Short term impact of minimum pricing for alcohol in Scotland



Christopher Snowdon Head of Lifestyle Economics

Summary

- Advocates of minimum pricing predicted that it would have an almost immediate impact in Scotland, with modelling forecasting 58 fewer deaths and 1,299 fewer hospital admissions in the first year.
- In the eight months after minimum pricing was introduced, alcohol-related mortality fell at the same rate in Scotland as it did in England and Wales (seven per cent).
- Alcohol-related hospital admissions rose slightly in Scotland in 2018/19 under minimum pricing.
- The median Scottish household (by income) spent an extra £100.88 on alcohol in the first year of minimum pricing while the median income group in England spent an extra £44.20, a difference of £56.68 per annum. Those on below-average incomes have been hit hardest, with those in the bottom income group increasing their expenditure on alcohol by eleven per cent.

What is minimum pricing?

Minimum pricing sets a floor price for alcoholic beverages of 50p per unit (a unit is 8 grams or 10 ml of ethanol). It was introduced in Scotland on 1st May 2018 with the aim of reducing rates of alcohol-related illness and mortality by making the bottom end of the market more expensive.

Advocates of the policy claimed that minimum pricing would have a rapid impact. Modelling from the Sheffield Alcohol Research Group (2016) predicted that there would be 58 fewer deaths and 1,299 fewer hospital admissions related to alcohol in the first year.

Alcohol-related deaths

Figures from the Office for National Statistics (2019) show that the number of alcohol-related deaths recorded in Scotland in 2018 rose from 1,120 in 2017 to 1,136 in 2018. The age-standardised alcohol-specific death rate rose from 20.5 per 100,000 to 20.8 per 100,000. By contrast, the rate in England fell from 11.1 per 100,000 to 10.7 per 100,000 and the rate in Wales fell from 13.5 per 100,000 to 13.1 per 100,000. Statistics released subsequently by NISRA (2019) showed that the rate in Northern Ireland also fell.

Although Scotland was the only country in the UK to see a rise in alcohol-related deaths in 2018, minimum pricing was not in force in the first four months of the year so it would be hasty to draw firm conclusions from this.

To see what effect, if any, minimum pricing had, we need to look at the monthly mortality rates in Scotland, England and Wales between May to December 2018. Published here for the first time, Figure 1 shows how the monthly number of alcohol-related deaths changed between 2017 and 2018. Interestingly, the trend was generally upwards in the first four months and downwards in the last eight months in all three countries. Between May and December, there were only two months in which the number of deaths in Scotland exceeded the 2017 level and only one month when England and Wales saw the number of deaths exceed the 2017 level. December saw a particularly notable decline in mortality in both England and Scotland.

¹ I'm grateful to the Office for National Statistics and the National Records of Scotland for supplying these figures.

Overall, the decline in the number of deaths was essentially the same in Scotland between May and December (7.3 per cent) as it was in England and Wales (7.1 per cent). The change in the mortality rate was remarkably similar across Britain, regardless of whether the country had minimum pricing or not.

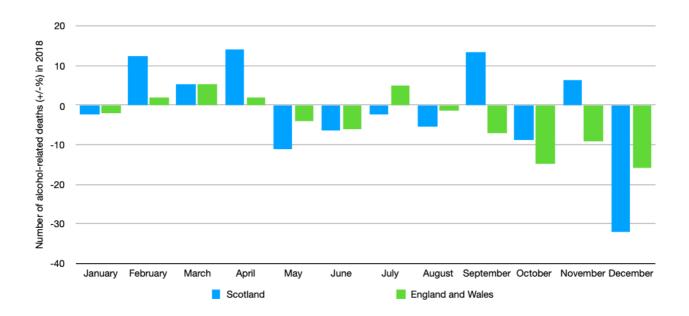


Figure 1: Change in the number of alcohol-related deaths between 2017 and 2018 Alcohol-related hospital admissions

Minimum pricing was projected to reduce hospital admissions in Scotland by 1,299. In practice, they rose slightly in 2018/19, the financial year in which minimum pricing was in effect for eleven months. There were 38,370 admissions in 2018/19, up from 38,199 in 2017/18 (NHS Scotland 2019).

To put that in context, there was a steep decline in the number of admissions between 2007/08 and 2014/15 when the age-standardised rate fell from 855 per 100,000 to 677 per 100,000. There has been little change since. The rate rose by a fraction after minimum pricing, from 668.8 per 100,000 to 668.9 per 100,000.

Off-trade sales

There is mixed evidence on alcohol sales in the off-trade after minimum pricing came into effect. Two market research companies - Information Resources Incorporated (IRI) and Nielsen - collate weekly sales figures by tracking purchases through supermarket tills and by taking random samples from smaller retailers. Neither company has access to sales figures from Aldi and Lidl, and so estimates for these supermarkets are based on extrapolations from their market share.

