



making business sense

Minimum Alcohol Pricing: A targeted measure?

Report to the Scottish Parliamentary Health and Sport Committee

Final Report

August 2010

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Authorship and acknowledgements

This report has been produced by cebr, an independent economics and business research consultancy established in 1992. Contributors to the project were Douglas McWilliams (project director) and Benjamin Williamson.

The review has been commissioned by SABMiller plc. Nevertheless, the views expressed herein are those of the authors only and are based upon independent research. The report does not necessarily reflect the views of SABMiller plc.

London, August 2010

Executive summary

This is a second supplementary report to centre for economics and business research's previous report on Minimum Alcohol Pricing in the United Kingdom: *Minimum Alcohol Pricing: A targeted measure?* It is an independent review of the case for the introduction of minimum alcohol pricing in Scotland. The report has been produced in the light of the University of Sheffield's recently updated report¹ and the publication of the Alcohol Bill at the end of November 2009.

Updated Sheffield report for Scotland utilises same methodology as previous work in Scotland and England, and therefore retains the limitations of the previous studies

On 8 July 2010, the Health and Sport Committee of the Scottish Parliament wrote to witnesses who gave oral evidence during the Stage 1 consideration of the Alcohol etc (Scotland) Bill. The Committee noted that it had not been able to test the University of Sheffield's updated model with witnesses, and therefore invited those witnesses who gave oral evidence on the Bill "to make any further written comments they may have on the revised model-based appraisal". This review is in response to the invitation.

Our second supplementary report finds that the case for minimum alcohol pricing continues to be unproved. The updated Sheffield report for Scotland suggests that the benefits of the policy are outweighed by the costs. Furthermore, the methodological failings of the initial University of Sheffield research remain and there are key factors that have not been considered. cebr estimates that minimum pricing in Scotland will cost consumers £184 million net per year and impact most heavily on the lowest income groups.

Overall, given that there is no significant change in the way the study was conducted, the same issues that we identified previously are still valid, namely:

- The definition of a 'moderate drinker' is very broad, but averages out at 6 units per week. This means that it is inevitable that the modelling shows that moderate drinkers do not see a huge impact on their finances. However the impact on the finances of an average drinker of between 10-20 units per week is clearly much greater;
- The evidence base linking consumption and crime / workplace harms is questionable;
- The report does not actually show that the case for minimum pricing is strong, and is, in fact, even weaker than had previously been suggested;
- The issue still remains that heavier drinkers are likely to be least responsive to price changes overall;

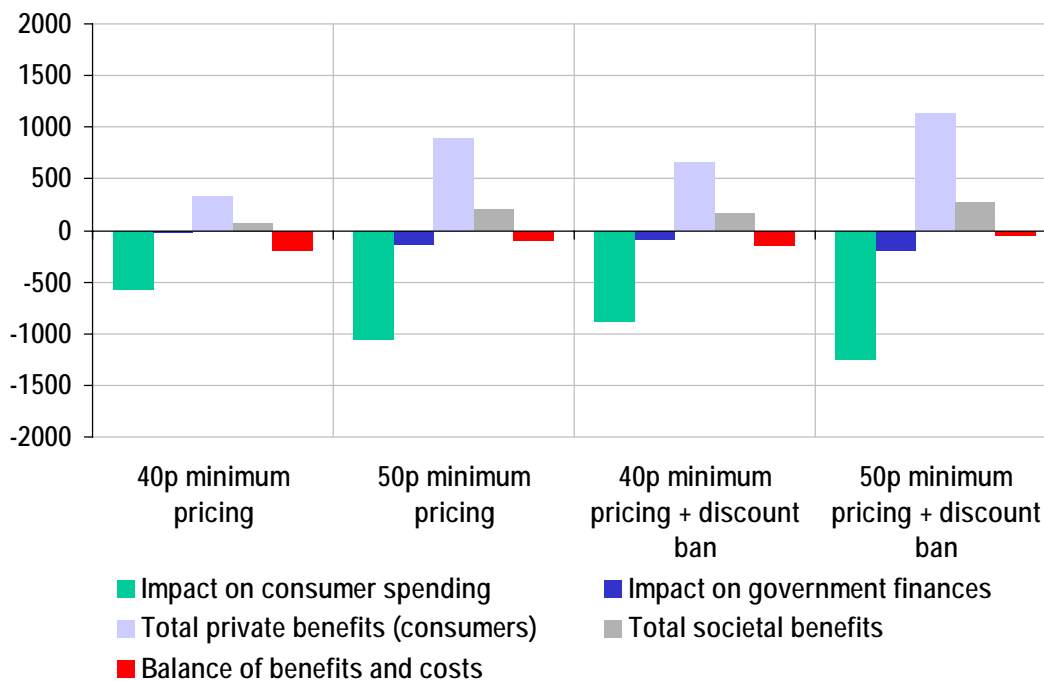
¹ *Model-based appraisal of alcohol minimum pricing and off-licensed trade discount bans in Scotland using the Sheffield alcohol policy model (v2) an update based on newly available data* ("updated Sheffield report"), April 2010

- The report does not consider a number of unintended consequences of minimum pricing, that mean that the case for minimum pricing may be significantly worse than that presented.

Updated Sheffield report shows that costs to the general public outweigh the benefits of minimum pricing

Even if the updated results of the University of Sheffield report for Scotland are taken at face value, the projected financial costs to Scottish consumers, along with the reduction in duty and VAT collected by government, are predicted to outweigh the projected private and societal benefits of the proposed policy.

Figure 1: Impact of minimum pricing and discount ban in Scotland, as presented in Sheffield report (£million, discounted value over 10 years)



In addition, as identified in our previous report², there are several other factors that should be taken into account when considering the economic and social case for minimum pricing.

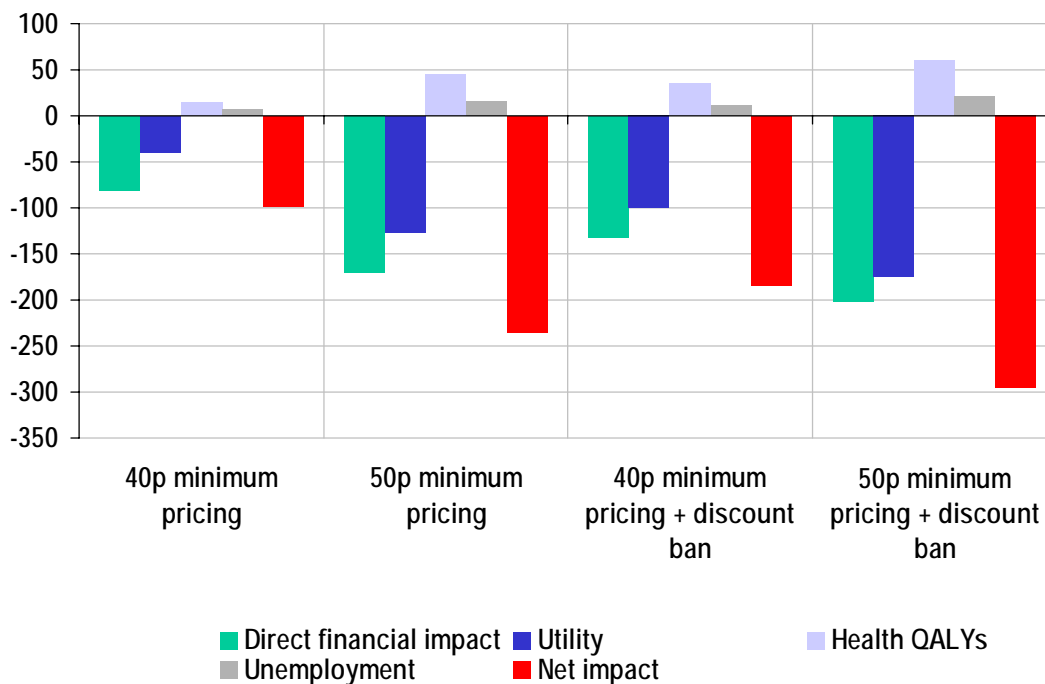
² Minimum Alcohol Pricing: A targeted measure?, cebr, 2009

Consumers face considerable financial and welfare losses, with relatively few benefits

Taking into account the potential impact of minimum pricing on all drinkers minimum pricing does not make sense. Figure 2 shows that if minimum pricing at 40 pence per unit along with a ban on promotions was introduced in Scotland:

