

# Evaluating the impact of Minimum Unit Pricing (MUP) on the price distribution of off-trade alcohol in Scotland – briefing paper

## Introduction

Minimum unit pricing (MUP) came into effect in Scotland on 1 May 2018. From that date, every drink containing alcohol has a minimum price based on the amount of pure alcohol it contains. The minimum price in Scotland is currently set at 50p per unit of alcohol (ppu).

The Monitoring and Evaluating Scotland's Alcohol Strategy (MESAS) MUP Evaluation Portfolio comprises a number of research studies that are being undertaken to assess the impact of MUP. The portfolio contains studies assessing compliance with and implementation of MUP, its impact on the alcoholic drinks industry in Scotland, changes in alcohol consumption, and changes in health and social harms.

## The aim of this report

This report provides an analysis of the off-trade price distribution of pure alcohol per adult in the first 12 months following the implementation of MUP. We provide a descriptive analysis of changes in the proportions of pure alcohol per adult in pence-per-unit price bands.

We have provided comparisons over time and with England and Wales, where the legislation was not implemented. This report focuses on off-trade alcohol, both overall and across several alcoholic drink categories.

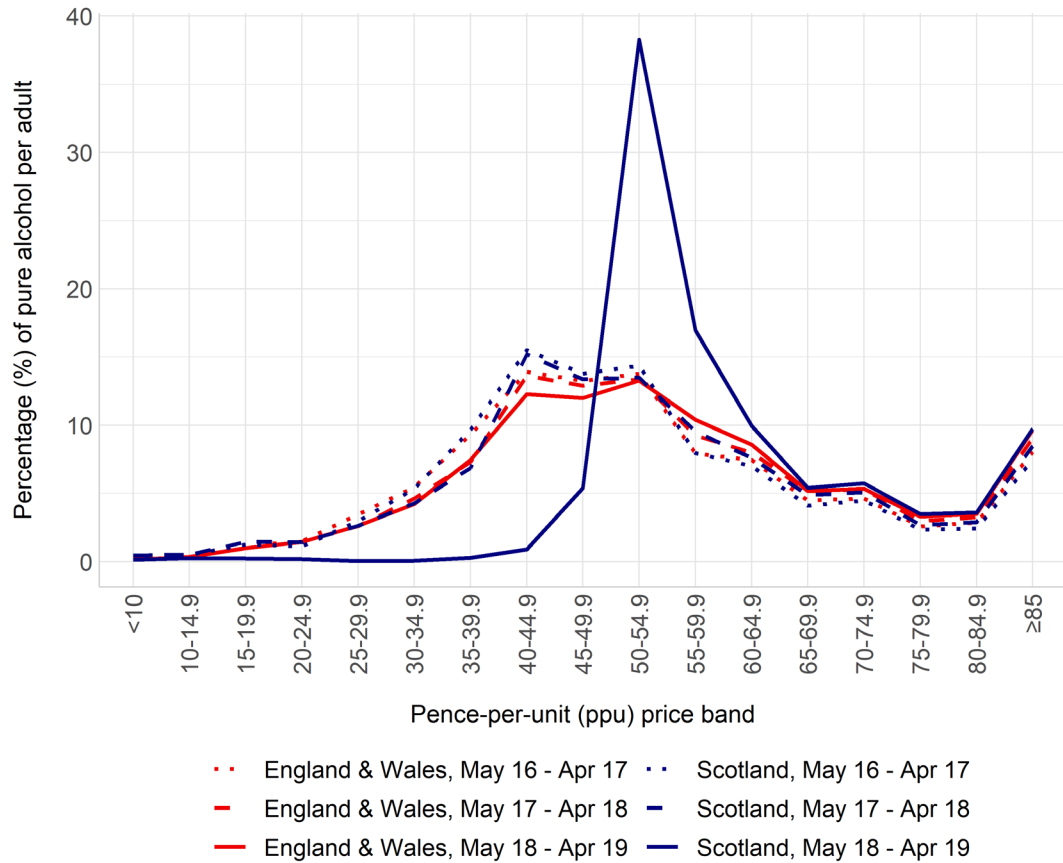
## **What we did**

We used weekly off-trade alcohol price band data to describe the price distribution in Scotland and in England & Wales from May 2016 to April 2019. The volume of alcoholic beverages (pure alcohol volume) from most supermarkets and a sample of convenience stores was collated and aggregated from electronic point of sale (EPOS) data. The price distribution was then estimated by allocating products to pence-per-unit price bands based on their price and pure alcohol volume. The price distribution was then converted into litres of pure alcohol per adult using mid-year population estimates for the adult population aged 16 years and over. This allowed us to directly compare the price distribution of Scotland to England & Wales.