IRI figures analysed by Aston Manor for the 52 weeks between 29 April 2018 and 27 April 2019 suggest that an additional 2.5 million units of alcohol were sold in the off-trade under minimum pricing. Adjusting for population growth, per capita sales were virtually unchanged on the previous year.

By contrast, Nielsen figures analysed by Giles et al. (2019) suggest a decline in per capita sales of 0.3 litres of pure alcohol per adult, a fall of 3.6 per cent. If correct, this is a bigger drop than has been seen in most years, although it is not exceptional. Off-trade sales fell by 0.3 litres per adult between 2011 and 2012 and by 0.2 litres per capita between 2015 and 2016.

Why do the two sets of figures differ? The answer probably lies in the need to estimate so much of the data. The only solid figures come from the mainstream supermarkets. Figures for discount supermarkets and 33,000 independent convenience stores are based on random samples and extrapolations. This leaves

ample room for error, particularly since minimum pricing has affected the distribution of sales. Aldi and Lidl are growing year-on-year and may have been disproportionately affected by minimum pricing. The convenience store sector has been selling 7.75 per cent more alcohol under minimum pricing (Retail Data Partnership 2019).

A study published in the *British Medical Journal* claimed that alcohol unit sales fell by 7.6 per cent after minimum pricing was introduced (O'Donnell et al. 2019). In fact, this was an estimate of how sales compared to a hypothetical counterfactual. The authors' own figures suggest a decline of 0.8 units per household per week, which equates to a 5.5 per cent drop. This is larger than any of the estimates given above and may be explained by the authors' reliance on Kantar data which requires households to scan each product after use. Drinks consumed outside the home are not included at all, even if bought in a shop.

Although it would not be surprising if a rise in price led to fewer sales, it is not certain that this happened in Scotland's off-trade. Moreover, none these figures include cross-border sales (see below).

If off-trade sales did decline, it does not seem to have led to improved health outcomes in the short term.

Category sales

Both sets of sales figures produce similar figures on category sales. Minimum pricing was expected to hit sales of strong cider particularly hard. All the data confirm this.

IRI sales figures show a large decline in volumes of cider (-13 per cent) and growth in fortified wine (+9.6 per cent) and ready-mixed drinks (+22.5 per cent). Nielsen figures also show large declines in cider (-18.6 per cent) and growth in fortified wine (+16.4 per cent). Giles et al. (2019) do not look at the ready-to-drink category, but it saw growth of 16.8 per cent in 2018. All datasets show a modest decline in wine sales. However, for beer and spirits - which make up more than half of the market in Scotland - Nielsen found a small decline whereas IRI found a small rise.

The only firm conclusion that can be drawn is that minimum pricing led to a large decline in the sale of cider and perry and a substantial rise in the sale of fortified wine and ready-mixed drinks. *Buckfast*, Scotland's market leader in the fortified wine category, was already sold at more than 50p per unit before minimum pricing was introduced and has seen a sharp rise in sales since May 2018.

Sales in the on-trade

Almost no alcohol is sold at below 50p per unit in British pubs, clubs and restaurants. Minimum pricing would therefore not be expected to have a significant impact on the on-trade. There are two mechanisms by which it could have some effect, however. Some pro-MUP campaigners suggested that the policy could benefit pubs by narrowing the price gap between the cheapest supermarket beer and pub beer. Alternatively, MUP could leave drinkers with less money in their pocket with which to go out.

There is insufficient evidence to prove either hypothesis, but as alcohol sales declined in the Scottish ontrade by 0.1 litres per adult in 2018, there is little reason to think that minimum pricing has benefited pubs.

Cross-border sales

The unusually large increase in cider sales in England and Wales after MUP was introduced (Giles et al. 2019: 26) may be an indicator of cross-border shopping. The Scottish Government's evaluation notes that alcohol sales rose faster in the north of England than in the rest of Britain after MUP was introduced, although the authors argue that the increase was not large enough to explain the entirety of the decline they report in Scotland (ibid.: 36). Nevertheless, it may have been at least partially responsible.

A qualitative study based on detailed interviews with ten retailers on either side of the English border found 'some evidence from the interviews that Scottish consumers increased cross-border purchasing behaviour,

primarily affecting retailers in the immediate vicinity of the border (within 15km), particularly those near major English towns such Carlisle and Berwick-upon-Tweed' (Frontier Economics 2019: 11). The scale of cross-border (and internet) shopping has not been quantified but its existence should be borne in mind when looking at official sales figures.