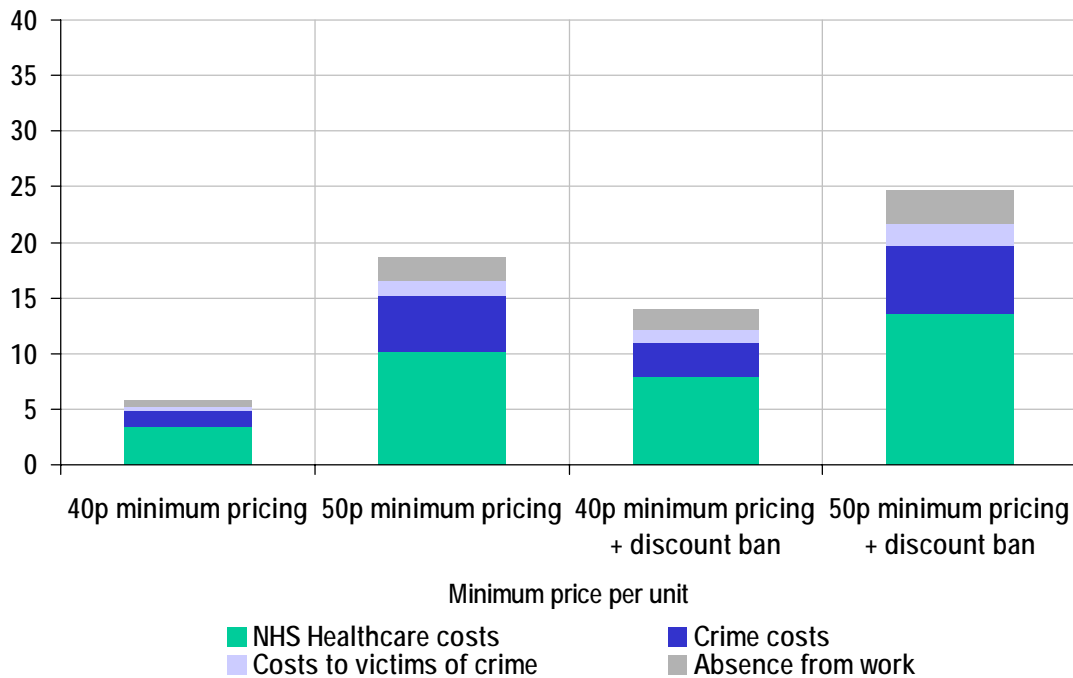
- Consumers would end up paying over £132 million per year more for alcohol products – the equivalent of £58 per household per year
- Consumers would also lose out by the equivalent of an additional £100 million per year in lost utility (satisfaction from drinking)
- The value of benefits of improved health and job prospects for individuals would be only £48 million per year
- This means that the net impact of minimum pricing on individual consumers sums to £184 million per year

Figure 2: Economic impact of minimum pricing on the private consumer, all drinkers, Scotland (£million per annum)



The results presented in the University of Sheffield report for Scotland, and our own analysis of these results, suggest that the value of benefits to wider society from the introduction of alcohol pricing policies are likely to be relatively small. These benefits fall a long way short of the scale of benefits required to justify the policy from an economic perspective.

Figure 3: Financial valuation of savings to wider society from minimum pricing, Scotland (£ million per annum) – cebr estimates

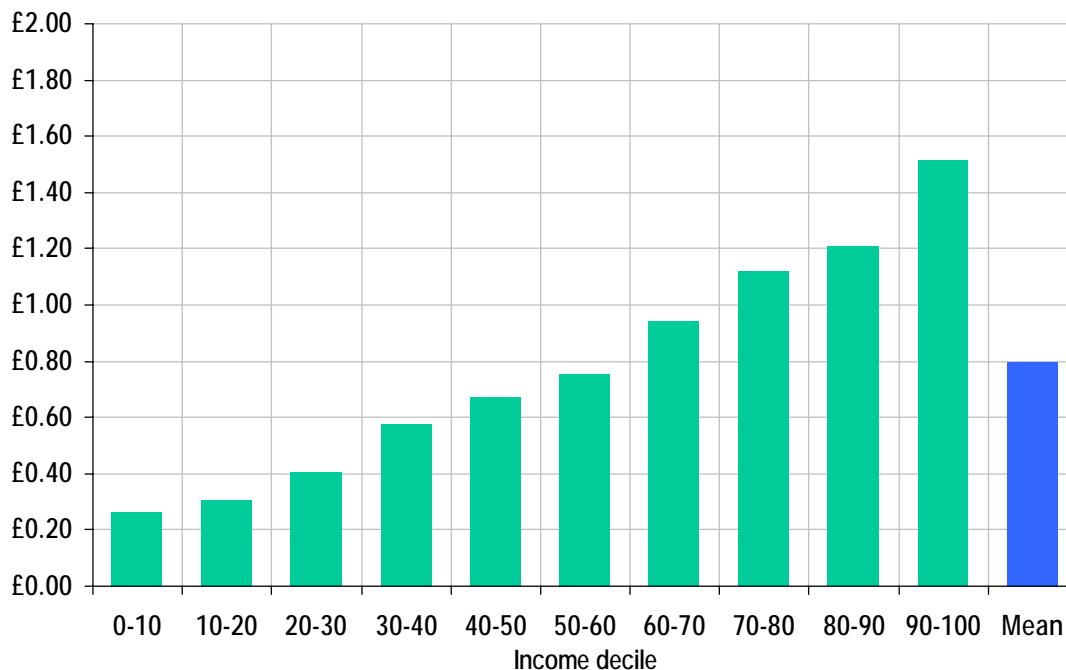


Crucially, the estimated total savings to wider society are not projected to outweigh the additional costs to moderate drinkers – estimated to be around £44 million per year for minimum pricing at 40 pence per unit along with a ban on promotions - from the introduction of the proposed alcohol pricing policies.

Minimum pricing hits lowest income groups hardest

Our analysis shows that the bottom 30 per cent of income levels pay on average 40 pence per unit of alcohol or less, and would therefore be fundamentally affected by the introduction of minimum pricing at 40 pence per unit.

Figure 4: Average price paid per unit of alcohol by income decile - Scotland



Sources: Family Expenditure Survey 2008, ONS; University of Sheffield; Living in Britain 2001, ONS; cebr analysis

We estimate that the introduction of 40 pence per unit minimum price plus a discount ban would lead to an increase in expenditure of £1.08 per week for the poorest ten per cent of households – around 1.0 per cent of their total income.

Unintended consequences have effectively been ignored in policy assessment

The limited remit against which the University of Sheffield were commissioned by the Scottish Government means that many important considerations with relation to the impact of alcohol pricing policy have effectively been ignored.

These unintended consequences include:

- The impact of 'cross border' / internet purchases on Scottish retailers, and the knock-on impacts on employment etc.;
- The fact that the net effect on consumption and therefore harms will inevitably be less than forecast because of the fact that consumers will still be able to choose to purchase alcohol from England perfectly legally;
- The impact on the black market, and policing/crime costs therein;
- The impact on 'consumer welfare' from reduction in consumption of alcoholic products;

- The impact on consumers' ability to purchase other products including essentials such as food, bills and rent, and how this feeds back into health harms, crime and workplace impacts;
- The costs of implementation and enforcement of the policy.

BERR's guidance on Impact Assessments suggests that '*government intervention can have unintended consequences, imposing costs and **creating economic distortions**...these possible effects should be explored when the case for intervention is being considered*'. In normal circumstances, we would expect such guidance to be followed before the implementation of policy, but unfortunately this has not yet been done.

It is clear that the introduction of this policy would lead to a number of unintended consequences that have yet to be properly considered or valued by the Scottish Government.

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I Introduction

This is the second supplementary report to centre for economics and business research's previous report on Minimum Alcohol Pricing in the United Kingdom: *Minimum Alcohol Pricing: A targeted measure?* It is an updated independent review of the case for the introduction of minimum alcohol pricing in Scotland. The report has been updated in the light of the University of Sheffield's recently updated report³.

Independent review of minimum alcohol pricing proposals in Scotland

The report represents an independent study of the minimum alcohol pricing policies in Scotland. It has been conducted by the centre for economics and business research ltd (cebr), an independent economics research consultancy founded in 1992. In addition to providing respected regular forecasts of global economic trends, cebr is a leading expert in calculating the potential economic impact of new policies and regulation.

On 8 July 2010, the Health and Sport Committee of the Scottish Parliament wrote to witnesses who gave oral evidence during the Stage 1 consideration of the Alcohol etc (Scotland) Bill. The Committee noted that it had not been able to test the University of Sheffield's updated model with witnesses, and therefore invited those witnesses who gave oral evidence on the Bill "to make any further written comments they may have on the revised model-based appraisal". This review is in response to the invitation.

The review has been commissioned by SABMiller plc. Nevertheless, the views expressed herein are those of the authors only and are based upon independent research.

