avoid costs falling on local government. It is considered there would be an increase in demand for advice to licence holders from LSOs in the run up to introduction and in the period immediately after introduction which would cause a reprioritisation of duties and resources. In the longer term, as licence holders and LSOs become more familiar with the minimum pricing provision, the workload associated with introduction should decrease. The cost of running the licensing system, including the costs of LSOs, are generally recovered by Licensing Boards from fee income in line with the Licensing (Fees) (Scotland) Regulations 2007 (SSI 2007 No. 553). If the costs of implementing minimum pricing were found to increase the workload of LSOs significantly, a review of the level of fee income would be appropriate.

²³² Op. cit., correspondence with Scottish Government, September 2011

Costs to central government

5.134 The Sheffield research estimates the effects on sales tax (VAT) and duty receipts to be relatively small due to the counter-balancing nature of the two taxes. Duty is applied to the volume of sales (which is estimated to reduce overall) but the VAT is applied to the monetary value of sales (which is estimated to increase overall).

5.135 There will be an impact on the level of UK Exchequer receipts. The actual effect will depend on the response of both consumers and the industry. Total receipts from VAT in the UK were £97,277m in 2010-11 of which Scotland contributed £8,260m; and from alcohol duties in the UK were £9,434m, of which Scotland's share was £895m²³³. Table 17 shows the estimated change in government revenue from the modelling. A reduction of around £10.5m is associated with a 50p unit price.

Table 17: Change in UK Government revenue			
Policy scenario: minimum price per unit	Change in VAT	Change in duty	Change in VAT and duty combined (£m)
25p	+0.9	-0.3	+0.6
30p	+1.9	-1.1	+0.8
35p	+3.6	-2.9	+0.7
40p	+6.2	-7.2	-1.0
45p	+9.6	-14.4	-4.8
50p	+13.0	-23.5	-10.5
55p	+16.1	-34.5	-18.4
60p	+18.5	-46.5	-28.0
65p	+20.5	-58.7	-38.2
70p	+21.7	-71.3	-49.6

5.136 A 50p minimum price per unit plus a discount ban is estimated to result in an increase in VAT of £16.2m and a reduction in duty of £32m, resulting in an overall reduction to the Exchequer of £16m.

5.137 There will be initial set up costs for the Scottish Government in introducing a minimum price per unit of alcohol in order to provide business advice to licence holders about the necessity to comply with the provision. The costs of these are estimated by the Scottish Government to be in the region of £90,000 based on previous experience of implementing tobacco legislation.

5.138 There will be costs associated with potentially varying the minimum price. The minimum unit price has to be set and remain at a level that is proportionate. As such, the Bill includes a clause requiring Scottish Ministers to review the level at

²³³ Scottish Government (2012) *Government Expenditure and Revenue Scotland 2010–11*, Edinburgh: Scottish Government <http://www.scotland.gov.uk/Publications/2012/03/9525/0>

which the minimum unit price is set 2 years following the policy's implementation. A period of 2 years is considered appropriate as this will provide the market time to respond to the measure, allow for analysis of price band data to determine the impact that minimum price has had on alcohol sales and prices and also allow some early indicators of changes in alcohol-related harm to come through.

5.139 This approach allows the price to be uprated if and when it was considered necessary, taking account of relevant factors related to changes in price and public health outcomes. A suite of indicators (including for instance RPI/CPI, sales, price band, affordability and acute health harm and crime data) will be used to build up an overall picture of the impact of the policy. Scottish Government officials will carry out the review so the cost will be limited to central government. It is difficult at this stage to put a figure on the cost, however it is likely it will be an indirect cost. The advantage over automatic uprating is that this approach provides flexibility so is better able to take account of how the market responds to a minimum pricing policy.

5.140 The Monitoring and Evaluation of Scotland's Alcohol Strategy (MESAS) portfolio of studies have been designed to measure the effectiveness of the actions set out in the Framework for Action (including minimum pricing). It is, therefore, not considered appropriate to apportion a specific cost to any one measure.

6. SCOTTISH FIRMS IMPACT TEST

6.1 This section sets out in general terms the impact of a minimum price per unit on specific sectors of the alcohol industry. The alcohol industry is defined as the combination of alcohol manufacturing, the wholesale of alcohol, retail sale of alcohol and the sale of alcohol in beverage service establishments. In 2010 this broad industry employed 47,000 people, three quarters of these being in beverage service²³⁴. In 2009 spirits manufacturing generated international exports worth £3.1bn²³⁵. The industry also relies on Scottish agricultural commodities as inputs. In 2010, the whisky sector used approximately 40% of the Scottish wheat and barley crop²³⁶.

6.2 In the UK, the retail sector (off-trade) consists of a small number of large supermarkets who dominate alcohol sales, a number of smaller supermarkets, a decreasing number of specialist retailers, and a large number of smaller grocers and corner shops. Nielsen maintains a database of all licensed trade premises in Great Britain. In 2010 there were around 44,000 outlets. Of these, over 10,500 were multiple retailers and over 33,000 were classed as smaller “impulse” retailers: i.e. a store that is not the main grocery shop for consumers but one used for impulse or top up purchases²³⁷.

6.3 Those areas of business most likely to be affected by a minimum price per unit in terms of costs are the off-trade sector and producers. The detail of the costs and benefits for each of the sectors in the alcohol industry is set out in section 5. As mentioned in section 3 on consultation, numerous discussions took place on the principles of minimum pricing. Discussions with any section of the alcohol industry on a specific minimum price are not permitted as the specific price must be set independent of economic operators for reasons relating to competition law.

6.4 In order to inform the Regulatory Impact Assessment²³⁸ published for the Alcohol etc. (Scotland) Bill in 2009, various questions in relation to the likely impact of introducing minimum pricing (using 25p, 50p and 70p per unit as examples) were posed to groups representing a significant number of retailers and producers of alcohol in Scotland. Although the policy proposal remains as before, this exercise was repeated in the summer/autumn of 2011 to inform this document, with members of the Scottish Government Alcohol Industry Partnership (SGAIP) being asked for their assessment of the likely impact of minimum pricing on their business. Twelve responses were received from members: Scottish Licensed Trade Association, Scottish Grocers' Federation, Chivas Brothers Ltd and Pernod Ricard UK, Scotch

²³⁴ Office for National Statistics, *Business register and employment survey 2010*

²³⁵ Scottish Government, *Global Connections Survey 2009 tables*, available at <http://www.scotland.gov.uk/Topics/Statistics/Browse/Economy/Exports/GCS2009tab>

²³⁶ Bell, J. (2010) *The Scotch whisky sector and grain supply and demand in Scotland*, SAC Commercial Unit

²³⁷ Thorpe, R., Robinson, M., McCartney, G., and Beeston, C. (2011) *Monitoring and Evaluating Scotland's Alcohol Strategy: A review of the validity and reliability of alcohol retail sales data for the purpose of Monitoring and Evaluating Scotland's Alcohol Strategy*, Edinburgh: NHS Health Scotland

²³⁸ Scottish Government (2011) *Regulatory Impact Assessment for Alcohol (Minimum Pricing) (Scotland) Bill*, Edinburgh: Scottish Government
<http://www.scotland.gov.uk/Topics/Health/health/Alcohol/resources/AlcoholbillRIA2009>

Whisky Association, Heineken UK, Molson Coors, Scottish Beer and Pub Association, Whyte & Mackay, Scottish Retail Consortium, Wine and Spirits Trade Association, Ian Macleod Distillers Ltd and SABMiller. Information relating to their responses is provided in section 5.

6.5 Specifically, the Scottish Grocers' Federation (SGF) and the Scottish Retail Consortium (SRC) represent a significant element of small businesses that could potentially be impacted by minimum pricing. The SGF is the trade association for the Scottish convenience store sector, representing most of the Scottish Co-ops, Somerfield, SPAR and local independent retailers. The Scottish Retail Consortium (SRC), whilst representing the larger retailers and supermarkets, also includes trade associations representing smaller retailers. During the passage of the previous Alcohol Etc (Scotland) Bill, SGF and SRC were two of the members of the Retailers' Working Group which was set up to discuss how the legislative proposals, which included minimum pricing, would affect their members. The re-introduction of a Bill on minimum pricing saw this discussion continue with SGF and SRC and they were invited to provide an assessment of what they consider the likely impact of a minimum price per unit of alcohol might have on their business.

6.6 We did not carry out the required face-to-face discussions with 6-12 individual businesses. Due to the widespread nature of those affected and due to the range of individual businesses which formed part of the SGAIP and the representations from SGF and SRC, we considered it would be disproportionate and would not add to the comments already received to carry out further face-to-face discussions with business.

6.7 The University of Sheffield modelling study gives an insight into how categories of drinkers may switch between different types of products. However the Scottish Government is not able to predict how individual companies and retailers will react to the introduction of a minimum price per unit. Detailed responses from SGAIP members are included in section 5 above but, in summary, there is no consensus on where any additional revenue arising from minimum pricing might accrue. A number of respondents consider it will end up with retailers, some consider producers might be able to gain a share, some consider there will be no additional revenue. The introduction of minimum pricing is likely to be of benefit to smaller retailers and independent stores as they will be more able to compete on price with the larger retailers such as supermarkets. The on-trade is unlikely to be adversely affected by minimum pricing as their prices are already likely to be above any minimum price set. As regards the effect on producers, again, there is no consistent view among industry representatives. Some respondents consider with the price of own label products likely to increase due to minimum pricing, producers may raise the prices of their premium brands in order to maintain a differential between the two types of products; or supermarkets may de-list the own label products; or the range of products may be reduced and this would depend on those products with most sales.

Benefits to industry

6.8 Across all minimum prices modelled there is an estimated increase in revenue to the alcohol industry as a whole (shown in table 9). A 50p per unit

minimum price is estimated to increase revenue to the alcohol industry (excluding VAT and duty) of £98m per annum for both the on and off-trade sectors. This is a high-level estimate of revenue changes to the alcohol industry as a whole. It was beyond the remit of the modelling to consider where the change in revenue may accrue i.e. whether the estimated increases benefit retailers, wholesalers or producers, or all of them to some extent. The alcohol market is highly segmented and this makes identifying potential effects difficult. For different products, where the additional revenue accrues will depend, to some extent, on the relative market power of different parts of the supply chain.

Costs to retailers – off-trade

6.9 A minimum price per unit is likely to affect the off-trade sector more than the on-trade sector due to the average price of alcohol being £0.45 in the off-trade and £1.34 for the on-trade in 2010²³⁹. The on-trade may benefit from any reduction in the differential between prices in the off-trade and on-trade sectors. The Sheffield modelling predicts that some drinkers would switch from purchasing in the off-trade to purchasing in the on-trade. So off-sales may experience a reduction in the volume of sales and consumers may switch to purchasing some of their alcohol from on-sales premises.

