## Public Health * Scotland

Evaluating the impact of MUP on alcohol products and prices: briefing paper

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November 2022

Translations

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0898 11/2022

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## Introduction

Minimum unit pricing for alcohol (MUP) came into effect in Scotland on 1 May 2018. From that date, every drink containing alcohol must have a minimum price based on the amount of alcohol it contains. The minimum price in Scotland is currently set at $£ 0.50$ per unit of alcohol. The MESAS (Monitoring and Evaluating Scotland's Alcohol Strategy) 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 briefing paper accompanies a report providing an analysis of prices and products in the off-trade in the first 12 months following the implementation of MUP. We provide a descriptive analysis of changes in price outcomes (price per unit of alcohol and price per litre) and the range of alcohol products (natural volume sales in different container sizes for single and multipacks; ABV (alcohol by volume); and the introduction and discontinuation of products), as well as natural volume sales and value of sales.

We provide comparisons over time and with England \& Wales, where MUP was not in place during the time frame under study. This report uses off-trade data on alcoholic drinks at three levels: all products combined; across several alcoholic drink categories; and at a brand level for a sample of popular brands.

## What we did

This research was directed by three research questions:

1. How did the price (price per unit and price per litre natural volume) of alcoholic drinks sold in the retail and wholesale sectors change in Scotland after the implementation of MUP?
2. How did the range of alcohol products (container size, multipacks, discontinuation or introduction of products, ABV) change in Scotland following the implementation of MUP?
3. How did the total volume (L) and value ( $£$ ) of sales change in Scotland following the implementation of MUP?

Most data (price outcomes, container size, multipacks, volume and value sales) were derived from weekly off-trade electronic point of sale (EPoS) data covering May 2016 to April 2019, obtained from market research specialist NielsenIQ. We compared Scotland to England \& Wales for each of these outcomes. Price per unit of alcohol was estimated by dividing the value of sales by the volume and then by ABV, from which the average price per week ( $£$ ) was calculated. Container size, multipack, and volume sales outcomes were expressed as natural volume (L) per adult, while value sales were expressed in pounds sterling per adult.

NielsenIQ data were also used for some of the analysis of introduction and discontinuation of products by checking for instances in which products were introduced or discontinued close to MUP being implemented. Further data were obtained from market research specialist Knowledge Gaps that provided more information on the introduction and discontinuation of products, as well as data on changes to ABV. Additional data were obtained from Knowledge Gaps covering prices charged in Aldi and Lidl (these retailers are not included in NielsenIQ data). Finally, we obtained further data from market research specialist SalesOut on prices in the wholesale sector.

## What we found

## Research question 1: How did the price of alcohol products change in Scotland after the implementation of MUP?

- Overall, average prices increased in the off-trade in Scotland in the first year of MUP; from $£ 0.60$ per unit of alcohol to $£ 0.66$ (+10.0\%) (Table 1). This was greater than the price increase in England \& Wales (+1.7\% from £0.60 to $£ 0.61$ per unit) and between the two previous years in Scotland (+3.4\% from $£ 0.58$ to $£ 0.60$ per unit).
- Price increases in supermarkets (+17.9\% from $£ 0.56$ to $£ 0.66$ per unit) were greater than in convenience stores $(+6.3 \%$ from $£ 0.63$ to $£ 0.67$ per unit). Thus, the average price per unit of alcohol sold in supermarkets was much more similar to convenience stores following the implementation of MUP than before implementation (or in England \& Wales).
- The types of alcoholic drink products that were priced the lowest relative to their ABV prior to MUP being implemented saw the greatest increases in price after implementation (Table 2). At a category level, this particularly affected cider ( $+25.6 \%$ price per unit of alcohol (ppu)) and perry ( $+50.0 \% \mathrm{ppu}$ ) as well as own-brand spirits in supermarkets, such as own-brand vodka (+18.5\% ppu), gin (+16.1\% ppu), and blended whisky (+12.8\% ppu).
- Because the main data provider is unable to collect data on Aldi and Lidl, we acquired data on them from an alternative source, and found that the average price per unit for cider and spirits increased (by $28.2 \%$ and $18.6 \%$ respectively) while it remained broadly similar for beer. The average price per unit of alcohol for both ciders and spirits prior to MUP being implemented was lower than $£ 0.50$ per unit of alcohol, but not for beers.
- We compared price changes in the wholesale and convenience sectors (because the customer for the wholesale sector is the convenience sector) and found that they were dissimilar. For example, prices decreased in the wholesale data for wine and spirits but increased in the convenience sector,
and prices increased for fortified wine in the wholesale data but decreased in convenience stores. However, because the wholesale data had relatively low coverage (around 50\%), it is unclear to what extent these data represent the wholesale sector overall.