I.1 Structure of this report

The remainder of this report is structured as follows:

- Chapter 2 considers whether the University of Sheffield's updated modelling suggests that there is a strong case for the introduction of minimum alcohol pricing and a promotions ban in Scotland;
- Chapter 3 considers the impact of minimum pricing and a promotions ban and on the individual consumer and wider society, including the unintended consequence of lost consumer surplus from the introduction of higher alcohol prices and;
- Chapter 4 considers the unintended consequences of minimum pricing not covered by the updated University of Sheffield report

³ *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* ("updated Sheffield report"), April 2010

2 Does the updated University of Sheffield modelling suggest that there is a strong case for the introduction of minimum alcohol pricing in Scotland?

2.1 What does the updated report add to the debate?

The University of Sheffield was commissioned by the Scottish Government to update its alcohol policy model based on newly available data.

The updated Sheffield report utilises the same overall methodology as that used in the previous report which covered Scotland and a similar and preceding report which covered England only. However, the previous report on Scotland from September 2009⁴ has been updated to reflect newly available data. The key differences are:

- New consumption data based upon the Scottish Health Survey ("SHeS"), the Scottish Schools Adolescent Lifestyle and Substance Use Survey ("SALSUS") for 2008 (the data in the previous report and model relates to 2003 for SHeS and 2006 for SALSUS);
- The Scottish Government has also procured market research data on the 2008/09 price distribution of off-trade alcohol (in terms of ethanol content) in Scotland from The Nielsen Company;
- New mortality data have also become available for 2008;
- Police recorded crime statistics and Scottish Crime and Justice Survey ("SCJS") data are now available for 2008/09

The update provided revised estimates of the effects of current proposals for minimum pricing and prohibition of off-trade discounting. The methodology has not changed since the previous report and the set of policies analysed remains the same as in the original research.

The updated report uses the same price elasticity matrices as the previous Sheffield report, which is based on econometric analysis of England EFS data. This is not a major criticism because elasticities are unlikely to be fundamentally different, although one would imagine that differences in preferences would feed through to different price elasticities.

Broadly, the new results show slightly smaller estimated reductions in total alcohol consumption across the range of policies when compared against the previous Sheffield modelling. This reflects the new data used (from Nielsen) which has a price distribution with marginally less alcohol sold at lower prices than the previous Sheffield report estimated, and therefore, for any of the policies, a slightly lower proportion of the products bought being affected by a minimum price.

⁴ Model-based appraisal of alcohol minimum pricing and off-license trade discount bans in Scotland. A Scottish adaptation of the Sheffield Alcohol Policy Model version 2 ("**previous Sheffield report**"), September 2009

Overall, given that there is no significant change in either the way the work has been undertaken or the conclusions drawn from the updated results, the same deficiencies that were identified previously are still valid, namely:

- The definition of a 'moderate drinker' is very broad, but averages out at 6 units per week. This means that it is inevitable that the modelling shows that moderate drinkers do not see a huge impact on their finances. However the impact on finances of an average drinker of between 10-20 units per week is clearly much greater;
- The evidence base linking consumption and crime / workplace harms is pretty weak;
- The updated report does not actually show that the case for minimum pricing is strong and is, in fact, even weaker than had been suggested in the previous Sheffield report;
- The issue still remains that heavier drinkers are likely to be least responsive to price changes overall.

In addition, as previously identified, the University of Sheffield has only been commissioned to tell part of the overall economic story. There are a number of other wider economic impacts that would normally be considered in a full regulatory impact assessment – these are described more fully in Chapters 3 and 4 of this document.

2.2 What does the updated Sheffield report cover?

The latest report by the University of Sheffield makes no recommendations on alcohol pricing policy, but presents the results of updated modelling which identifies a number of potential impacts of different levels of minimum pricing / promotions bans. These include:

- Health impacts of reduced alcohol consumption including reduced illness and death, and an economic valuation of these health impacts;
- Impacts on levels of crime, and the valuation of cost savings from reduced crime both from the personal impacts of crime and the societal costs of policing and justice;
- Impacts on employment and work absence due to reductions in alcohol consumption, and economic valuation of these impacts;
- Additional financial costs to consumers due to higher alcohol prices and;
- Impact of the policy on government duty and VAT receipts.

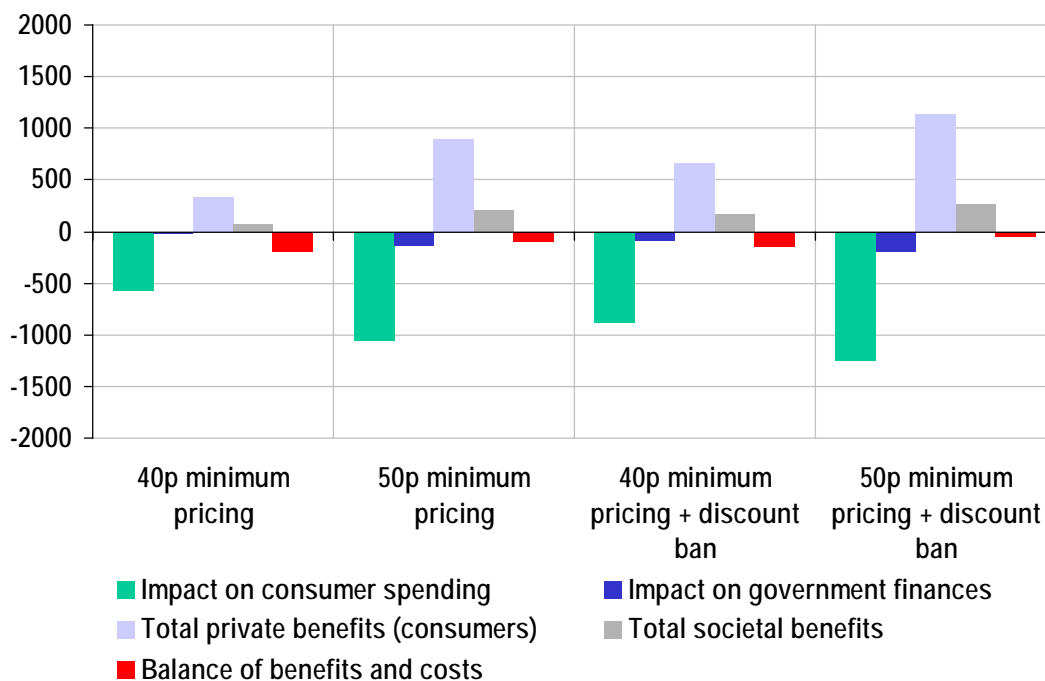
As we discuss in this report, there are a number of other considerations that should be taken into account in assessing the case for the introduction of minimum alcohol pricing, and we also highlight some potential considerations with the University of Sheffield's modelling results.

Here we consider whether – even if the results of the report are taken at face value – the updated Sheffield report presents a compelling case for the introduction of minimum alcohol pricing and/or a ban on alcohol promotions in Scotland.

2.3 Assessment of Sheffield results

Figure 2.1 presents the headline results as presented in the updated Sheffield report. It shows the aggregated financial impact on all types of drinker (moderate, hazardous, harmful), the impact on government finances due to duty and VAT, and the aggregated benefits to all types of drinker and benefits to wider society. The results presented relate to the discounted costs and benefits over 10 years.

Figure 2.1: Impact of minimum pricing and discount ban in Scotland, as presented in the updated Sheffield report (£million, discounted value over 10 years)



As the chart shows, the projected financial costs to Scottish consumers, along with the reduction in duty and VAT collected by government, are predicted to marginally outweigh the projected private and societal benefits of the proposed policy.

Much of the debate about minimum pricing has focused on how little moderate drinkers are financially impacted, to such an extent that one might get the impression that the financial impact of such a policy on ‘hazardous’ and ‘harmful’ drinkers is irrelevant to the assessment of the policy. This is a fundamentally flawed view. Impact assessment of any policy or regulation should take account of all of the costs and benefits accruing to all those that are impacted by the policy.

Therefore, the results presented in the updated Sheffield report do not present a compelling case for the introduction of minimum pricing in Scotland. In fact they show that overall financial costs to consumers outweigh the projected benefits to consumers and society at large.

As we identified in our previous reports⁵, there are several other factors that should be taken into account when considering the economic and social case for minimum pricing. These are explored in the following chapters.

⁵ Minimum Alcohol Pricing: A targeted measure?, cebr, 2009

3 Impact of minimum pricing on the individual consumer and wider society

3.1 What do we mean by the individual consumer?

Any policy which impacts both on the individual consumer of a product, and the effects that consumption of the product has on wider society as a whole should be considered from the point of view of both the individual consumer, and from a wider social perspective.