Sales

6.10 In their response to the minimum pricing proposals, SGF members consider that a minimum price of between 25p-49p would impact on up to 30% of products (mainly cider and cheaper spirits); a minimum price of between 50p-69p would impact on up to 90% of products; a minimum price of 70p or over would impact on all products. In their previous response, SGF estimated that a minimum price of 50p would result in a reduction in sales of 10%. SWA estimate that a minimum price of 50p would result in a reduction of Scotch Whisky sales in Scotland by 15% which equates to a reduction in sales of £23m (using the elasticities quoted in the Wagenaar paper²⁴⁰), and will have a significant impact on the Scottish market. They also consider the effect on sales will have a throughput effect on suppliers of such items as bottles, labels, cases etc. and further down the line it will impact on transport, farmers, maltsters and ultimately investment.

6.11 Identifying which part of the retail market will be most affected – supermarkets or small shops – is problematic. Large and small retailers are likely to be affected differently. Larger retailers sell large volumes of popular brands (often priced very competitively) and also a greater range of products. Nielsen state that at least 70% of off-sales are retailed through the large supermarket chains²⁴¹. The Scottish Government is currently not aware of any retailers who specialise in selling only those low cost products likely to be below any minimum price set.

²³⁹ Robinson, M., Craig, N., McCartney, G., and Beeston, C. (2011) *Monitoring and Evaluating Scotland's Alcohol Strategy: An update of alcohol sales and price band analyses*, Edinburgh: NHS Health Scotland

²⁴⁰ Wagenaar, A.C., Salois, M.J., and Komro K.A (2009) *Effects of beverage alcohol taxes and prices on consumption: a systematic review and meta-analysis of 1003 estimates from 112 studies*, Addiction: 2009, 104

²⁴¹ Communication with NHS Health Scotland

Pricing

6.12 There will be costs to retailers associated with the implementation of a minimum pricing scheme such as re-pricing products, altering bar codes and shelf tickets. The costs to retailers that operate only in Scotland will form part of their usual operational practice when altering prices. Those retailers that operate on a UK-wide basis may incur costs associated with a different pricing and promotion regime operating in Scotland. These retailers are predominantly large supermarket chains. There is likely to be a lead in time prior to introduction. That, coupled with the resources available to them, should allow retailers to investigate the most cost effective method of implementing differential pricing across stores in different parts of the UK.

6.13 Information on how often prices change for products in supermarkets, including alcohol, from weekly scanning data from Nielsen²⁴² show that around 40% of prices in supermarkets change frequently. Around 25% of changes are adjusting for temporary reductions and in any one week – 29% of alcohol prices rose and 29% fell. Given that around 70% of alcohol is sold through supermarkets it would appear that altering prices is part of routine business practice.

Costs to wholesalers

6.14 Wholesalers will not be directly affected as minimum pricing does not affect trade-to-trade sales. Wholesalers may be affected indirectly as although there is likely to be an increase in the value of sales there would be a decrease in the volume. This varies across types of alcohol so may depend on what type of alcohol the wholesaler sells and the nature of their customer base.

Costs to producers

Volume of Sales

6.15 Producers that will be most affected by a minimum price are those whose production consists of a significant volume of products which currently sell below the preferred minimum price of 50p per unit. As noted in section 5, these producers are likely to be the ones whose main production focuses on own label products. It has proved difficult to obtain comprehensive information about which producers produce the 'cheap' alcohol and own label alcohol. In the case of ciders, some of the cheaper brands are produced by global companies such as Constellation Brands and Heineken which are major drinks companies producing a whole range of alcohol products. These companies are likely to be affected to a minimal extent due to the relatively small proportion of total sales that will come from the Scottish market. It has not been possible to source the producers of own label cider.

6.16 For own label spirits, it appears that there are two companies that deal with most of the own label whisky production: Whyte & Mackay and Glen Catrine. Both of these companies supply the UK market. Whyte & Mackay claim to be the leading supplier of own label whisky for the majority of the UK's grocery retailers with an estimated share of that market of 80%, and Glen Catrine appear to be a leading

²⁴² Ellis, C (2009). *Do supermarket prices change from week to week?*, Bank of England Working Paper No. 378

supplier of whisky and vodka to the UK market, supplying the UK's 5th highest selling whisky and the UK's 2nd highest selling vodka. A minimum price per unit will only affect those sales in Scotland. SWA estimate that a minimum price of 50p would result in a reduction of Scotch Whisky sales in Scotland by 15% which equates to a reduction in sales of £23m (using the Wagenaar model), and will have a significant impact on the Scottish market.

Jobs

6.17 SWA estimate that supermarket and value brands account for around 26% of the Scottish off-trade market, and that 250-400 jobs could be at risk for Scottish companies supplying own label and/or value brands. Whyte & Mackay estimate that for a minimum price of 50p there are likely to be immediate job losses of 83²⁴³ with indirect job losses of 250 (using SWA's estimate of 3 jobs indirectly supporting each direct job in the whisky industry). Job losses would be unlikely if the minimum price was 40p. Whyte & Mackay anticipate their bottling plant at Grangemouth would close with the loss of 200 jobs and 100 jobs would be lost at distilleries with the reduction in production. However, previously, Whyte and MacKay have also said that they see the future of the company being driven by the 'premiumisation' of their brands – moving away from competing mainly on price, in accordance with the view that Scotch whisky is a premium product and should be marketed as such.

Small businesses

6.18 The Federation of Small Businesses (FSB) responded to the public consultation on the Scottish Government's alcohol strategy in 2008 and met with Scottish Government representatives. FSB is Scotland's largest direct member business organisation representing almost 20,000 members. FSB's views was that while they supported the ending of irresponsible promotions that encouraged binge drinking, such intervention had to be balanced against the risk of government intervening in the market by determining the pricing structure for a particular product. They state that anecdotal evidence suggests that most small shops are often not the main culprits associated with what might be deemed irresponsible pricing and the FSB has previously campaigned against the use of 'loss leaders' (i.e. below-cost selling) as a sales tactic by larger retailers²⁴⁴.

Small retailers

6.19 The overall impact for small retailers is likely to be limited as the proportion of their turnover made up of alcohol sales likely to be directly affected by minimum pricing is small in comparison to turnover from alcohol products not affected by minimum pricing and all other product lines. The Sheffield modelling, based on the responsiveness of consumers to changes in price, suggests that although the volume of sales in off-sales premises will reduce, the value of sales will increase. Minimum pricing effectively sets a price floor and will reduce the ability of multiple retailers, such as the larger supermarkets, to use alcohol as a 'loss leader'. This

²⁴³ John Beard, Chief Executive, Whyte & Mackay in oral evidence at Health and Sport Committee on 17 March 2010

²⁴⁴ FSB Scotland response to the 2008 alcohol strategy consultation: <http://www.scotland.gov.uk/Resource/Doc/249251/0072071.pdf>

may be advantageous to smaller retailers who may be less able to compete on price compared to the larger supermarkets.

Small specialist retailers

6.20 Minimum pricing, by creating a price floor, may make small specialist retailers more able to compete on cheaper priced products. In addition they may be better able to compete on non-price attributes such as better product information and individual customer service.

6.21 For some small specialist retailers, such as wine merchants and whisky shops, their product range is such that they are unlikely to be affected by the introduction of a minimum price as they tend to specialise in premium products rather than cheap alcohol.

Small producers

6.22 Scotland has a thriving craft brewery sector producing a variety of beers, supplying beers of varying styles and alcoholic strength²⁴⁵. Scotland also has some small independent distillers. These are generally premium products sold at relatively high prices compared to 'mainstream' high volume brands and are therefore unlikely to be affected by a minimum price of 50p per unit.

6.23 There are also a growing number of micro distilleries such as Kilchoman, on Islay to meet increasing demand for new and novel malt whiskies²⁴⁶. However these represent a very small proportion of the overall Scotch Whisky market. This follows a growing international trend in the spirits industry which is, in part, a reaction to the domination of the market by large companies and mainstream brands. These produce premium products retailing at premium prices.

Small on-sales premises

6.24 On-sales premises in general are likely to be affected less than off-sales premises by setting a minimum price for alcoholic drinks, as the price of alcohol in on-sales premises is generally higher than in off-sales premises. In 2010, Nielsen data estimated that the average price per unit of alcohol in on-trade premises was £1.34 as compared to 45p for off-trade²⁴⁷.

²⁴⁵ See: <http://www.scotland.org/about/entertainment-and-sport/features/culture/brewing-up-a-storm.html> & <http://www.scotland.org/features/item/brewing-up-a-storm/>

²⁴⁶ Inside story: Scotch Whisky is reinventing itself <http://scotlandonsunday.scotsman.com/scotsman-whisky/Inside-story-Scotch-Whisky-is.5599488.jp> & Siddons T, *Spirit of Adventure* Scottish Field. 4 May 2011

²⁴⁷ Robinson, M., Craig, N., McCartney, G., and Beeston, C. (2011) *Monitoring and Evaluating Scotland's Alcohol Strategy: An update of alcohol sales and price band analyses*. Edinburgh: NHS Health Scotland

7. LEGAL AID IMPACT TEST

7.1 We have consulted with the legal aid policy team. They have confirmed that there is unlikely to be any significant impact to the legal aid fund.

8. TEST RUN OF BUSINESS FORMS

8.1 No new business forms will be introduced in the implementation of the proposed legislation.

9. ENFORCEMENT, SANCTIONS AND MONITORING

9.1 The minimum price proposal will be enforced through legislation. The proposal does not create any new enforcement or monitoring mechanisms. As with the other conditions of licences issued under the 2005 Act, it will be monitored by Licensing Standards Officers who are able to report infringements to the Licensing Board. The Licensing Board are then able to apply a number of sanctions to the licence holder which are available through the 2005 Act ranging from a warning to the revocation of the licence.

9.2 The Alcohol (Minimum Pricing) (Scotland) Bill includes a provision under which the minimum pricing provisions cease to have effect after 6 years from when those provisions are fully in force (a “sunset clause”). However the minimum pricing provisions can continue to have effect if before that date the Scottish Ministers make an order providing that these provisions should continue in force (before it can be made, that order must first have been laid before and approved by the Scottish Parliament).

9.3 Complementary to this provision, the Act includes a provision requiring the Scottish Ministers to evaluate the effect of minimum pricing 5 years after it comes into force and to report this to the Scottish Parliament. The report must include information as to the effect of minimum pricing on the licensing objectives, for example, protecting and improving public health and reducing crime and disorder, the effect on premises licences holders such as the pub trade, retail sector and wider licensed trade and the impact on alcohol producers. In preparing the report Ministers will also be required to consult persons having functions relating to health, crime prevention, children and young people, education and social work, and those representing premises licence holders and alcohol producers.