Cost to consumers

The regressive impact of minimum pricing has been a worry for many politicians. Figures from O'Donnell et al. (2019 Appendix: 5-6) show that these concerns are well founded. They suggest that households in the lowest income quintile spend an extra £89.44 per year on alcohol under minimum pricing while those in the top quintile spend an extra £39.00. This equates to a rise in expenditure of eleven per cent and four per cent respectively.

The median Scottish household (by income) spent an extra £100.88 on alcohol in the first year of minimum pricing whereas the median income group in England spent an extra £44.20, a difference of £56.68 per annum.

Advocates of minimum pricing have claimed that the policy has little or no effect on moderate drinkers, but O'Donnell et al.'s figures do not bear this out. They imply that the median purchasing group, which consumes an average of just 8.5 units a week, spent an extra £88.40 a year on alcohol under minimum pricing in Scotland while the equivalent group in England spent an extra £37.44, an excess cost to Scottish consumers of £50.96 (ibid.: 6).

Underage drinking

A qualitative study commissioned by NHS Scotland found that the 'price of alcohol was not a significant factor in the young people's alcohol use' and that 'young people who reported their favoured drink had risen in price since May 2018 tended to carry on drinking it'. Based on detailed interviews with fifty young people with a history of drinking aged between 13 and 17, the study concluded: 'Overall, the findings presented in this report suggest the introduction of MUP had limited impact on children and young people's alcohol consumption and no reported impact on related behaviour' (Iconic Consulting 2019).

Impact on industry

A qualitative study based on detailed interviews with industry figures found that minimum pricing had little impact on retailer revenues and profits, and that the impact on alcohol producers was negative but small (Frontier Economics 2019).

Conclusion

There is no evidence that minimum pricing has created a step change in the rate of alcohol-related harm in Scotland. Alcohol-related mortality declined at the same rate as in the rest of Britain in the months following its introduction and the number of alcohol-related admissions rose.

Aside from shifting demand from cider to fortified wine, minimum pricing's effect on sales remains unclear. If there has been a decline in off-trade sales, as seems plausible, it has not been dramatic and it has not resulted in better health outcomes, at least in the short term.

We estimate that the average Scottish household spent an extra £100.88 on alcohol between May 2018 and April 2019, of which approximately £57 was the result of minimum pricing. Those on low incomes have been hardest hit, with those in the bottom income group increasing their expenditure on alcohol by eleven per cent.

References

Frontier Economics (2019) Minimum Unit Alcohol Pricing: Evaluating the impacts on the alcoholic drinks industry in Scotland: baseline evidence and initial impacts. 2 October:

http://www.healthscotland.scot/media/2810/frontier-economics-mup-evaluating-the-impacts-on-the-alcoholic-drinks-industry-in-scotland.pdf

Giles, L., Robinson, M. and Beeston, C. (2019) Minimum Unit Pricing (MUP) for alcohol evaluation. Sales-based consumption: a descriptive analysis of one year post-MUP off-trade alcohol sales data. November: http://www.healthscotland.scot/media/2954/c-users-kims-desktop-sales-based-consumption-descriptive-analysis-of-one-year-post-mup-off-trade-alcohol-sales-data.pdf

Iconic Consulting (2019) Minimum Unit Pricing in Scotland: A qualitative study of children and young people's own drinking and related behaviour. November: http://www.healthscotland.scot/media/2947/iconic-mup-cyp-own-drinking-and-related-behaviour-english-jan2020.pdf

NHS Scotland (2019) Alcohol-related hospital statistics Scotland 2018/19: https://www.isdscotland.org/Health-Topics/Drugs-and-Alcohol-Misuse/Publications/2019-11-19/2019-11-19-ARHS-Summary.pdf

NISRA (Northern Ireland Statistics and Research Agency) (2019) Alcohol-Specific Deaths 2008-2018: https://www.nisra.gov.uk/publications/alcohol-specific-deaths-2008-2018

Office for National Statistics (2019) Alcohol-specific deaths in the UK: registered in 2018: https://www.ons.gov.uk/peoplepopulationandcommunity/healthandsocialcare/causesofdeath/bulletins/alcohol-relateddeathsintheunitedkingdom/2018#alcohol-specific-death-by-uk-constituent-country

Retail Data Partnership (2019) Declining Scottish MUP Alcohol Sales Figures Don't Include Convenience Stores: https://www.retaildata.co.uk/news-updates/scottish-mup-figures-convenience-stores/

IEA Briefing Papers are designed to promote discussion of economic issues and the role of markets in solving economic and social problems. As with all IEA publications, the views expressed are those of the author and not those of the Institute (which has no corporate view), its managing trustees, Academic Advisory Council or other senior staff.