Interpretation: This study found strong evidence for widespread increases in the prices of alcoholic drink products in order to meet the $£ 0.50$ per unit of alcohol price floor, especially in the supermarket sector. There were few examples of prices being decreased. At a category level, the only exception was the fortified wine category in the convenience sector. We were not able to determine if products previously priced above the MUP increased prices in order to maintain a price differential.

Table 1: Average price per unit (£) of pure alcohol

| Country | Year | Convenience <br> stores | Supermarkets | Total <br> coverage |
| :--- | ---: | ---: | ---: | ---: |
| Scotland | $2016-17$ | 0.61 | 0.55 | 0.58 |
| Scotland | $2017-18$ | 0.63 | 0.56 | 0.60 |
| Scotland | $2018-19$ | 0.67 | 0.66 | 0.66 |
| EW | $2016-17$ | 0.61 | 0.54 | 0.58 |
| EW | $2017-18$ | 0.63 | 0.56 | 0.60 |
| EW | $2018-19$ | 0.65 | 0.57 | 0.61 |

Table 2: Average price per unit of alcohol (£) by drink category

| Country | Year | Beer | Wine | Spirits | Cider | FW | RTD | Perry |
| :--- | :--- | :--- | :--- | ---: | ---: | ---: | ---: | ---: |
| Scotland | $2016-17$ | 0.52 | 0.64 | 0.55 | 0.43 | 0.61 | 0.90 | 0.36 |
| Scotland | $2017-18$ | 0.55 | 0.66 | 0.57 | 0.43 | 0.63 | 0.92 | 0.38 |
| Scotland | $2018-19$ | 0.59 | 0.70 | 0.61 | 0.54 | 0.65 | 0.96 | 0.57 |
| EW | $2016-17$ | 0.52 | 0.65 | 0.55 | 0.43 | 0.58 | 0.92 | 0.35 |
| EW | $2017-18$ | 0.55 | 0.68 | 0.57 | 0.43 | 0.61 | 0.93 | 0.36 |
| EW | $2018-19$ | 0.56 | 0.70 | 0.59 | 0.43 | 0.63 | 0.96 | 0.37 |

Note: EW = England \& Wales; FW = Fortified wine; RTD = Ready to Drink beverages Years start in May to coincide with the introduction of MUP on 1 May 2018.

## Research question 2: How did the range of alcohol products (container size, multipacks, discontinuation or introduction of products, ABV) change in

 Scotland after the implementation of MUP?- Changes to container sizes included a large reduction in the amount of cider sold in containers of $1,000 \mathrm{ml}$ or greater ( $-61.3 \%$ ); of the amount of beer and cider sold in the largest multipacks; and a reduction of spirits sold in $1,000 \mathrm{ml}$ containers ( $-18.9 \%$ ) coinciding with an increase of spirits in 700 ml containers (+13.9\%).
- There were reduced sales in multipacks with 13 or greater items for beer (-34.3\%, and a drop in share from $29.2 \%$ to 19.0\%) and cider (-68.4\%, and a drop in share from $12.9 \%$ to $4.9 \%$ ). Conversely, there were increased sales in multipacks with 12 or fewer items for beer ( $+17.3 \%$ ) and cider ( $+14 \%$ ). The proportion of beer sold in multipacks was largely stable (Table 3), and went up for cider (largely due to the steep decline in single packs over $1,000 \mathrm{ml}$ ).
- There was limited evidence of containers being discontinued or introduced as a result of MUP being introduced. Out of the top 50 brands in convenience stores and supermarkets, more product variants were introduced in 2017-18
than in the first year of MUP and more containers were discontinued in 2017-18 than in the first year of MUP. However, two brands (Lambrini and own-brand Soave wine) saw a product introduced that came to represent a substantial proportion of sales post-MUP implementation.
- ABV decreased for $2.9 \%$ of products and increased for $1.5 \%$. There was limited evidence that the observed changes in ABV were attributable to the implementation of MUP.

Interpretation: The natural volumes of alcoholic drinks sold in larger container sizes or larger multipacks declined, especially for products that saw larger price increases. This was at least partially offset by increased sales in smaller containers. There was limited evidence of MUP affecting ABV, product discontinuations or product introductions.