In the case of alcohol consumption and minimum pricing, the aim of the policy is to both reduce the harm that alcohol consumption directly does to individuals in terms of their personal health and resultant quality of life, and in terms of their job prospects. The policy also seeks to address the wider consequences of individuals' alcohol consumption in terms of their propensity to commit crimes, the costs of treating them on the NHS, and the impacts of their absence from work on business productivity.

Here, we consider the potential benefits of minimum pricing to individuals, and weigh them up against the costs to the individual consumer who would have to pay more for alcohol products.

As we identified in our previous report, the impacts of minimum pricing on individuals can be summarised as follows:

Benefits of Minimum Pricing	Costs of Minimum Pricing
Health improvements / reduced risk of death	Increased expenditure
Higher wages	Lower utility from consumption
Lower unemployment	Impacts of cross border trade (job losses, reduced sales etc.)

We also consider the extent to which a minimum pricing policy would have unequal impacts across different income groups.

3.2 Differential responsiveness of heavy drinkers to price changes

In our previous reports we have highlighted the apparent inconsistency between the results of the Sheffield modelling – which implied greater responsiveness to price changes amongst heavier drinkers than moderate drinkers – and a range of academic evidence⁶ that suggests that heavier drinkers are less responsive to changes in price in terms of their overall alcohol consumption levels.

⁶ Wagenaar et al (2008); Manning et al (1995); Chisholm et al (2004)

The updated Sheffield report for Scotland does not attempt to address this assessment, however the previous Sheffield report did by making three points⁷:

- 1) Several of the elasticities used in the major meta-study by Wagenaar et al (2008) relate to the frequency or magnitude of heavy episodic drinking (or bingeing) – therefore are not comparable with elasticities that relate to average levels of consumption;
- 2) The elasticities identified in the study by Manning et al (1995) are based upon a survey of the US population in 1983 and are therefore not relevant to England or Scotland in 2009;
- 3) The model used in the Sheffield study, with its 256-element elasticity matrix, is far more sophisticated than anything else out there, and is specifically designed to facilitate analysis of substitution between alcohol products and the on/off trade.

None of these are particularly convincing arguments.

On point (1) – there is clearly a direct and strong relationship between frequency and magnitude of drinking binges, and overall mean levels of alcohol consumption – these are not mutually exclusive. This is particularly the case for heavier drinkers. As an example – those drinkers classified as ‘harmful’ in the updated University of Sheffield study consume 72 units per week (65 in the previous study), or ten units per day (nine in the previous study) on average. This implies that most of their alcohol would be consumed in what would be defined as a binge. It must therefore be the case that the elasticity relationships identified with regard to drinking binges are to a large extent applicable to mean levels of alcohol consumption.

On point (2) – it is not clear why relative elasticities for heavy and moderate drinkers in the US in 1983 would not be relevant to England and Scotland today. It is difficult to see why there would be fundamental differences in the relationships.

On point (3) – the point that we made was that the extremely complex model that underpins the study does not give intuitive results under simple test conditions, ie. where all alcohol prices go up at the same rate. The fact that the model considers ‘substitution between beverage types, beverage quality and the on-trade and off-trade’ is completely irrelevant in the case where all products prices go up at the same rate. In addition, cebr has eighteen years of economic modelling experience, and this has taught us that increased modelling complexity most certainly does not equal increased modelling accuracy.

We completely accept that a model which considers the complex relationships that the Sheffield team has attempted to account for is entirely necessary for the job of considering the impact of minimum alcohol pricing and promotions, but we most certainly do not accept that the fact that the model has been built to this specification means that the model produces robust results.

⁷ Section 2.51 of *Model based appraisal of alcohol minimum pricing and off-licensed trade discount bans in Scotland*, Meier et al, 2009

In addition, it remains the case that the Sheffield team does not appear to have found any academic evidence that strongly supports the results of its modelling. It would be more convincing if substantial evidence existed to support this view.

Finally, the results still appear to contradict the finding in the original University of Sheffield report⁸, which calculated 'aggregate' alcohol price elasticities of -0.47 for moderate drinkers and -0.21 for hazardous / harmful drinkers.

We welcome the fact that both of the Sheffield reports for Scotland contains sensitivity analyses which use an assumption that heavy drinkers are one-third less responsive than moderate drinkers.

However, the updated Sheffield report for Scotland does not provide any strong evidence to support a change in the overall approach we adopted in our previous reports.

3.3 How will minimum pricing affect alcohol consumption?

We have updated our estimates for Scotland based upon the fact that the updated Sheffield report has incorporated more recent alcohol consumption data and market research data on the price distribution of off-trade alcohol.

The charts below present both the Sheffield modelled forecasts of price changes and impacts on consumption levels as a result of various minimum price levels ("**Sheffield modelling**" in the following charts), and revised estimates based upon the evidence presented in chapters 2 and 4 of our previous report *Minimum Alcohol Pricing: A targeted measure?* ("**cebr estimates**" in the following charts).

⁸ Meier et al, 'Independent Review of the Effects of Alcohol Pricing and Promotion, Part B, University of Sheffield, 2008

Figure 3.1: Estimated change in price / consumption under different pricing policies (moderate drinkers)

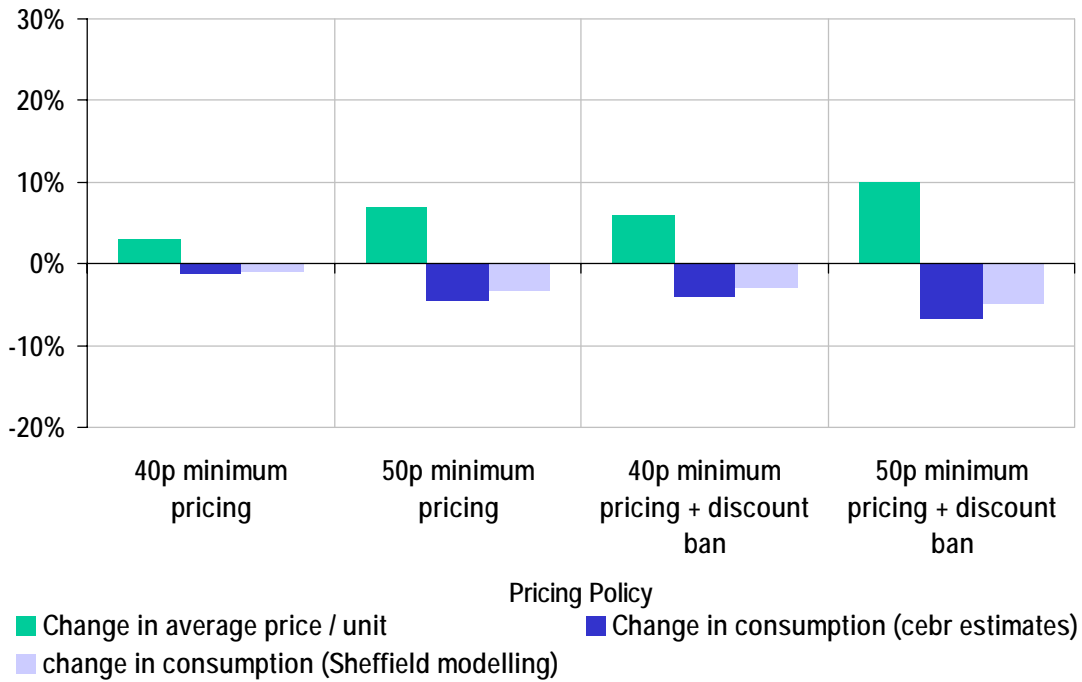


Figure 3.2: Estimated change in price / consumption under different pricing policies (hazardous drinkers)