9.4 An evaluation report after 5 years (ending after year 6 if an order to continue the measure has not been made) is considered a suitable timeframe against which to measure the policy’s effectiveness. While for acute conditions (such as alcohol-related injuries, drink driving and acute intoxication), an increase in price would be expected to have an immediate impact on prevalence rates, the relationship between changes in price, consumption levels and the incidence of chronic alcohol conditions is much more difficult to quantify. There is likely to be a ‘time lag’ between a reduction in consumption due to the introduction of minimum pricing and the full benefits in terms of reduced chronic health harms. The expected time lag is also assumed to vary across conditions and by individual.

9.5 Scotland already has in place a detailed evaluation plan for monitoring the impact of the wider alcohol strategy. Following publication of the discussion paper on alcohol in June 2008, the Scottish Government established a Monitoring and Evaluation Reference Group for Alcohol (MERGA) to oversee the development of a portfolio of monitoring and evaluation studies to measure the extent to which the actions set out in the strategy (including the 2005 Licensing Act) are effective in delivering the intended outcomes.

9.6 The Monitoring and Evaluating Scotland's Alcohol Strategy (MESAS) portfolio, which was peer reviewed by leading international alcohol and evaluation experts, includes both commissioned and in-house research and analysis. The aim of the evaluation is to provide more than just a final verdict on the effectiveness of the strategy. Evaluation asks not just 'did it work' but 'how is it working, who for and how might it work better?' To contribute to policy improvement, the evaluation therefore considers implementation and differential impact (where possible) alongside the population outcomes that will assess effectiveness. The portfolio of monitoring and evaluation studies, being led by NHS Health Scotland on behalf of the Scottish Government, has a number of overall key aims:

- to evaluate the success or otherwise of the new legislation and strategic approach in achieving the Scottish Government's desired outcomes;
- to track the implementation progress, reach and outcomes of the key actions included in the 2005 Act and the Framework for Action in order to inform any necessary amendments or adjustments;
- to identify any unintended outcomes or displacement effects, including differential effects or outcomes which may impact on health inequalities; and
- to build knowledge about the effectiveness of actions where the evidence base is weakest.

9.7 The Scottish Government is currently working closely with NHS Health Scotland and the academic community to consider ways in which the MESAS portfolio can be expanded if minimum pricing is implemented. This is likely to include further research to identify any possible displacement/substitution effects; assessing the impact on the alcohol industry; and whether minimum pricing leads to unintended consequences (such as an increase in cross-border trade, an increase in the use of illicit substances, etc).

9.8 To this end, a study primarily funded by the Scottish Government and led by Queen Margaret University is already in place to determine the impact of minimum pricing on heavy drinkers in contact with specialist services. It will use a longitudinal design to determine if minimum pricing results in changes in consumption, type of beverage, price paid or substitution to industrial/illicitly produced alcohol or drugs in these drinkers, and whether any changes are differentially patterned, for example by deprivation. A Newcastle study arm will help enable the researchers to determine if any observed change in behaviours in Scotland is attributable to minimum pricing.

9.9 The evaluation report laid before the Scottish Parliament 5 years after implementation will draw upon all relevant research and data available at that time.

The report will be a key source of information when Parliament decides whether to approve the order to renew the minimum pricing provisions and therefore the evaluation must be both comprehensive and robust.

10. IMPLEMENTATION AND DELIVERY PLAN

10.1 The policy will be implemented by various groups. All licensed premises will implement the minimum price per unit which will be specified by the Scottish Ministers. The Scottish Government will have discussions with local authorities and the licensed trade to assist implementation of the policy.

11. POST IMPLEMENTATION REVIEW

11.1 As noted in paragraphs 9.2-9.4, the Bill includes a provision requiring the Scottish Ministers to evaluate the effect of minimum pricing 5 years after it comes into force and to report this to the Scottish Parliament. Minimum pricing will end after 6 years unless the Scottish Ministers make an order providing that it should continue in force. Annual reporting of trends in consumption, price and harm will continue via the MESAS portfolio.

11.2 The minimum price per unit has to be set and remain at a level that is proportionate. As such, the Bill includes a provision requiring the Scottish Ministers to review the level at which the minimum price per unit is set 2 years following the policy's implementation. A period of 2 years is considered appropriate as this will provide the market time to respond to the measure, allow for analysis of price band data to determine the impact that minimum pricing has had on alcohol sales and prices and also allow some early indicators of changes in alcohol-related harm to come through.

11.3 This approach allows the price per unit to be uprated if and when it was considered necessary, taking account of relevant factors related to changes in price and public health outcomes. A suite of indicators (including for instance RPI/CPI, sales, price band, affordability and acute health harm and crime data) will be used to build up an overall picture of the impact of the policy. The advantage over automatic uprating is that this approach provides flexibility so is better able to take account of how the market responds to a minimum pricing policy.

12. SUMMARY AND RECOMMENDATION

Summary Costs and Benefits Table

Minimum price per unit of alcohol

Recommendation

12.1 It is recommended that the Scottish Government introduces a preferred minimum price of 50p per unit of alcohol.

Option	Costs	Benefits
Introduce a prohibition on sales of alcohol below a preferred minimum price of 50p per unit	<p><u>Consumers</u> Costs to consumers of £87m (table 10).</p> <p><u>Retailers – off-trade</u> SGF estimate a 50p minimum price will reduce sales by 10% (paragraph 5.74).</p> <p>SWA estimate that a minimum price of 50p would result in reduced Scotch Whisky sales in Scotland by 15% which equates to a reduction in sales of £23m (paragraph 5.74).</p> <p>Administrative costs of re-pricing and maintaining separate prices for Scotland and rest of UK. Will depend on size of retailer and whether they are UK or Scotland based.</p> <p>Scottish Government estimates around a maximum of £0.4m (paragraph 5.78) for re-pricing in off-sales convenience premises.</p> <p><u>Retailers – on-trade</u> Unlikely to be adversely affected.</p>	<p><u>Consumers</u> <u>Health harms</u>: a reduction of £24m in year 1 (including QALYs) and a reduction of £606m over 10 years (including QALYs) (tables 3 & 6).</p> <p><u>Crime harms</u>: reduction of £5m in year 1 (including QALYs) (table 6) and a reduction of £44m over 10 years (including QALYs) (table 6).</p> <p><u>Employment harms</u>: reduction of £35m in year 1 (including QALYs) (table 6), and reduction of £292m over 10 years (including QALYs) (table 6).</p> <p><u>Retailers – off-trade</u> Increase in revenue of £68m (table 9) per annum.</p> <p><u>Retailers – on-trade</u> Increase in revenue of £29m (table 9) per annum.</p> <p><u>Wholesalers</u> All minimum price scenarios result in increased revenues, however it is not possible to ascertain where this increased revenue will end up in the supply chain.</p>

	<p><u>Wholesalers</u> Estimated there will be a decrease in volume of sales and an increase in the value of sales, however it is not possible to ascertain where this increased revenue will end up in the supply chain.</p> <p><u>Producers</u> Estimated there will be a decrease in volume of sales and an increase in the value of sales, however it is not possible to ascertain where this increased revenue will end up in the supply chain.</p> <p>SWA estimate supermarket and value brands will be affected – these account for around 26% of the Scottish off-trade market, and 250-400 jobs (paragraph 5.111) could be at risk for Scottish companies supplying these products at a 50p per unit minimum price.</p> <p>Whyte & Mackay estimate a 50p per unit minimum price would result in possible job losses for them of up to 83 in Scotland, with around 250 job losses in total (using 3 jobs indirectly connected with every direct job in the industry) (paragraph 5.111).</p> <p>SWA claim that a minimum price of 50p would erode the differential between cheap and premium Scotch Whisky thereby affecting not only brands that would be directly affected by minimum pricing (paragraph 5.114).</p> <p>SWA estimate that “copy-</p>	<p><u>Producers</u> All minimum price scenarios result in increased revenues, however it is not possible to ascertain where this increased revenue will end up in the supply chain.</p> <p><u>Local government</u> Benefits from estimated reductions in health, crime and employment harms and associated costs.</p> <p><u>Central government</u> Benefits from estimated reductions in health, crime and employment harms and associated costs.</p>
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	<p>cat” discrimination in other jurisdictions could reduce Scotch Whisky exports in the region of £500m a year (paragraph 5.131). No information has been provided in respect of which countries are contemplating or are likely to pursue such discriminatory action.</p> <p><u>Local government</u> Minimal.</p> <p><u>Central government</u> Cost of business advice to licence holders of £0.09m (paragraph 5.137) regarding implementation of minimum pricing.</p> <p>Cost of a periodic review of the minimum price for the Scottish Government – methodology and timescale not yet decided.</p> <p>Effect on VAT and duty of a reduction of £11m (table 17) for the UK Exchequer.</p>	
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Conclusions

12.2 There is strong and consistent evidence linking the price of alcohol to the demand for alcohol and that increasing the price reduces consumption and alcohol-related harm. The evidence supports the assertion that a minimum price per unit of alcohol will lead to reductions in health, crime and employment harms.

12.3 The policy aim is to reduce consumption generally, but in particular, target a reduction in consumption of cheaper alcohol relative to its strength. Evidence shows that this type of product is more favoured by hazardous and harmful drinkers. Minimum pricing achieves this because it is both a whole population approach and a targeted approach – it applies to the whole population but hazardous and harmful drinkers are likely to be affected more than moderate drinkers, in terms of the amount they drink, how much they spend and how much they benefit from reductions in harm.

12.4 The Scottish Government considers that the increased costs to individuals are outweighed by the benefits in the reduction of societal harms. It is estimated

there will be administrative costs for the industry in setting up and maintaining a separate pricing structure to the rest of the UK (unless they voluntarily adopt the Scottish pricing arrangements across the UK) however the alcohol industry as a whole is estimated to benefit from increased revenues. Some parts of the industry may incur costs, however, we consider this is offset by the benefits they are also likely to experience.

13. DECLARATION AND PUBLICATION

I have read the impact assessment and I am satisfied that (a) it represents a fair and reasonable view of the expected costs, benefits and impact of the policy, and (b) that the benefits justify the costs I am satisfied that business impact has been assessed with the support of businesses in Scotland.



Signed

Date **19 June 2012**

Nicola Sturgeon, Cabinet Secretary for Health, Wellbeing and Cities Strategy.

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ALCOHOL (MINIMUM PRICING) (SCOTLAND) BILL – COMPETITION ASSESSMENT

Introduction

1. This competition assessment analyses the likely economic impact of introducing a minimum price per unit of alcohol of 50p on the competitive ability of producers and retailers and the consequential impact on consumers.

Definition of competition

2. Competition is a process of rivalry between firms seeking to win customers' business. This process of rivalry, where it is effective, encourages firms to deliver benefits to customers in terms of prices, quality and choice. Where levels of rivalry are reduced (say because a proposal restricts the number of firms active in any market) customers have less choice because they have fewer firms from which they can buy goods or services²⁴⁸.