## **What we found**

The price distribution of off-trade alcohol in Scotland changed in the first 12 months after MUP was implemented (May 2018 to April 2019), with a shift upwards towards the price floor of 50 pence per unit, and differed markedly from England & Wales (Figure 1). There was a sharp increase in the proportion of pure alcohol sold per adult between 50 to 59.9ppu and a smaller increase between 60 and 64.9ppu. This 50 to 64.9ppu price range accounted for 65.3% in Scotland during the first 12 months after MUP was implemented, compared to 33.6% in England & Wales and 31.9% in Scotland in the year before MUP was implemented. Increases in the higher price bands of 65ppu and above were in line with previous years and those in England & Wales.

**Figure 1: Estimated price distribution (%) of pure alcohol (litres per adult) sold in the off-trade, Scotland and England & Wales, May 2016 to April 2019**



Please note that, due to methodological limitations, these data cannot be used as evidence of systematic sales below the minimum unit price of 50 pence per unit in Scotland.

During the first 12 months of MUP, 7.5% of pure alcohol was categorised beneath the 50ppu price floor. Based on other studies which show high compliance, as well as consultation with the data provider, Licensing Standards Officers, and academic and other experts, it is unlikely that 7.5% is an accurate representation of sales below the minimum unit price, which are likely to be substantially lower. Several methodological and other issues were identified which contribute to this 7.5%. First, category average alcohol by volume (ABV) are used for a minority of products. These products may then be allocated to a price band based on an ABV that is higher than the actual ABV, resulting in misallocation to a lower price band. Second, some retailers may split a multipack into its individual items and sell them at an appropriate price for a single item. EPoS data will misread this as a multipack being sold for the price of the individual (split) item. This will misallocate the product to a much lower price band. A third issue is the degree of accuracy in the calculations used to produce the price distribution, which creates a margin of error because the boundaries of price bands are sensitive to rounding. This is especially the case for the boundary between 49.9 and 50ppu, but will occur across the price distribution.

It is highly likely that the issues described above are artificially inflating the proportion of alcohol recorded as being sold below 50ppu. We are unable to differentiate between alcohol sold below 50ppu and the limitations of the data.

Not all drink categories were affected in the same way. Those categories with a greater proportion sold in price bands below 50 pence per unit prior to the implementation of MUP (namely beer, cider, spirits, and perry) saw changes in line with total alcoholic drink sales. Categories with a greater proportion sold in price bands above 50ppu (namely wine, fortified wines, and ready to drink beverages (RTDs)) were not affected as much.

## **Our understanding of the impact of MUP so far**

The MUP Evaluation Compliance (Licensing) Study<sup>1</sup>, published in August 2019, sought the views of licensing practitioners on the implementation of MUP. It showed that compliance with the legislation had been high in both large and small retailers, and that the on-trade had been unaffected. This is an important first step in the legislation realising its intended outcomes, and further underlines that data limitations are an important part of the explanation for the 7.5% of pure alcohol recorded as sold under 50ppu in the Price Distribution study.

The Economic Impact Baseline and Short Term Impacts Study<sup>2</sup>, published in October 2019, found that the effect of MUP on retailer revenue and prices was small, as increased margins compensated for decreased volumes. The findings from the current report suggest that the change in price distribution (i.e. the movement from below 50ppu to 50 to 64.9ppu) may have been a key mechanism driving the small economic impact observed in that study.

A suite of studies investigates population-level sales and consumption post-implementation. The most recent publication from March 2021<sup>3</sup> found that the introduction of MUP in Scotland was associated with a net reduction in per adult off-trade alcohol sales of 3.5% in the 12 months following the implementation of MUP. Changes to the price of alcohol reflected in the price distribution of off-trade alcohol observed in the current study are a likely mechanism through which the reduction in consumption occurred.