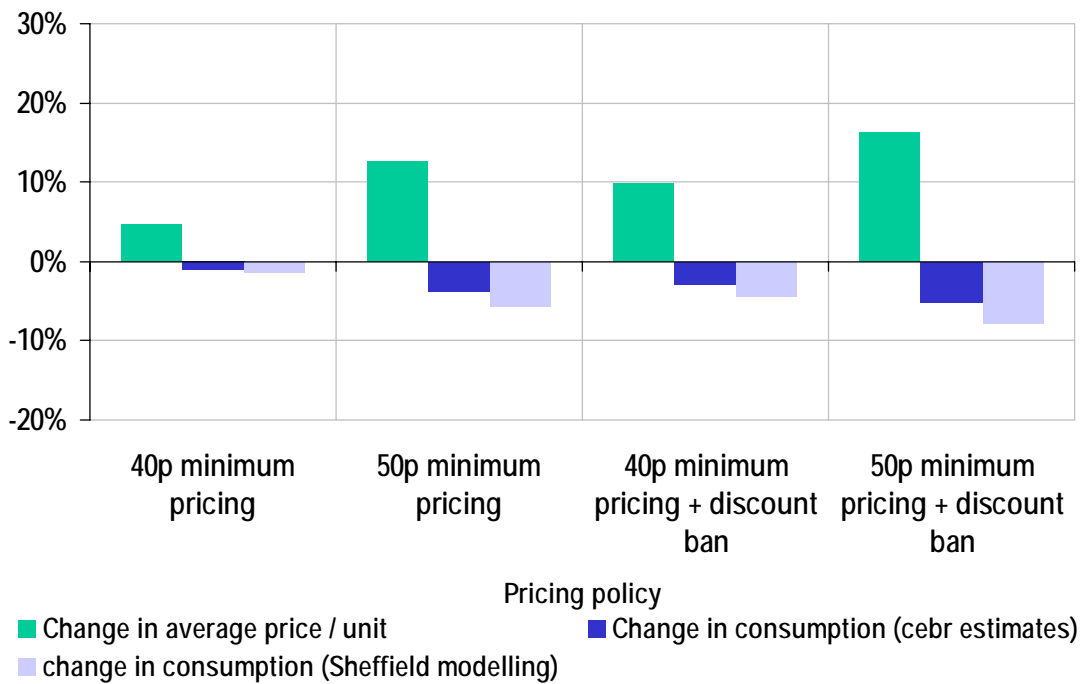
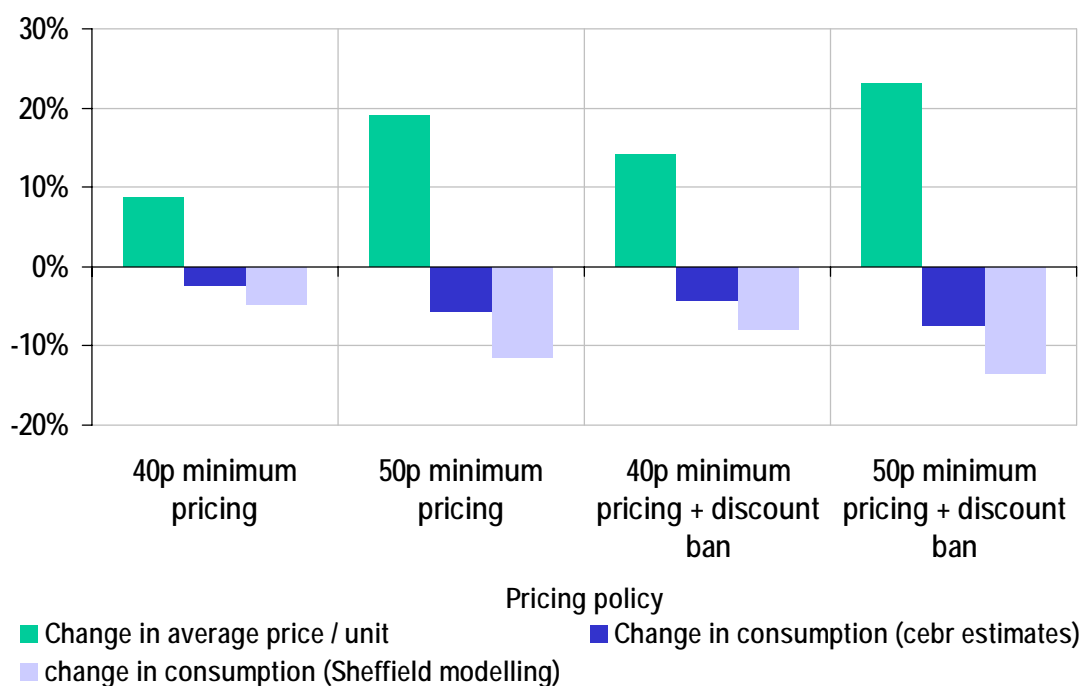


Figure 3.3: Estimated change in price / consumption under different pricing policies (harmful drinkers)



Minimum pricing is likely to have the desired effect of increasing the prices faced by harmful drinkers the most, as on average harmful drinkers consume cheaper alcohol products and consume a higher proportion of their alcohol from the off-trade, compared with hazardous and moderate drinkers. Hazardous drinkers would also face higher price rises than moderate drinkers for the same reasons.

However, the charts also show the extent to which the updated University of Sheffield model appears to overstate the impact of price changes on consumption levels of hazardous and harmful drinkers. For example, a 50 pence per unit minimum price is forecast to increase the average price faced by harmful drinkers by 19.1 per cent. The updated Sheffield modelling suggests that this will result in a reduction in harmful drinkers' consumption levels by 11.4 per cent. However, given the evidence that harmful drinkers are less responsive to price changes than moderate drinkers, we estimate that harmful drinkers' consumption levels would only fall by 5.7 per cent. Overall, we would expect minimum pricing at 50 pence per unit to reduce harmful drinkers' consumption by around 4.1 units per week, and 40 pence per unit would only reduce harmful drinkers' consumption levels by around 1.7 units per week – less than one pint of weak beer.

On the other hand, moderate drinkers would face an average price increase of 7.3 per cent. The updated Sheffield modelling suggests that this will reduce consumption by just 3.3 per cent, whilst the evidence suggests that the reduction in consumption would be more like 4.6 per cent.

Therefore whilst minimum pricing would have the effect of targeting heavier drinkers due to their preference for cheaper, stronger alcohol products, it is likely to have a similar proportionate effect on moderate and harmful drinkers in terms of consumption levels. The

charts also show that the impact on hazardous drinkers' consumption levels is likely to be minimal.

3.4 Economic impact of minimum pricing on individual consumers

Using the same methodology as we adopted in our previous reports, we have estimated the private consumer 'balance sheet' with regard to minimum pricing and ban on promotions.

Given that the evidence suggests that the University of Sheffield has overstated the impact of price changes on consumption levels of hazardous and harmful drinkers, we present adjusted estimates based upon this.

Figure 3.4 shows the impact of minimum pricing on moderate drinkers. It can be seen that if a minimum price of 40 pence plus promotions ban was implemented in Scotland, moderate drinkers are likely to spend an additional £15 million per year more on alcohol products. We also estimate that lost utility (lost enjoyment) from reducing average consumption by around four per cent for moderate drinkers would constitute an economic loss of around £45 million per annum for moderate drinkers. We estimate that health benefits would be worth just over £16 million per year for moderate drinkers, meaning a net economic loss of just over £44 million per year.

Figure 3.4: Economic impact of minimum pricing on the private consumer, moderate drinkers, Scotland (£million per annum)

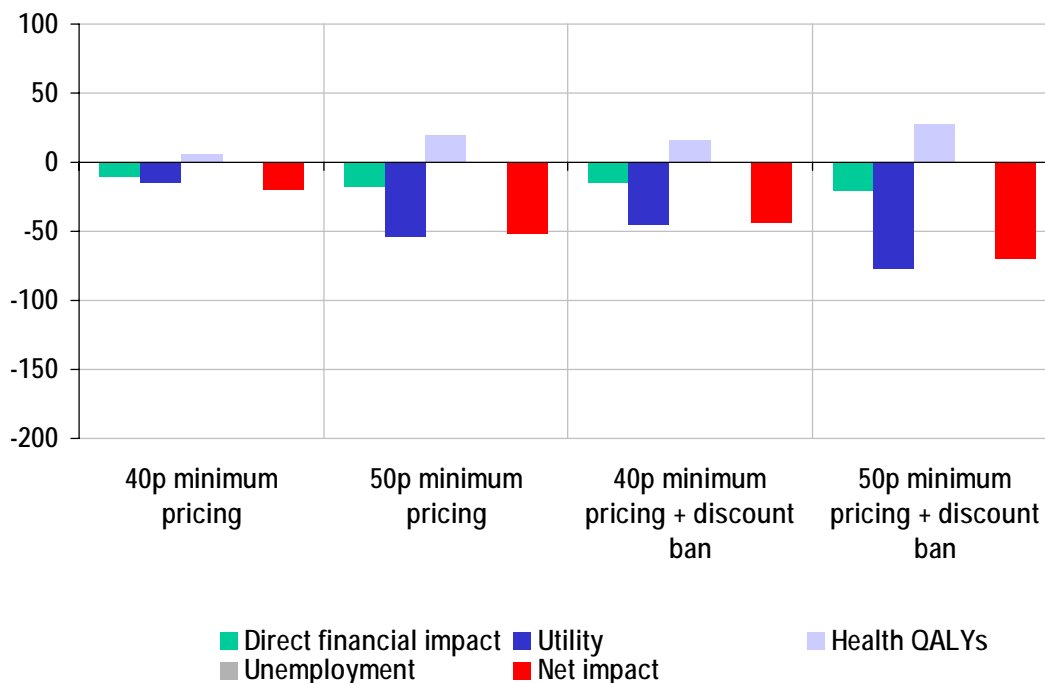


Figure 3.5 shows the impact of minimum pricing on hazardous drinkers. It can be seen that the forecast value of private health benefits to hazardous drinkers is likely to be massively outweighed by significant increases in expenditure on alcohol, as well as reductions in utility from reduced consumption. We estimate that if a minimum price of 40 pence plus promotions ban was implemented in Scotland, hazardous drinkers, who consume around 28 units per week on average, would spend an additional £62 million per year on alcohol products – around £73 per person.