3. Firms compete for market share using both price and non price competition. Competition between firms may focus on offering the lowest price, particularly where the product is standardised (either because of the characteristics of the product in question, or because of regulation). Most suppliers will try and compete in a number of ways in addition to price, for example by developing new 'improved' products, by offering products of differing quality or characteristics, by branding and advertising the differences in their products relative to their competitors', or by using different sales channels.

Definition of markets

4. Markets and sectors which could potentially be affected both directly (downstream) and indirectly (upstream) have been identified and are listed below.

Directly affected markets/sectors (downstream):

- Sales of alcohol on off-licensed premises
- Sales of alcohol in licensed premises
- Market flows between on and off-licensed sales
- Sales of other products by retailers which sell alcohol, including footfall

Indirectly affected sectors (upstream) might include:

- Drinks manufacturers
- Distributors/wholesalers

²⁴⁸ Office of Fair Trading (2007) *Completing competition assessments in Impact Assessments: Guideline for policy makers* http://www.offt.gov.uk/shared_offt/reports/comp_policy/oft876.pdf

Overview of the Scottish drinks industry

5. The structure of the Scottish alcohol industry is complex. On the manufacturing side, there are a number of multinational companies who produce multiple products for different worldwide markets plus a large number of smaller producers. These firms use a large number of smaller firms, from Scotland or abroad, to supply the required inputs for the production process and in some cases may subcontract out part of the production process, such as bottling, to other firms. The alcohol retail sector (off-sales) consists of a small number of large supermarkets, a decreasing number of smaller specialist retailers and a large number of other small grocers and corner stores. The hospitality sector (on-sales) consists of a small number of national chains and a large number of small pubs, clubs and restaurants. While previously there have been a large number of independent pubs, these are increasingly being taken over by mostly large beer producers. The retail sector and the hospitality sector sell products produced both within and outside Scotland²⁴⁹.

6. An analysis provided by NHS Health Scotland using Nielsen data²⁵⁰ found that in 2010, 11.8L of pure alcohol (1,185 units) were sold per adult (aged over 16) in Scotland (22.8 units per adult per week). This level has stayed broadly constant in Scotland since 2005, having increased by around 11% from 1994 onwards. Comparable sales in England and Wales were 9.6L in 2010 (964 units or 18.5 units per adult per week), meaning sales in Scotland are 23% higher than in England and Wales²⁵¹. A further study by NHS Health Scotland on the validity and reliability of these data found that while they were a robust measure of population consumption in Scotland, they were subject to typical under and over-estimating influences²⁵². Considering possible sources of overestimation and underestimation, the study concluded that the range of uncertainty around the central estimate of 11.8 litres of pure alcohol per adult was from an overestimate of 0.3L to an underestimate of 2.4L per adult.

7. Table 1 provides an overview of the market size, employment, turnover and Gross Value Added (GVA)²⁵³ of the Scottish beverage manufacturing sector.

²⁴⁹ Petrie, D. et al. (2011) *Scoping study of the economic impact on the alcohol industry of pricing and non-price policies to regulate the affordability and availability of alcohol in Scotland*. Edinburgh: NHS Health Scotland <http://www.healthscotland.com/documents/5051.aspx>

²⁵⁰ Robinson, M., Craig, N., McCartney, G., and Beeston, C. (2011) *Monitoring and Evaluating Scotland's Alcohol Strategy: An update of alcohol sales and price band analyses*. Edinburgh: NHS Health Scotland

²⁵¹ *Ibid*

²⁵² Thorpe, R., Robinson, M., McCartney, G., and Beeston, C. (2011) *Monitoring and Evaluating Scotland's Alcohol Strategy: A review of the validity and reliability of alcohol retail sales data for the purpose of Monitoring and Evaluating Scotland's Alcohol Strategy*, Edinburgh: NHS Health Scotland

²⁵³ Gross Value Added (GVA) estimates GDP and is measured in basic prices, which excludes taxes (including VAT and excise duties) but includes subsidies on products

Table 1: Overview Manufacturing of Beverages in Scotland, 2009

	Business units		Employment		Turnover		GVA	
	Number	% of total	Number ('000)	% of total	Total (£m)	% of total	At basic prices (£m)	% of total
Manufacture of Beverages	237		10.8		4,350.2		2,730.8	
Distilling, rectifying and blending of spirits	148	62%	7.8	72%	3,020.4	69%	1,850.8	68%
Manufacture of beer	42	18%	0.8	7%	657.9	22%	**	**
Manufacture of soft drinks; production of mineral waters and other bottled waters	27	11%	1.7	16%	363.3	55%	157.7	6%
Others*	18	8%	0.4	4%	155	43%	**	**

* Includes: manufacture of malt, other non-distilled fermented beverages, other fermented fruit beverages, cider and perry, cider and other fruit wines, wine based on concentrated grape must, wine of fresh grapes and fresh juice, wines and production of alcohol from fermented materials.

** GVA not available

Source: Office for National Statistics, Annual Business Inquiry (Compiled by Scottish Government)

8. In 2008, the Scottish spirits sector accounted for a significant proportion of total UK output of the industry (around 80% for both turnover and Gross Value Added)²⁵⁴. This shows a stark difference relative to the whole of manufacturing where Scotland accounts for only around 8% to 9% of total UK output. The spirit sector accounted for over one third of Scottish food and drink manufacturing's total turnover and over half of its total GVA.

9. GVA per employee of the spirits sector more than doubled from £81,069 in 1998 to £195,874 in 2007. This was over three times greater relative to the manufacturing sector as a whole (£61,252). Whilst average labour costs per employee (£46,600) are 60% higher in the spirit sector relative to the manufacturing as a whole (£28,866).

Intra-industry overview

10. The industry sales data published by NHS Health Scotland²⁵⁵ indicates that 51.1 million litres of pure alcohol were sold in Scotland in 2010. Analysis shows that approximately two thirds (67%, 34.1 million litres) of the total volume of pure alcohol sold in Scotland in 2010 was sold through the off-trade compared with approximately one third (33%, 17.0 million litres) through the on-trade. The majority of spirits (77%), light wine (77%) and cider (68%) were sold off-trade. Beer was the

²⁵⁴ Scottish Government (2009) *Food and Drink in Scotland: Key Facts 2009*, Edinburgh: Scottish Government <http://www.scotland.gov.uk/Resource/Doc/289239/0088496.pdf>

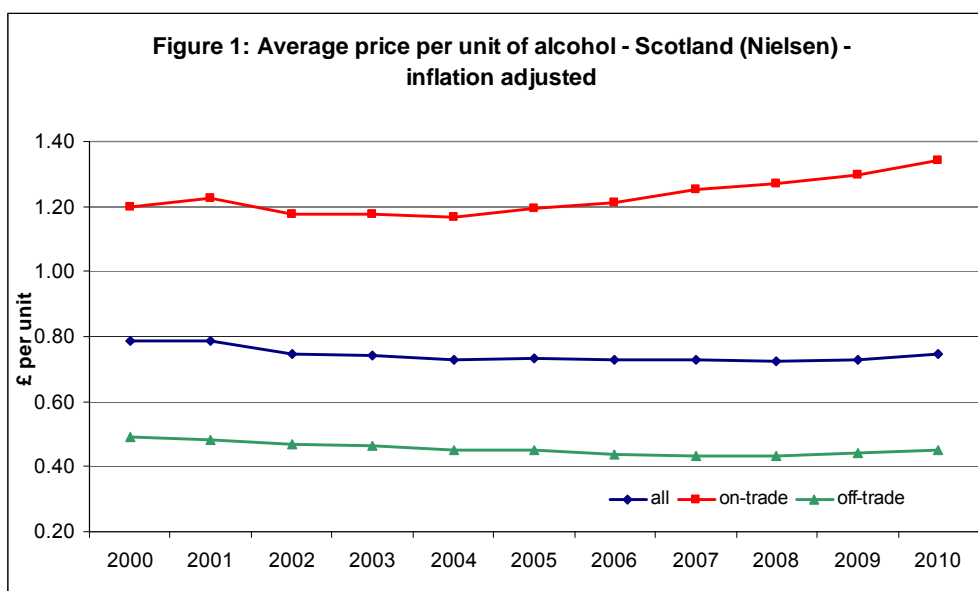
²⁵⁵ Robinson, M., Craig, N., McCartney, G., and Beeston, C. (2011) *Monitoring and Evaluating Scotland's Alcohol Strategy: An update of alcohol sales and price band analyses*. Edinburgh: NHS Health Scotland

only category of drink for which the majority of alcohol was sold through the on-trade (52%).

Prices

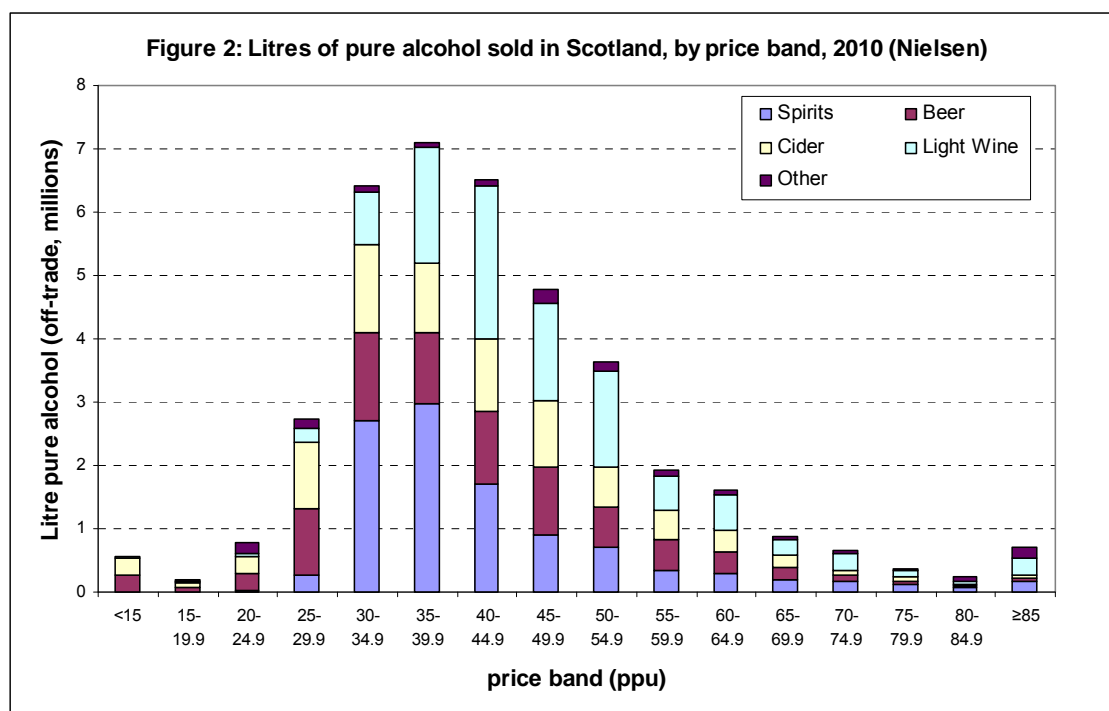
11. The Nielsen data published by NHS Health Scotland estimates that the average price per unit of alcohol in Scotland in 2010 was £0.75, almost identical to the figure in England and Wales (£0.74)²⁵⁶. As set out in paragraph 2.37 above, the average price per unit in the on-trade in 2010 was 134p, compared to just 45p in the off-trade.