In addition to the evaluation studies, the annual MESAS Monitoring Reports track the average sales price of alcohol in Scotland compared to England and Wales over the calendar year. The 2019 report<sup>4</sup> found an increase in the average price in the off-trade in Scotland from 2017 to 2018 (from 55 to 59ppu), and the 2020 report<sup>5</sup> showed an even greater increase from 2018 to 2019 (from 59 to 65ppu). These figures are in line with those from the Price Distribution study. They are also consistent with a study<sup>6</sup> examining the impact of MUP on alcohol purchases recorded through shopping panel data.

The study found an increase in price of 5.1 pence per unit of alcohol and a reduction in alcohol purchases relative to England of 1.2 units per adult per week in Scotland immediately following the implementation of MUP.

## **What other evidence on the impact of MUP on alcohol pricing on products is still to come?**

This report presents a descriptive analysis of the price distribution of off-trade alcohol for the 12-month period since the implementation of minimum unit pricing (MUP) in Scotland. A number of other studies will offer further insights into the impact of MUP on alcohol prices and products.

- A further study on the economic impact of MUP will report in late 2022, and will include analysis of quantitative data, stakeholder engagement, and qualitative interviews with small retailers in the border area.
- While not a part of the formal evaluation of MUP, the annual MESAS Monitoring Report will continue to present a wide range of alcohol indicators, including sales and price. The next MESAS Monitoring Report is planned to be published in June 2021.
- The products and prices study will provide quantitative evidence on the extent of change to the characteristics of products available in the retail and wholesale sectors. This study will report in late 2021.
- A further study on sales-based consumption will provide quantitative evidence on the effect of MUP on population alcohol consumption using data for 3 years after the implementation of MUP. The study will report in 2022.

## **Conclusion**

The price distribution of pure alcohol per adult in Scotland changed with the introduction of MUP, with most categorised in the 50 to 64.9ppu price range, in contrast to previous years and England & Wales where MUP does not apply. Price bands above 65ppu increased in line with previous years and with England & Wales, indicating that MUP had limited effect on the price distribution above 65ppu. After MUP was implemented in Scotland, a small proportion was categorised under 50ppu. Methodological issues are likely to have artificially inflated this proportion but, unfortunately, it was not possible to differentiate actual non-compliance from data limitations.

## References

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<sup>3</sup> Giles L, Richardson E and Beeston C. Using alcohol retail sales data to estimate population alcohol consumption in Scotland: an update of previously published estimates. Edinburgh: Public Health Scotland; 2021. Available online: <https://publichealthscotland.scot/media/2994/using-alcohol-retail-sales-data-to-estimate-population-alcohol-consumption-in-scotland-an-update-of-previously-published-estimates.pdf> Accessed: June 2021

<sup>4</sup> Giles L, Robinson M. Monitoring and Evaluating Scotland's Alcohol Strategy: Monitoring Report 2019. Edinburgh: NHS Health Scotland; 2019. Available online: [www.healthscotland.scot/media/2587/mesas-monitoring-report-2019.pdf](http://www.healthscotland.scot/media/2587/mesas-monitoring-report-2019.pdf) Accessed: June 2021

<sup>5</sup> Giles L, Richardson E. Monitoring and Evaluating Scotland's Alcohol Strategy: Monitoring Report 2020. Edinburgh: Public Health Scotland; 2020. Available online: [www.healthscotland.scot/media/3330/mesas-monitoring-report-2020-english-updated-march-2021.pdf](http://www.healthscotland.scot/media/3330/mesas-monitoring-report-2020-english-updated-march-2021.pdf) Accessed: June 2021



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<sup>6</sup> O'Donnell A, Anderson P, Jané-Llopis E et al. Immediate impact of minimum unit pricing on alcohol purchases in Scotland: controlled interrupted time series analysis for 2015–18. *British Medical Journal*. 2019 September; 366:l5274. Available online: [www.bmj.com/content/366/bmj.l5274](http://www.bmj.com/content/366/bmj.l5274) Accessed: June 2021.