Figure 3.5: Economic impact of minimum pricing on the private consumer, hazardous drinkers, Scotland (£million per annum)

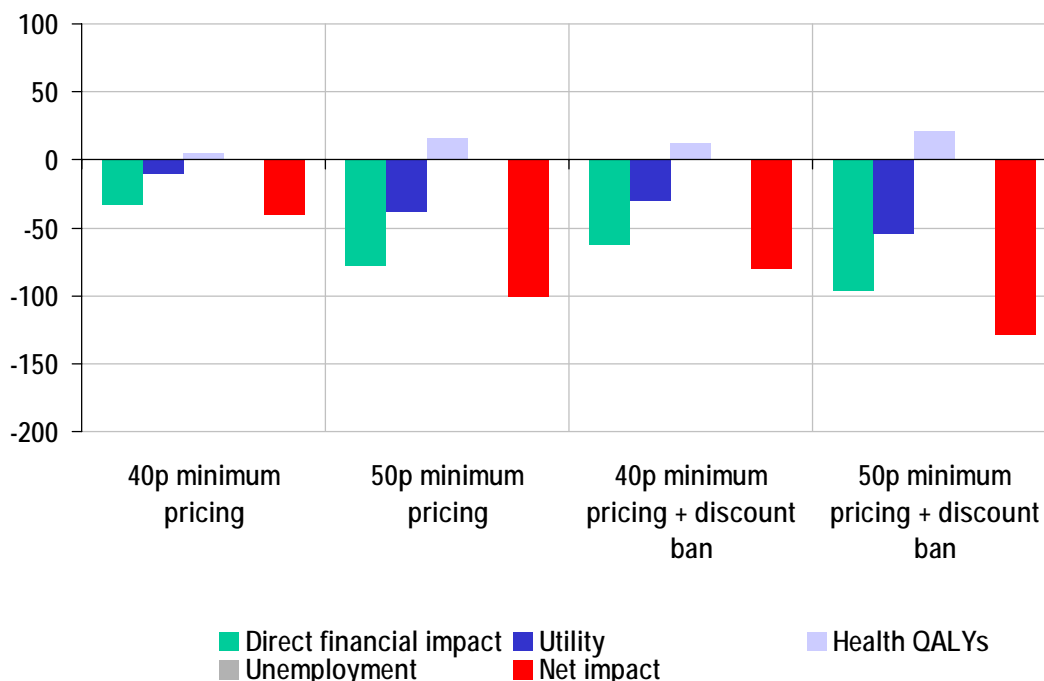
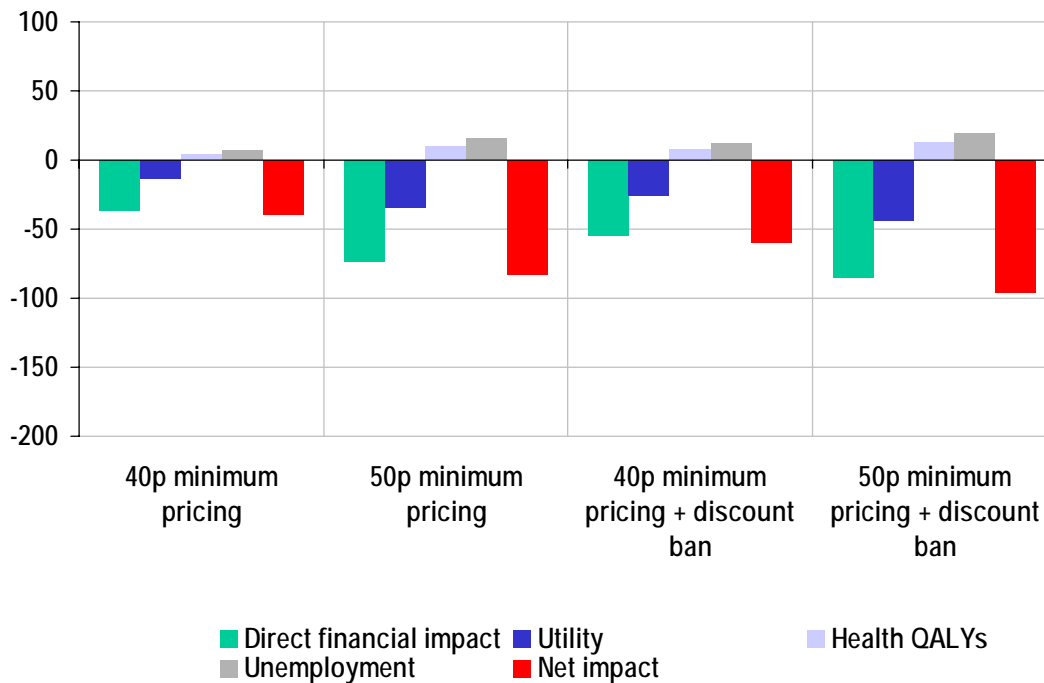


Figure 3.6 shows the forecast annual impact of different pricing policies on harmful drinkers in Scotland. It can be seen that even for harmful drinkers, the increased costs in terms of additional expenditure on alcohol products is unlikely to be compensated by improved health and employment prospects. However, it could be argued that the reduced ‘utility’ from reduced alcohol consumption, along with increased expenditure should be excluded altogether from the balance sheet in the case of harmful drinkers, given that in many cases their alcohol consumption is likely to be irrational. But even if ‘utility’ is removed from the equation, it still appears that the financial costs to harmful drinkers would outweigh the benefits.

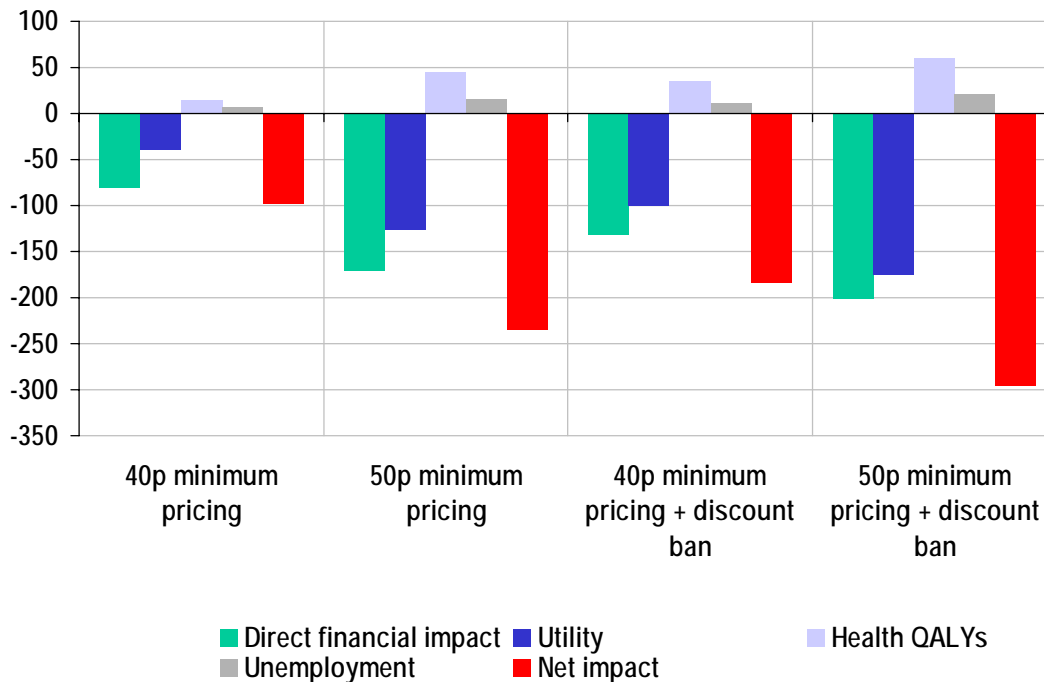
Figure 3.6: Economic impact of minimum pricing on the private consumer, harmful drinkers, Scotland (£million per annum)



Taking into account the potential impact of minimum pricing on all drinkers minimum pricing does not make sense. Figure 3.7 shows that if minimum pricing at 40 pence per unit along with a ban on promotions was introduced in Scotland:

- Consumers would end up paying over £132 million per year more for alcohol products – the equivalent of £58 per household per year
- Consumers would also lose out by the equivalent of an additional £100 million per year in lost utility (satisfaction from drinking)
- The value of benefits of improved health and job prospects for individuals would be only £48 million per year
- This means that the net impact of minimum pricing on individual consumers sums to £184 million per year

Figure 3.7: Economic impact of minimum pricing on the private consumer, all drinkers, Scotland (£million per annum)



3.5 Wider societal benefits of minimum pricing

The analysis above shows that the personal benefits to consumers of minimum pricing in Scotland are likely to be outweighed by the costs in terms of direct financial impacts, and lost utility (satisfaction from drinking).