12. Figure 1 displays trends in average price adjusted for inflation and broken down by on-trade and off-trade. Off-trade prices fell by around 8% between 2000 and 2010, with inflation adjusted prices declining in the early part of the decade and remaining relatively stable thereafter. In contrast, on-trade prices rose by almost 12% since 2000. Overall alcohol prices fell by around 4% between 2000 and 2010, reflecting the fact that the majority of alcohol is sold through off-sales.



13. Figure 2 uses Nielsen data to analyse the distribution of alcohol sold in the off-trade sector by price band by five main types of alcohol. It can be seen that the majority of off-trade sales are made within the price range 25p to 50p per unit.

²⁵⁶ *Ibid*



14. An analysis of the cumulative off-sales volume of selected drink types and unit prices based on 2010 Nielsen data is presented in table 3. The last column in the table provides market shares of the product categories as a proportion of total off-sales volume. The table demonstrates that for all major drink types a majority of sales are priced below 50p per unit (with cider retailing particularly cheaply).

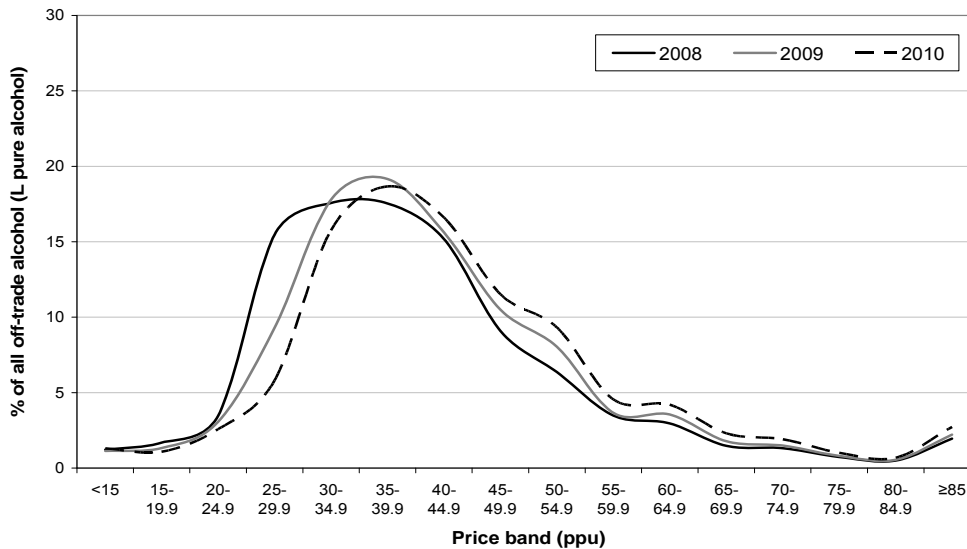
**Table 3: Cumulative volume of off-sales of pure alcohol (volume)
by price band and total market share**

	Price per unit (pence)	<40p	<45p	<50p	<55p	<60p	<65p	<70p	% of total sales volume
Spirits		56%	72%	81%	87%	91%	93%	95%	32%
of which	Vodka	70%	85%	92%	97%	99%	99%	99%	13%
	Blended Whisky	58%	77%	85%	93%	96%	98%	98%	8%
	Malt Whisky	1%	3%	3%	9%	13%	28%	45%	1%
	Gin	56%	77%	87%	94%	96%	98%	98%	3%
	White Rum	46%	72%	78%	85%	94%	97%	98%	1%
	Dark Rum	55%	70%	83%	92%	96%	99%	100%	1%
	Golden Rum	15%	40%	56%	73%	83%	91%	92%	1%
Beer		50%	64%	77%	85%	91%	95%	96%	24%
of which	Standard	52%	70%	84%	90%	94%	98%	98%	10%
	Premium	46%	57%	70%	80%	87%	92%	94%	13%
	Super Strength	80%	92%	99%	99%	99%	100%	100%	1%
Cider		72%	81%	85%	88%	91%	93%	94%	7%
of which	White/ Strong	94%	98%	99%	100%	100%	100%	100%	2%
	Regular	66%	76%	81%	85%	88%	90%	92%	5%
Table Wine		35%	28%	52%	66%	81%	86%	91%	94%
Other		35%	40%	56%	66%	72%	78%	81%	4%
of which	Fortified	32%	40%	63%	77%	87%	93%	94%	3%
	Perry	92%	96%	99%	100%	100%	100%	100%	1%

15. Over the last 3 years the distribution illustrated in figure 2 has been shifting to the right (see figure 3). As prices have increased the amount sold below any particular price per unit has diminished. For example, in 2008, 81% of all off-trade alcohol was sold at below 50p per unit. This fell to 78% in 2009 and 73% in 2010. It is anticipated that this trend will have continued throughout 2011 and 2012. This being the case the proportions shown in table 3 will be smaller by the time minimum pricing is implemented (2013 at the earliest). In addition, for products such as wine, much of their sales cluster just below the 50p per unit (for instance 36% of wine retailed at between 40p and 49.9p per unit in 2010)²⁵⁷. Therefore even relatively modest increases in price are likely to affect the proportion of such products retailing below the preferred minimum price of 50p per unit.

²⁵⁷ *Ibid*

Figure 3: Price distribution (%) of pure alcohol sold off-trade in Scotland, 2008-2010



Exports

16. The Global Connections Survey indicates that in 2010 the whisky industry, along with other spirits (distilled potable alcoholic beverages), accounted for approximately 84% of all food and drink manufacturing exports, the share having increased in the last eight years from 80% in 2002. The nominal value of spirits exports grew by 74% from £1.9bn in 2002 to £3.3bn in 2010²⁵⁸. HMRC data suggest a higher export figure for whisky than the Global Connections Survey, with total export value estimated to be £4.2bn (up from £3.4bn in 2010)²⁵⁹. In 2009, 91.3% of the total volume of Scotch Whisky was exported and 8.7% consumed in the UK²⁶⁰.

Individual company market shares

17. It is not possible to estimate the exact market shares of the biggest companies and brands for Scotland, however, the top 10 selling Scotch Whisky brands on the Scottish market by volume are estimated to account for approximately 70% of the market. Own label and cheap brands accounting for the remaining 30% of the market²⁶¹.

Geographical impact

18. Since the legislation would be introduced in Scotland only, there is theoretically some potential for Scottish consumers to purchase alcoholic products in off-licences across the border in England, thereby shifting market demand away

²⁵⁸ Scottish Government (2012) *Global Connections Survey 2010*, Data tables available at: <http://www.scotland.gov.uk/Publications/2010/12/GCS2009>

²⁵⁹ HMRC, uktradeinfo website <https://www.uktradeinfo.com/Pages/Home.aspx>

²⁶⁰ Scotch Whisky Industry Review 2009, <http://www.scotchwhiskyindustryreview.com/>, p.12

²⁶¹ SWA response to 2009 consultation

from Scottish supply (cross-border effects). The extent to which this might happen is difficult to predict as it will depend on consumers' willingness to travel for their alcohol purchases and on the scale of the price differential. The products most likely to be affected are high-strength, low price products and potential savings from purchasing these products in England would have to be weighed against increased travel and transport costs.

19. The issue of cross-border shopping between Northern Ireland and the Republic of Ireland was addressed in a report conducted by the Office of the Revenue Commissioners and the Central Statistics Office for the Irish Department of Finance²⁶². The report notes that the main causes of price differentials between goods in Northern Ireland and the Republic are operating costs, profit margin, taxes and, in particular, the rapid depreciation of Sterling against the Euro (depreciation of around 30% between January and December 2008). These are specific circumstances where it is not just alcohol that is cheaper – people are travelling to do their whole grocery shopping.

20. The report estimates potential losses in Exchequer revenues due to tax losses to be between €92m (£74m) and €143m (£114m)²⁶³ in 2009. The value of cross-border shopping was estimated to be in the range of €350m (£280m) and €550m (£440m) in 2008. The Alcohol Beverage Federation of Ireland also noted that alcohol was a major contributory factor driving cross-border shopping, due to higher alcohol taxes in the Republic of Ireland relative to the UK. Based on Nielsen data, it was estimated that off-licence sales in the North have risen by 30% in the year to August, while off-sales in the South were down by 7%.

21. Different tax regimes in Scandinavian countries have led to flows of goods across borders. For example, one study analysed sales of alcohol and tobacco in Norway both close to the border with Sweden (where the tax is lower) and further away. Revenue from these products was lower for Norwegian stores near the border but consumers there report higher consumption than those further away. This suggests cross border shopping by a number of Norwegian households. They also found that measure of externalities were higher near the border. The authors concluded that large tax differentials near borders induce tax avoidance behaviour²⁶⁴.

22. Another potential consequence of introducing minimum pricing in Scotland only is an increase in internet sales. If the alcohol is not despatched from within Scotland minimum pricing would not apply. Similar to cross-border shopping, the products most likely to be affected are high-strength, low price products. Also similar to cross border shopping, the incentive to buy from outwith Scotland via the internet will be greater the bigger the price differential between the price of alcohol in Scotland and elsewhere, combined with the volume of goods being purchased. From the limited information available, the Scottish Government believes that the

²⁶² Office of the Revenue Commissioners and the Central Statistics Office (2009) *The Implications of Cross Border Shopping for the Irish Exchequer*
<http://www.finance.gov.ie/documents/publications/reports/2009/crossborderefb09.pdf>

²⁶³ Assuming €1=£0.8

²⁶⁴ Beatty, T., Larsen, E., and0 Sommervoll D. (2009) *Driven to Drink. Sin taxes near a border*, Journal of Health Economics, 28, 1175 - 1184

type of alcohol currently typically bought over the internet – predominantly fine wines – will not be affected by minimum pricing. The potential for this market to diversify and grow, however, is acknowledged and will be monitored as far as possible.

Impact on retailers, suppliers and wholesalers

23. Guidance produced by the Office of Fair Trading (OFT) recommends the consideration of four key questions in order to discuss whether the legislation on alcohol products would have an impact on competition. Each of these questions is discussed in turn for the proposal of a minimum price for a unit of alcohol.

24. The four questions are as follows. In any affected market, would the proposals:

1. Directly limit the number or range of suppliers?
2. Indirectly limit the number or range of suppliers?
3. Limit the ability of suppliers to compete?
4. Reduce suppliers' incentives to compete vigorously?

1. Would the proposals directly limit the number or range of suppliers?

25. Minimum pricing is not going to award exclusive rights to supply or restrict procurement processes to a single supplier or restricted group of suppliers. There will also be no direct impact or limitation (quota) on the number of suppliers or retailers as a consequence of any of the proposals.

26. A licensing scheme is already in place for the retail of alcohol in off-licences and on-sales premises. Minimum pricing will affect all off and on-sales licensed premises, however, it will not affect the existing licensing scheme or require the introduction of a new licensing scheme.

2. Would the proposals indirectly limit the number or range of suppliers?

27. A minimum price will essentially establish a price floor. This could potentially make it harder for firms to enter or exit the market for retailing alcohol if the price floor is binding, i.e. if the free market price for products lies below the price floor. New, small retailers would no longer be able to attract demand by challenging existing firms on price, and below that price floor would be left with the ability to compete only on non-price factors such as brand, quality, range, advertising, etc.

28. Products that currently retail below the preferred minimum price of 50p per unit, would require to raise their price to comply with the legislation. That could result in a number of brands of a similar product retailing at an identical price such as supermarket own label spirits, brands associated with a low retail price and those recognised as more premium brands. If there was no price differential it may be that demand for the own label product or value product diminishes leading ultimately to a reduction in the number of suppliers.

29. Minimum pricing may provide an incentive to innovate. One possible effect of minimum pricing could be the introduction of alcohol products containing lower strength alcohol which could be sold at a relatively lower price in larger quantities due to them containing fewer units of alcohol per litre.

International competition

30. The legislation would apply equally to international producers, wholesalers and retailers trying to enter the Scottish market. Any firms wanting to import high strength, low price products would have to raise their retail prices to comply with the minimum price per unit legislation. This could impact on a foreign company's ability to compete in the domestic market if the company was currently selling at very low margins in order to be competitive with domestic products.

3. Would the proposal limit the ability of suppliers to compete?

31. Minimum pricing will restrict the ability of retailers to price alcohol products. Since the limitation will act as a price floor, retailers will not be able to out-compete through undercutting one another on price across some or all of their product range or through loss-leading. This could have a weakening effect on competition between retailers.

32. Identifying which part of the retail market will be most affected – supermarkets or small shops – is problematic. Large and small retailers are likely to be affected differently. Larger retailers sell large volumes of popular brands (often priced very competitively) but also, a greater range of products. Convenience stores' representatives have said that they need to maintain low prices to compete with supermarkets, particularly as supermarkets continue to develop their "convenience store" format (such as Tesco Metro and Sainsbury's Central) putting pressure on independent retailers to compete with them on price.

33. Some small retailers may depend on alcohol sales for a significant proportion of their turnover. The initial consultation response by the Scottish Grocers' Federation estimated that the imposition of a minimum price of between 40p to 70p could reduce sales by between 10% and 25%²⁶⁵. However, this will have to be weighed up against the additional (off-sales) turnover predicted to be generated at any given level of minimum price.

34. It is therefore very unlikely that the minimum price legislation will force any small retailers out of the market. However, in the exception where this might be the case, there would be a potential competition impact since it could lead to a more consolidated market, and hence less competition between firms even on products where the minimum price floor does not have a direct effect. Since higher levels of minimum price will affect larger proportions of products, the overall impact on retailers' turnover will also increase. This will play a more important role for retailers whose turnover is derived to a larger extent from the sale of affected alcoholic products.

²⁶⁵ Scottish Grocers' Federation (SGF) response to 2009 consultation

35. Table 4 illustrates the potential impact on the price of a selection of specific products following the introduction of a range of a minimum price of 50p. These are examples taken as a snapshot from a comparison website²⁶⁶ and represent products at low and medium price range in different drinks categories (sample taken in May 2012). The table indicates the minimum retail price and those products for which there would be no change. (Please note that some of these prices may have been a “special offer” indicating a price reduction on that date.)

²⁶⁶ www.mysupermarket.co.uk, accessed May 2012

Table 4: Retail prices of a sample of products from Tesco (on 28 May 2012) and the impact of a 50p minimum price per unit

Product	ABV	Units	Prices as at 28 May 2012*	Price per unit of alcohol	Minimum price at 50p/unit	Increase
Cider						
Tesco Strong dry cider, 4x440ml	5.3	9.3	£2.09	22p	£4.67	£2.58
Strongbow, 4x440ml	5.3	9.3	£3.50	41p	£4.67	£1.17
Blackthorn dry cider, 12x440ml	5.5	29.0	£11.99	42p	£14.52	£2.53
Gaymers Old English, 4x440ml	4.5	7.9	£3.95	50p	£3.96	£0.01
Bulmers, 6x568ml	4.5	15.3	£9.00	59p	£7.67	Not affected
Magners, 4x440ml	4.5	7.9	£4.79	61p	£3.96	Not affected
Vodka and Gin						
Tesco Value vodka, 70cl	37.5	26.2	£8.72	33p	£13.13	£4.41
Glen's vodka, 70cl	37.5	26.2	£12.00	46p	£13.13	£1.13
Vladivar Classic, 70cl	37.5	26.2	£13.00	50p	£13.13	£0.13
Gordon's gin, 70cl	37.5	26.2	£13.00	50p	£13.13	£0.13
Smirnoff Red Label, 70cl	37.5	26.2	£13.00	50p	£13.13	£0.13
Whisky						
Tesco Value, 70cl	40.0	28	£10.32	37p	£14.00	£3.68
Tesco Special Reserve, 70cl	40.0	28	£12.00	43p	£14.00	£2.00
Bell's, 70cl	40.0	28	£13.00	46p	£14.00	£1.00
Whyte and MacKay, 70cl	40.0	28	£13.00	46p	£14.00	£1.00
Grants, 70cl	40.0	28	£13.00	46p	£14.00	£1.00
Famous Grouse, 70cl	40.0	28	£13.00	46p	£14.00	£1.00
Johnnie Walker Red Label, 70cl	40.0	28	£16.11	58p	£14.00	Not affected
Chivas Regal 12 yr old, 70cl	40.0	28	£21.00	75p	£14.00	Not affected
Glenfiddich single malt 12 yrs, 70cl	40.0	28	£21.00	75p	£14.00	Not affected
Beer and lager						
Tesco Lager 4x500ml	4.0	8	£2.39	30p	£4.00	£1.61
Carlsberg Special Brew 4x440ml	9.0	15.8	£7.09	45p	£7.92	£0.83
Tennents Super Lager 4x440ml	9.0	15.8	£7.09	45p	£7.92	£0.83
Carling 4x440ml	4.1	7.2	£3.50	49p	£3.61	£0.11
Stella Artois 4x440ml	4.0	7.0	£4.00	57p	£3.52	Not affected
Red Stripe 4x440ml	4.7	8.3	£4.99	60p	£4.14	Not affected
Carlsberg 4x440ml	3.8	6.7	£4.50	67p	£3.35	Not affected
Wine						
Silver Rock Chardonnay 750ml	12.5	9.4	£3.19	34p	£4.69	£1.50
Tesco South African White 750ml	12	9	£3.37	37p	£4.50	£1.13
Tesco Simply Chenin Blanc 750ml	12.5	9.4	£3.49	37p	£4.69	£1.20
Blossom Hill Californian Red 750ml	12.5	9.4	£4.59	49p	£4.69	£0.10
Echo Falls Merlot, 750ml	13	9.8	£4.99	51p	£4.88	Not affected
Blossom Hill Chardonnay, 750ml	13	9.8	£5.49	56p	£4.88	Not affected
Black Tower Rivaner, 750ml	9.5	7.1	£4.88	69p	£3.57	Not affected
Hardy's Cabernet Merlot, 750ml	13.5	10.1	£7.99	79p	£5.07	Not affected

*source: mysupermarket.com

36. The initial change in the market is likely to be in the quantities sold of a specific alcoholic product if the original price lies below the newly set minimum price. The change in revenue to retailers and wholesalers will be determined by consumers' elasticity of demand for that product – the more inelastic the demand, the greater the increase in revenue. This leads to a transfer of 'rents' from consumers to retailers. In effect, retailers can charge higher prices for the same goods than they otherwise could under free and unrestricted competitive markets.

37. The Scotch Whisky Association point out that there could be another form of market distortion as a result of obligatory price increases in some of the low price, high strength products. Such an increase would reduce the price gap between low quality products (in this case own brand whiskies) and higher quality products such as branded blended whiskies and, to a lesser extent, single malts. The SWA claim this could potentially lead to a 'commoditisation' of the market, with consumers expected to switch to alternative, higher quality, but now similarly priced products.

38. An alternative consequence could be a proportionate increase in prices of higher quality products by retailers in order to maintain the product differentiation, which would then result in a higher level of prices throughout the alcohol product segment presented to the consumer. Evidence from British Columbia shows that when the minimum price for alcoholic drinks was raised, prices rose across all of the price distribution, including those well above the minimum price. The scale of price increases reduced the higher the original price of the product²⁶⁷.

39. Findings on consumers' price elasticities of demand for different alcoholic products from the University of Sheffield study and others are discussed in greater detail in the consumers section below. Broadly, it is found that demand for wine and beer is generally inelastic in the UK. Own-price elasticities for spirits range from relatively inelastic to elastic. The Sheffield study's estimates are in line with other findings showing that demand for beer and ready to drink beverages is relatively more inelastic than demand for wine and spirits.

40. The Sheffield report predict that all minimum price scenarios modelled result in increased revenue for the alcohol industry overall, both off-trade and on-trade (excluding duty and VAT). Higher minimum prices lead to greater retail receipts, with increases in off-trade receipts of around £69m (excluding VAT and duty) for a 50p per unit minimum price and £91m for a minimum price of 50p per unit plus a discount ban²⁶⁸.

41. The updated Sheffield model of 2012 estimated a reduction in duty and VAT receipts for the off-trade sector at all levels of minimum price per unit with increasing

²⁶⁷ Professor T. Stockwell *Alcohol pricing for public health: alcohol general principles, the devil and the detail*. Presentation to Scottish Health Action on Alcohol Problems, Edinburgh, 28 September 2012

²⁶⁸ Meng, Y. et al. (2012) *Model-based appraisal of alcohol minimum pricing and off-licensed trade discount bans in Scotland using the Sheffield Alcohol Policy Model (v.2): Second update based on newly available data*, Sheffield: University of Sheffield
http://www.sheffield.ac.uk/polopoly_fs/1.150021/file/scotlandupdatejan2012.pdf

reductions at increasing minimum price per unit rates. This is partially offset by linearly increasing duty and VAT receipts in the on-trade sector at increasing rates of minimum price. Duty is applied to the volume of sales on a per unit basis (which with this price scenario is reducing) but the sales tax (VAT) is applied to the monetary value of sales (which is increasing). For a minimum price per unit of 50p, the overall reduction in tax (across both off and on-sales) would be around £10.5m: an increase in VAT of £13m and a decrease in duty of £23.5m. A 50p minimum price per unit plus a discount ban is estimated to result in an increase in VAT of £16m and a reduction in duty of £32m: an overall reduction to the UK Exchequer of £16m.