Given this, in order for the proposed policies to represent a good deal from the general public's perspective, the additional benefits to wider society, beyond those felt by the individual consumer, must outweigh the costs to individuals. Most notably, these benefits include:

- Crime, costs of policing and criminal justice system
- Costs of NHS provision of healthcare
- Wider productivity impacts (eg. absence from work)

The updated University of Sheffield study provides detailed estimates of savings to wider society which could be yielded as a result of minimum alcohol pricing. However as with the impacts on individual consumers outlined in the previous section, these estimates are subject to adjustment based upon the evidence that the University of Sheffield modelling appears to over-estimate the relationship between price and consumption for heavier drinkers. In this chapter we present these estimates.

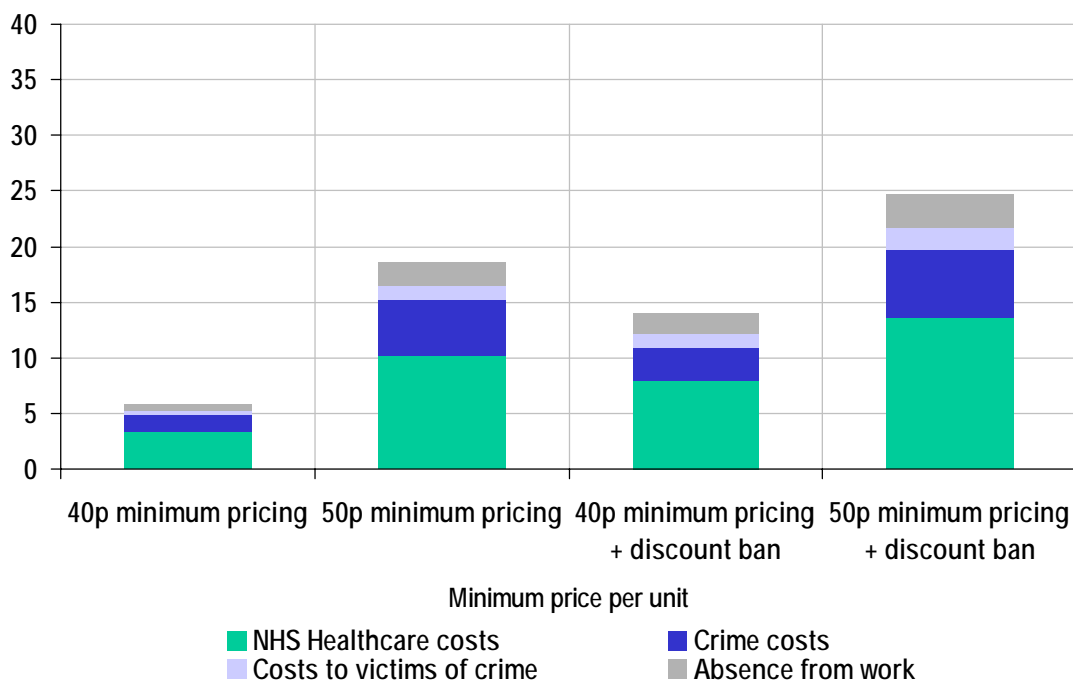
3.5.1 Estimates of benefits to wider society from alcohol pricing policies

The results presented in the updated Sheffield report for Scotland, and our own analysis of these results, suggest that the value of benefits to wider society from the introduction of alcohol pricing policies are likely to be relatively small. These benefits fall a long way short of the scale of benefits required to justify the policy from an economic perspective.

Figures 3.8 and 3.9 show cebr’s and the University of Sheffield’s updated estimates of the benefits to wider society from the introduction of such alcohol pricing policies in Scotland.

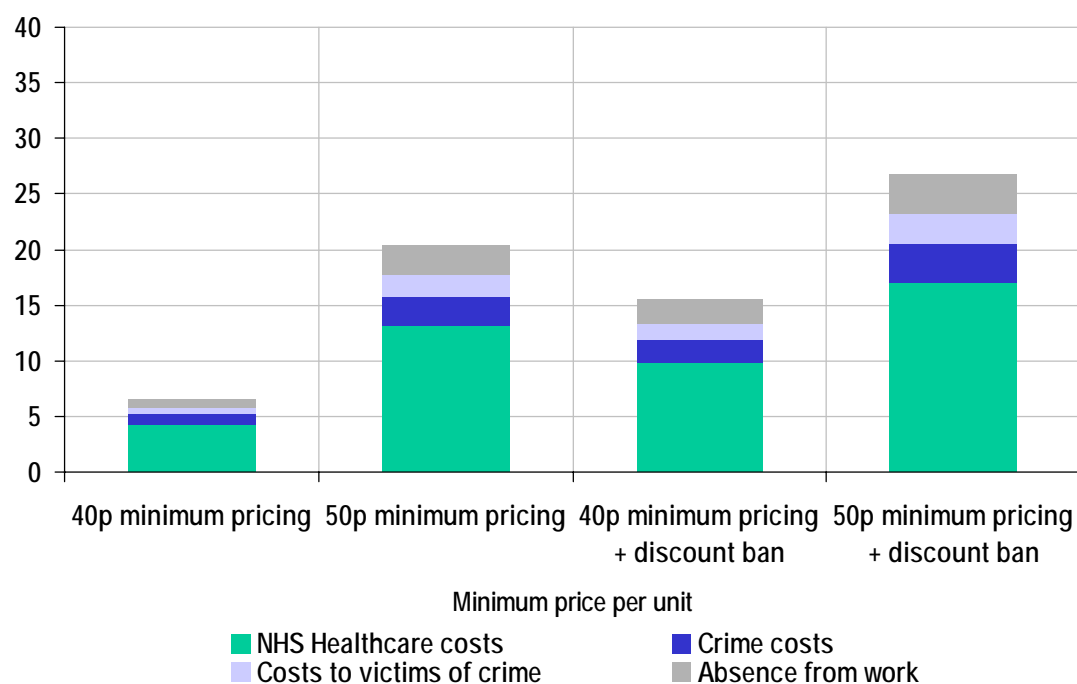
It can be seen that both our estimates and the University of Sheffield’s estimates show that the benefits to wider society from the introduction of minimum pricing are likely to be between £14-16 million per year. Of these benefits, the savings to the NHS are projected to be largest, at between £8-10 million per year. This compares with the reputed cost of alcohol misuse in Scotland of £2.25 billion per year⁹.

Figure 3.8: Financial valuation of savings to wider society from minimum pricing, Scotland (£ million per annum) – cebr estimates



⁹ Source: Scottish Government

Figure 3.9: Financial valuation of savings to wider society from minimum pricing, Scotland (£ million per annum) – University of Sheffield estimates



Crucially, the estimated total savings to wider society are not projected to outweigh the additional costs to moderate drinkers – estimated to be around £44 million per year for minimum pricing at 40 pence per unit along with a ban on promotions - from the introduction of the proposed alcohol pricing policies.

3.6 Minimum pricing hits lowest income groups hardest

Neither of the two Sheffield reports for Scotland considers the impact of minimum pricing on different income groups, and this is not something we are aware that the Scottish Government has explicitly considered.