42. The likely distribution of these increased revenues for the industry across the supply chain is not known. If the majority of profits are retained by retailers, those margins could be used to become more competitive in other areas, e.g. fruit and vegetables. It might lead to loss-leading activities on staple items such as bread and milk. This might put smaller retailers, who would not have the same flexibility of margins, at a competitive disadvantage. If producers raise their prices accordingly following the imposition of a minimum price, this would negate any profit margin increase for retailers²⁶⁹.

43. The Loi Galland, passed in France in 1997, meant that large supermarkets could not pass on discounts negotiated with wholesalers to consumers, the equivalent to allowing industry-wide price floors. Any deals made by retailers with wholesalers would only result in an increase in the retailer's margins, and not benefit consumers. In France, between 1997 and 2002, food prices increased faster than general inflation – 11.8% compared to 6%. Before the Loi Galland food prices increased at a slower rate than inflation²⁷⁰.

44. Similarly, between 1987 and 2005 Ireland's Groceries Act (1987) provided very similar restrictions on retailers' pricing by outlawing below-cost selling in Ireland. Collins et al. (2001)²⁷¹ identified the Act as a key influence on the behaviour of retailers, and as a significant variable in the explanation of retail gross margins. They show a positive relationship between the banning of below-cost selling and retail gross margins, which indicates that the law resulted in a reduction in price competition between retailers. A study by the Irish Competition Authority in 2005²⁷² estimated that removing the restriction on below-cost selling could save households nearly €500 per year.

²⁶⁹ Scottish Grocers' Federation input to draft Regulatory Impact Assessment; SGF response to 2011 consultation

²⁷⁰ Biscourp, Boutin and Vergé (2008) *"The Effects of Retail Regulations on Prices; Evidence from the Loi Galland"*, INSEE Working paper 2008/2

²⁷¹ Collins, Burt, and Oustapassidis (2001), *"Below-cost Legislation and Retail Conduct: Evidence from the Republic of Ireland"*, British Food Journal

²⁷² Irish Competition Authority (2005), 'Submission to the Minister for Enterprise, Trade and Employment on the Groceries Order, Submission: S/05/006', July 2005

http://www.tca.ie/PromotingCompetition/Submissions.aspx?selected_item=9

45. An Organisation for Economic Co-operation and Development (OECD) roundtable in 2005 on resale below cost²⁷³ further noted that restrictions on selling below cost are associated with slower economic growth and higher unemployment.

46. In some cases, there is a risk that Government-imposed restrictions on pricing could encourage rent-seeking activity e.g. lobbying by firms to maintain or increase restrictions. This could lead retailers to divert resources away from developing and improving their products and services. In the long-run this can result in higher costs.

Specialists

47. In the case of specialists who sell alcohol products only, there would not be the opportunity to use any increase in revenue to reduce prices of other products such as fruit and vegetables in order to enhance competitiveness. However the aggressive low cost competition between the supermarkets within the off-sales sector is likely to have contributed to the failure of mid size off-sales chains such as Threshers, Haddows and Oddbins. In terms of lower priced products, a minimum unit price might increase the ability of independent shops and smaller chains to compete in this market.

Production methods and innovation

48. The producers that will be most affected by a minimum price are those whose production consists of a significant volume of products which currently sell below that minimum price threshold. These producers are likely to be the ones whose main production focuses on own label products, as these generally sell at lower price. It has proved difficult to obtain comprehensive information about which producers produce the 'cheap' alcohol and own label alcohol.

49. In the case of ciders, some of the cheaper brands are produced by global companies such as Constellation Brands and Heineken which are major drinks companies producing a whole range of alcohol products. These companies are likely to be affected, overall, to a very minimal extent by minimum pricing in Scotland. It has not been possible to source the producers of own label cider.

50. For own label spirits, it appears that there are two companies that are significantly involved in own label whisky production: Whyte & Mackay and Glen Catrine. Whyte & Mackay claim to be a leading supplier of own label whisky for the UK, with an estimated 80% share of that market. Glen Catrine's website²⁷⁴ states it now has the largest independent bottling plant in Scotland. Amongst a multitude of brands, they produce the 5th highest selling whisky in the UK (High Commissioner Scotch Whisky) and the 2nd highest selling vodka in the UK (Glen's Vodka). The strength of these companies in own label spirit production is borne out by the Scotch Whisky Association's letter of 19 February 2010²⁷⁵ to the Finance Committee in

²⁷³ Organisation for Economic Co-operation and Development (2006) *OECD Policy Roundtables: Resale Below Cost, 2005* <http://www.oecd.org/dataoecd/13/30/36162664.pdf>

²⁷⁴ See: <http://www.lochlomonddistillery.com/>

²⁷⁵ Scottish Parliament reference FI/S3/10/7/2

which they state that “*while there are a number of companies involved in this trade [cheap or own label] two companies in particular rely heavily on this segment of the market*”. The letter goes on to mention Whyte & Mackay and Glen Catrine.

51. There should be minimal impact on innovation or the introduction of new products. New, high-strength products would have to comply with a minimum price, but would not be prevented from being introduced. There may even be an incentive to innovate. One possible effect of minimum pricing could be the introduction of alcohol products containing lower strength alcohol which could be sold at a relatively lower price in larger quantities due to them containing fewer units of alcohol per litre. This would constitute an introduction of a new product in line with proposed legislation and would not change the characteristics of existing products. However, reducing the alcohol content will not be an option in the case of Scotch Whisky, where legal definitions dictate that the product has to be of strength of at least 40% or higher²⁷⁶.

52. It is not anticipated that the proposals will limit suppliers' freedoms to organise their own production processes or their choice of organisational form.

International competition

53. There is some concern by the industry²⁷⁷ that the establishment of minimum price legislation as a precedent in Scotland could lead to similar legislation being introduced in other countries under a protection of public health rationale. While we consider this unlikely, depending on how these measures are implemented in other countries, there could potentially be a detrimental effect on the export segment of Scottish drinks producers, in particular for Scotch Whisky. At the same time Scotch Whisky is already subject to a number of imposed duties and restrictions in other countries, so it is difficult to see how minimum pricing introduces a precedent.

4. Would the proposals reduce suppliers' incentives to compete vigorously?

54. The primary effect of a price floor is to reduce the ability of retailers to compete on price grounds. Instead, retailers might switch to competing on other factors, such as customer service, quality, heritage, taste or origin. Some of this could be positive for consumers. However, other forms of competition can be less positive (e.g. competition on advertising). One unintended consequence of the legislation might be an increase in this type of non price competition facilitated by the increase in revenue and any resultant impact on sales.

55. The previous section (section 3: “limits the ability of suppliers to compete”) established that there could be increases in revenue to retailers following the introduction of a minimum price depending on the elasticity of demand for alcohol. This could remove pressure on retailers to be efficient as it may reduce incentives to compete on price grounds.

²⁷⁶ Definition of Scotch Whisky, 3.1.i http://www.opsi.gov.uk/si/si2009/ukSI_20092890_en_1#l1g3

²⁷⁷ SWA response to 2009 consultation

56. It is important to ensure that the introduction of a minimum price does not inadvertently allow or encourage competitors to share information on their commercial matters (e.g. future price or demand projections) during the process of setting their price according to the regulations. If this was the case, it could also lead to reduced incentives to compete.

57. Biscourp et al. (2008) find that before the Loi Galland retail prices were significantly lower in concentrated markets in France but, two years after the enactment of the law, the correlation vanished. This indicates that retail chains were no longer competing fiercely, and consumers would have been losing out. The larger retailers benefited the most in terms of ability to increase prices.

Impact on Consumers

58. A minimum price for a unit of alcohol can be expected to have direct and indirect impacts on consumers. A price floor will lead to price changes for affected products. This means that relative prices of different alcoholic products would change as the minimum price floor would affect some products (whose price would increase), but not others (whose original price was already set above the minimum price per unit).

59. Consumers can be expected to respond to these changes in either of two ways, either by reducing their consumption of an alcoholic product if the price increases, or by switching to alternative products (substitutes) whose relative price has decreased. The extent to which this happens will depend on consumers' price responsiveness, i.e. the own-price elasticity (PED) and cross-price elasticities (XED) of demand, which will determine change in consumption and switching behaviour.

60. It is not expected that minimum pricing will affect the ease with which customers can switch between competing products.

61. For a better understanding, own-price and cross-price elasticities are explained below:

- Own-price elasticity of demand is defined as the measure of responsiveness in the quantity demanded for a commodity as a result of a change in its own price. It is a measure of how consumers react to a change in price.
- If demand for a good is inelastic, a change in the good's price will invoke a proportionately smaller change in demand for that good ($0 < PED < 1$). Likewise, if the demand for a good is elastic, then a change in price will result in a relatively larger change in quantity demanded ($1 < PED < \infty$).
- *Aggregate* analysis tend to suggest that heavier drinkers have relatively more inelastic elasticities of demand for alcohol than moderate drinkers, meaning that an overall change in the price of alcohol will cause heavier drinkers to change their consumption behaviour by relatively less than moderate drinkers. However, since heavier drinkers by definition consume more in absolute terms, the absolute quantities of alcohol consumed could change more than for moderate drinkers. The Sheffield study, however found that heavier drinkers were more responsive to price change. This is because it is based on disaggregated

equations rather than aggregated. The model takes into account that cross price impacts vary in a very complex way between moderate and hazardous/harmful drinkers and across the different drink and price groups of goods.

- Cross-price elasticities of demand (XED) measure the responsiveness of the demand for one good to a change in the price of another good. If the XED between two alcohol products is high, this means that consumers would switch easily to an alternative if the price of one product increased.

62. As alcohol is both mind altering and addictive it might be reasonable to suggest alcohol has relatively few substitutes²⁷⁸. The PED for alcoholic beverages is therefore likely to be inelastic. Estimates of the PED will vary, however, depending on how the beverage is defined, e.g. it could reasonably be argued the most important substitute products for beer are wine and spirits. As there are relatively few substitute products, it is likely the absolute value of the own-price elasticity of beer is quite low. The same is obviously also true for wine and spirits.

63. The more narrowly defined the market of a product (e.g. alcohol), the greater the flexibility to switch to alternative products, i.e. the greater the elasticity. For any given brand of beer, or beer sub-market category, e.g. imported beer, there are therefore many substitute beer products. As such, it is reasonable to expect the absolute value of the PED for a specific beer brand or beer sub-market category to be relatively high.

64. The Sheffield modelling produced a complex matrix of elasticities for different categories of drinkers and for different alcoholic drinks in both the on and off-trade for the UK. An extract of the results is used to populate the summary of own-price elasticities from the Sheffield study in table 5 below. For comparison, examples of price-elasticities from other studies are given in table 6.

Table 5: Price elasticity of demand for 16 beverage categories (Sheffield – UK)

Moderate drinkers	Off-trade				On-trade			
	Beer	Wine	Spirit	RTD	Beer	Wine	Spirit	RTD
Low*	-0.40	-0.43	-0.51	-0.32	-0.40	-0.26	-1.10	-0.35
High*	-0.44	-0.47	-0.52	-0.34	-0.42	-0.28	-0.16	-0.34
Hazardous and harmful drinkers	Off-trade				On-trade			
	Beer	Wine	Spirit	RTD	Beer	Wine	Spirit	RTD
Low*	-0.58	-0.59	-0.62	-0.43	-0.67	-0.39	-2.22	-0.44
High*	-0.60	-0.64	-0.65	-0.42	-0.66	-0.39	-0.24	-0.44

*Low/High=price point estimates for each product

RTD=ready to drink

65. These tables show that demand for wine and beer is generally inelastic in the UK. Exceptions are on-trade spirits in both the Sheffield and HMRC studies; and off-trade beer in the HMRC studies. (Note that many studies do not split into on and off-trade.) Findings in own-price elasticity for spirits range from relatively inelastic to elastic. The Sheffield study's estimates are in line with other findings, showing that

²⁷⁸ Fogarty, J. (2008) *The demand for beer, wine and spirits: Insights from a meta analysis approach*, American Association of Wine Economists, Working paper No.31, November 2008

demand for beer and ready to drink beverages is relatively more inelastic than demand for wine and spirits.

Table 6: Examples of price elasticities in international studies

Study	Region	Period/type	Mean own-price elasticities			
			Alcohol (aggregate)	Beer	Wine	Spirits
Huang ²⁷⁹ (HMRC)(2003)	UK	1970-2002, on-trade		-0.48	-0.75	-1.31
		1970-2002, off-trade (beer only)		-1.03		
Fogarty ²⁸⁰ (2004)	UK	Meta analysis		-0.47	-0.72	-0.76
Gallet ²⁸¹ (2007)	International	Meta analysis	-0.54			
Wagenaar ²⁸² (2009)	International	Meta analysis	-0.51	-0.46	-0.69	-0.8
		(harmful drinkers only)	(-0.28)			
Collis, Grayson & Johal ²⁸³ (HMRC) (2010)	UK	2001-2006, on- trade		-0.77	-0.46	-1.15
		2001-2006, off-trade		-1.11	-0.54	-0.89

66. A possible increase in the price of alcoholic products following the introduction of a minimum price proposal could therefore have different effects on consumption depending on these elasticities. For the more inelastic products, it can be expected that consumers will spend more. For the relatively more elastic products, consumers could reduce their consumption in response to price increases.

67. These PEDs do not take into account switching behaviour. This issue is addressed by the XEDs between different alcoholic products as defined above. Table 7 provides an overview of the consumption patterns between different products and between sales in the on and off-trade for moderate drinkers. Positive numbers indicate substitutes (a price increase in one good is expected to lead to a switch, i.e. an increase in demand, to the other good). Negative relationships indicate complements (a price increase in one good also leads to a fall in consumption in the other good) and are highlighted here for ease of reference.

²⁷⁹ Huang, C. D. (2003) *Econometric models of alcohol demand in the United Kingdom*, Government Economic Service Working paper 140, London: HM Customs & Excise

²⁸⁰ Fogarty, J. (2004) *The own price elasticity of alcohol: a meta analysis*, Programme Working Papers, University of Western Australia

²⁸¹ Gallet, C. A. (2007) *The Demand for Alcohol: A Meta-analysis of Elasticities*, Australian Journal of Agricultural and Resource Economics, 51, 2, 121-135

²⁸² Wagenaar, A.C., Salois, M.J., and Komro K.A (2009) *Effects of beverage alcohol taxes and prices on consumption: a systematic review and meta-analysis of 1003 estimates from 112 studies*, Addiction: 2009, 104

²⁸³ Collis, A., Grayson, A., and Johal, S. (2010) *Econometric Analysis of Alcohol Consumption in the UK: HMRC Working paper 10*, London: HMRC

68. Table 7 shows that the majority of products are substitutes, meaning that consumers can be expected to switch between them. Exceptions include price increases in on-trade spirits, which cause reductions in all other on-trade products, and the on-trade relationship between beer and wine. It should be noted that the absolute figures recorded are small, so the extent of the induced switching behaviour can be expected to be almost negligible.

Table 7: Cross-price elasticities of demand for 8 beverage categories (moderate drinkers) – Sheffield study

Consumption		Off				On			
Price		Beer	Wine	Spirit	RTD	Beer	Wine	Spirit	RTD
Off	Beer		0.0095	0.0052	0.0026	0.0215	0.0013	0.0055	0.0048
	Wine	0.0097		0.0037	0.0015	0.0176	0.0012	0.0042	0.0044
	Spirit	0.0083	0.0082		0.0017	0.02	-0.0003	0.0035	0.0034
	RTD	0.0119	0.0067	0.0025		0.009	0.0019	0.0045	0.0035
On	Beer	0.0128	0.01	0.0052	0.0025		-0.0002	0.0104	0.0064
	Wine	0.0051	0.0055	0.0037	0.0007	0.0061		0.0053	0.0045
	Spirit	0.0021	0.0018	-0.0002	0.0002	-0.0111	-0.0068		-0.0007
	RTD	0.0025	0.0023	0.0034	0.0007	0.003	0.0048	-0.0051	

High price-point elasticities only

-ve = complements

+ve = substitutes

69. Table 8 summarises the Sheffield study's findings on modelling consumers' behaviour for different scenarios of varying minimum price levels. The changes in consumption are then translated into changes in spending on alcohol products.

Table 8: Impact of minimum price scenarios on consumption and total spending – (all drinkers) Sheffield Study 2012²⁸⁴

Minimum price (£)	% change in consumption	Total spending change (£m)	% spending change
0.25	-0.1%	6.3	0.3%
0.30	-0.4%	13.0	0.6%
0.35	-0.8%	24.0	1.2%
0.40	-1.9%	41.8	2.0%
0.45	-3.5%	64.3	3.1%
0.50	-5.7%	87.2	4.2%
0.55	-8.3%	108.1	5.2%
0.60	-11.1%	124.3	6.0%
0.65	-14.0%	137.7	6.6%
0.70	-16.9%	145.4	7.0%

70. From table 8 it can be seen that increasing levels of minimum pricing show increasing impacts on consumption and, similarly, increases in overall spending. The increases in consumer spending at all minimum prices mean that consumption decreases do not keep pace with price increases and so overall spending rises.

²⁸⁴ Meng, Y. et al. (2012) *Model-based appraisal of alcohol minimum pricing and off-licensed trade discount bans in Scotland using the Sheffield Alcohol Policy Model (v.2): Second update based on newly available data*, Sheffield: University of Sheffield

71. The Sheffield report breaks down the extra spending per drinker per year into moderate, hazardous and harmful drinkers. These estimates take into account any changes in consumption that occur due to the price changes at different minimum price levels. Harmful drinkers account for the largest proportion of extra spending in each scenario. The spending impact on moderate drinkers is much lower than that observed for harmful drinkers.

72. For a 50p minimum price per unit the estimated reduction in consumption for moderate, hazardous and harmful drinkers is -2.8%, -4.8% and -10.7% respectively with an associated increase in spend of 2.8% (£21.1m in total), 5.3% (£43m) and 4.9% (£22.4m).

73. The estimates on price changes generated in the drinks specific analysis presented in table 4, for those products retailing below 50p per unit, were applied to Sheffield price elasticities (off-sales, low-low point) for the categories of all drinkers, moderate drinkers, hazardous drinkers and harmful drinkers. This generated an overview of how price changes might impact on the consumption of specific goods given different groups of consumers, presented in table 9 below (note these do not take account of any switching behaviour).

74. It should be stressed that this analysis is indicative only and makes the strong assumption that one drink specific demand elasticity applies to all products within that drinks category and at all price levels (constant elasticity of demand). That assumption automatically implies that consumption will linearly decrease with a linear increase in price (to the point where it is reduced by 100%), which might be unrealistic.

Table 9: Hypothetical reduction in demand for products which have to increase their price under a 50p per unit minimum price (as shown in table 4)

sample product	% increase in price	% reduction (all drinkers)	% reduction from moderate drinkers	% reduction from hazardous/harmful drinkers
Ciders				
Tesco Strong dry cider, 4x440ml	123%	-68%	-50%	-72%
Strongbow, 4x440ml	33%	-18%	-13%	-20%
Blackthorn dry cider, 12x440ml	21%	-12%	-9%	-12%
Gaymers Old English, 4x440ml	0%	0%	0%	0%
Vodka and Gin				
Tesco Value vodka, 70cl	51%	-31%	-26%	-31%
Glen's vodka, 70cl	9%	-6%	-5%	-6%
Vladivar Classic, 70cl	1%	-1%	-1%	-1%
Gordon's gin, 70cl	1%	-1%	-1%	-1%
Smirnoff Red Label, 70cl	1%	-1%	-1%	-1%
Whisky				
Tesco Value, 70cl	36%	-22%	-18%	-12%
Tesco Special Reserve, 70cl	17%	-10%	-9%	-6%
Bell's, 70cl	8%	-5%	-4%	-3%
Whyte and MacKay, 70cl	8%	-5%	-4%	-3%
Grants, 70cl	8%	-5%	-4%	-3%
Famous Grouse, 70cl	8%	-5%	-4%	-3%
Beer and lager				
Tesco Lager 4x500ml	67%	-37%	-27%	-39%
Carlsberg Special Brew 4x440ml	12%	-6%	-5%	-7%
Tennents Super Lager 4x440ml	12%	-6%	-5%	-7%
Carling 4x440ml	3%	-2%	-1%	-2%
Wine				
Silver Rock Chardonnay 750ml	47%	-24%	-20%	-28%
Tesco South African White 750ml	34%	-17%	-15%	-20%
Tesco Simply Chenin Blanc 750ml	34%	-18%	-15%	-20%
Blossom Hill Californian Red 750ml	2%	-1%	-1%	-1%
Echo Falls Merlot, 750ml	-2%	1%	1%	1%
Blossom Hill Chardonnay, 750ml	-11%	6%	5%	7%