We have used a combination of data to estimate the average price paid per unit of alcohol for different income deciles. We combined the following data:

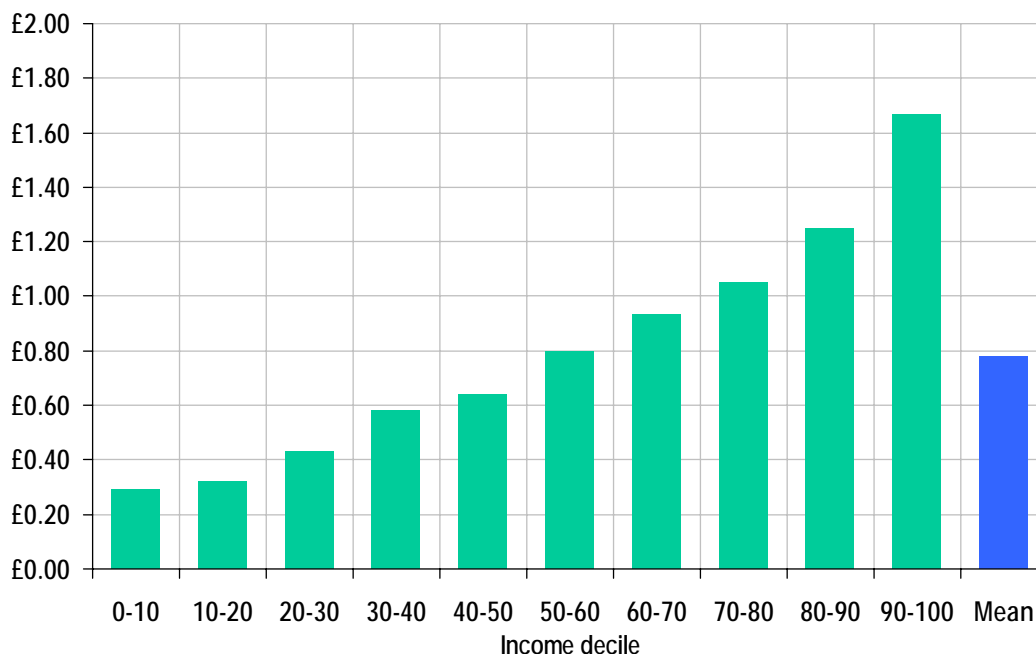
- *Family Spending Report 2009*, which gives expenditure across the full range of household goods and services, including alcohol, by region/country and by income deciles;
- *Updated Sheffield report for Scotland* – which provides reliable data on overall levels of alcohol consumption and expenditure in Scotland;
- *Census 2001* – which provides data on alcohol consumption by income bracket, which we adjusted to align with current levels of alcohol consumption.

Our analysis shows that people at lower income levels drink only a slightly smaller amount than average, but spend significantly less on alcohol products.

Figure 3.9 below shows the extent of the difference in average price paid per unit of alcohol across the income range. It shows that the bottom 30 per cent of income levels pay on average 40 pence per unit of alcohol or less, and would therefore be fundamentally affected by the introduction of minimum pricing at 40 pence per unit.

For the lowest income decile, average price paid per unit of alcohol would increase by at least 52 per cent. For the next lowest income decile, average price paid per unit of alcohol would increase by at least 30 per cent, based upon current average expenditure rates.

Figure 3.9: Average price paid per unit of alcohol by income decile - Scotland



Sources: Family Spending Report 2009, ONS; University of Sheffield; Living in Britain 2001, ONS; cebr analysis

This has significant implications for disposable income of the lowest income groups.

Assuming a price elasticity of demand of -0.6 for low income households, the introduction of a 40 pence per unit minimum price is likely to lead to an increase in expenditure of £1.08 per week for the lowest ten per cent of income groups – around 1.0 per cent of their total income.

4 Unintended consequences of minimum pricing not covered by the updated Sheffield report

4.1 Limited remit of Sheffield Reports

The limited remit against which the University of Sheffield were commissioned by the Scottish Government means that many important considerations with relation to the impact of alcohol pricing policy have effectively been ignored.

These unintended consequences include:

- The impact of 'cross border' / internet purchases on Scottish retailers, and the knock-on impacts on employment etc.
- The fact that the net effect on consumption and therefore harms will inevitably be less than forecast because of the fact that consumers will still be able to choose to purchase alcohol from England perfectly legally
- The impact on the black market, and policing/crime costs therein
- The impact on 'consumer welfare' from reduction in consumption of alcoholic products
- The impact on consumers' ability to purchase other products including essentials such as food, bills and rent, and how this feeds back into health harms, crime and workplace impacts
- The costs of implementation and enforcement of the policy

Each of these issues are discussed in the remainder of this chapter.

4.2 Impact of cross border / internet purchases

The updated Sheffield report implicitly assumes that the introduction of new alcohol pricing policies in Scotland is effectively done 'in a bubble', with consumers having no ability to choose to purchase alcohol products from retailers in England either directly, or through internet purchases. This is not a criticism of the research itself, as the impact of such changes in behaviour is difficult to model, however the fact that this is a difficult area does not mean that there should be no reference to it in the government's considerations.

4.2.1 Impact on retailers

Evidence on the increase in cross-border purchasing between The Republic of Ireland and Northern Ireland, as a result of the increasing strength of the euro against the pound, shows that shoppers are prepared to travel significant distances to take advantage of price differentials. This evidence suggests that 16% of residents in The Republic of Ireland now choosing to shop in Northern Ireland¹⁰. Although this example covers the full range of shopping and not just alcohol products, it demonstrates that this is certainly an issue to be considered. In addition, the 'booze cruise' phenomenon between England and France is a pertinent example.

A particular issue would be if an internet-based supplier decided to set up premises near the Scottish border, and encouraged bulk purchasing within the border towns and even Glasgow and Edinburgh, where it may be economically viable to undertake mass delivery of alcohol products.

The introduction of minimum pricing and/or a promotions ban in Scotland would certainly put Scottish retailers at a disadvantage against their English counterparts, and may risk job losses. The following points are apparent:

- Minimum pricing at higher price points would increase the prevalence of cross-border purchases, as this would make the price differential between England and Scotland greater
- The impact would be most keenly felt amongst Borders towns
- Internet retailers could potentially sell into large conurbations where the economies of scale of delivery would be most advantageous

4.2.2 Impact on effectiveness of policy

Clearly, if a proportion of Scottish consumers choose to purchase alcohol from English-based retailers, then this will reduce the effectiveness of the pricing policy in terms of its impact on alcohol related harms.

Given this, it is therefore likely that the Scottish Government is underestimating the negative impact on Scottish consumers, and overestimating the potential benefits of the policy to an even greater extent than we suggest in our analysis in chapter 3 of this report.

4.3 Impact on 'consumer welfare'

In the previous chapter, we demonstrated the extent to which consumer welfare is impacted from the price increases imposed by minimum alcohol pricing and/or promotions bans. This is probably the most significant omission from the University of Sheffield calculations, and

¹⁰ Summary of Cross-Border Alcohol Trade Data UPDATE- October 2009, ABFI

therefore the most significant omission from the Scottish Government's assessment of the policy.

This omission is acknowledged in paragraph 4.3 of the updated Sheffield report under 'Areas for future research':

'A future economic appraisal could also potentially extend to other exclusions from the current analysis...potential lost benefits (such as transitional costs to parts of industry, or lost consumer surplus)'¹¹

As outlined in chapter 3, we estimate this omitted cost to be worth around £100 million per year to Scottish consumers under a 40 pence per unit minimum price plus promotions ban regime.

4.4 Impact on consumers' ability to purchase other products including essentials

As outlined in chapter 3, the introduction of minimum pricing would have a disproportionate impact on lower income groups. We calculate that the introduction of a 40 pence minimum price plus a promotions ban would mean that the lowest income groups end up spending an additional 1.0 per cent of their income on alcohol products. At the margins, this could have potential consequences for consumers' ability to purchase other essential products such as food, or household bills.

Whilst we are not suggesting that there would be a significant additional cost associated with such issues, there would certainly be an additional cost to consumers on the lowest incomes over and above the pure financial costs.

In addition, the regressive nature of the policy is in itself a relevant consideration. Under BERR's guidance on Impact Assessments (<http://www.berr.gov.uk/files/file44544.pdf>) it is clear that where 'government intervention can have unintended consequences, imposing costs and creating economic distortions...these possible effects should be explored when the case for intervention is being considered'. It is disappointing that the Scottish Government has not followed this guidance.

4.5 The cost of implementation and enforcement of the policy

The introduction of this policy could lead to additional costs in the following areas:

- Administrative costs to retailers / producers from implementing and continually checking revised price levels;
- Costs of enforcement, particularly amongst smaller retailers who are likely to find it easier to avoid compliance with the policy without strict enforcement.

¹¹ Model based appraisal of alcohol minimum pricing and off-licensed trade discount bans in Scotland, Meier et al, 2009

4.6 Conclusions

It is clear that the introduction of this policy would lead to a number of unintended consequences that have yet to be properly considered or valued by the Scottish Government. BERR's guidance on Impact Assessments suggests that '*government intervention can have unintended consequences, imposing costs and **creating economic distortions**...these possible effects should be explored when the case for intervention is being considered*', and in most circumstances we would expect such guidance to be followed before the implementation of policy.