Table 3: Litres of natural volume beer per adult in different ranges of container sizes for singles and multipacks

| Container size | Scotland <br> 2017-18 | Scotland <br> $\mathbf{2 0 1 8 - 1 9}$ |  <br> Wales <br> 2017-18 |  <br> Wales <br> 2018-19 |
| :--- | ---: | ---: | ---: | ---: |
| Single - <br> Less than 330ml | $0.00(0.0 \%)$ | $0.00(0.0 \%)$ | $0.02(0.1 \%)$ | $0.01(0.0 \%)$ |
| Single - <br> 330 ml to 439ml | $0.45(1.3 \%)$ | $0.47(1.4 \%)$ | $0.48(1.5 \%)$ | $0.50(1.4 \%)$ |
| Single - <br> 440 ml to 568ml | $2.26(6.7 \%)$ | $2.20(6.5 \%)$ | $2.76(8.4 \%)$ | $2.76(7.9 \%)$ |
| Single - <br> 569 ml or greater | $1.57(4.7 \%)$ | $1.95(5.7 \%)$ | $1.98(6.0 \%)$ | $2.27(6.5 \%)$ |
| Multipack - <br> $2-6$ items | $10.88(32.2 \%)$ | $12.78(37.5 \%)$ | $11.57(35.1 \%)$ | $12.28(35 \%)$ |
| Multipack - <br> $7-12$ items | $8.71(25.8 \%)$ | $10.19(29.9 \%)$ | $6.95(21.1 \%)$ | $7.20(20.5 \%)$ |
| Multipack - <br> 13 or more items | $9.87(29.2 \%)$ | $6.48(19.0 \%)$ | $9.24(28.0 \%)$ | $10.03(28.6 \%)$ |

Research question 3: How did the total volume and value of sales change in Scotland following the implementation of MUP?

- Natural volume sales per adult declined $2.4 \%$ overall. Products that saw larger price increases, such as some ciders, perries, and own-brand spirits in supermarkets, tended to see larger reductions in sales. The cider category reduced $17.5 \%$ in natural volume sales per adult overall, with some strong ciders seeing reductions in convenience stores of over $90 \%$, and the perry category reduced by $40.0 \%$ overall. There were also large reductions in natural volume sales for supermarket own-brand blended whisky (-31.6\%), gin (-22.7\%), and vodka (-40.1\%).
- Overall, the impact of MUP on the sales volume of beer, wines and spirits was small. However, there were reductions in sales volumes for own-brand spirits and some beer and spirit products that were priced below $£ 0.50$ per unit prior to MUP.
- RTDs (+21.4\%) and fortified wine (+18.2\%) both increased in sales volume following MUP implementation, with RTDs being the category with the smallest increase in price and fortified wines being the only category to see a decrease in price at a sector level (in the convenience sector).
- Despite the $-2.4 \%$ decline in natural sales volume overall, the monetary value of sales increased by $7.8 \%$ in Scotland in the first year of MUP - more than in England \& Wales or than between the previous two years in Scotland. This indicates that the decline in sales volume could be more than offset by the increase in price, thus increasing the value of sales.

Interpretation: We observed that larger price increases tended to coincide with smaller increases or reductions in natural volume sales. Products that saw larger price increases tended to see larger reductions in sales, and products that saw small price increases or that decreased in price tended to see smaller reductions in sales volumes or increases in sales volumes. Sales value increased overall, only tending to decrease for the products that saw the largest decreases in sales value.

## Our understanding of the impact of MUP so far

The findings of this study were largely consistent with others from the MUP Evaluation.

- Price distribution. This study ${ }^{1}$, published in June 2021, also used electronic point of sale data from NielsenIQ, and found similar changes to pricing in the first year of MUP, with a large decline in the proportion of products priced below $£ 0.50$ per unit, and a large increase in products priced in the $£ 0.50$ to $£ 0.65$ per unit range.
- Small retailers. The impact on small retailers study ${ }^{2}$, published in May 2020, used pre-MUP Scotland data to investigate changes to price and product ranges in a sample of small retailers in the first nine months of MUP. Findings largely corroborated the current study's analysis of the convenience sector. There was a reduction in the number of distinct cider products sold in small retailers, echoing the sharp decline in strong ciders described above. The increase in the number of distinct RTDs being sold in small retailers also supports the above finding that RTDs increased in sales volume and sales value. There were also reductions in container sizes and in the larger multipacks. Similar to the current study, researchers on the small retailers study also found some limited indication of an effect of MUP on ABV, with reductions in ABV for some variants of Lambrini Original and Frosty Jack's (from $7.5 \%$ to $6.0 \%$ for both).
- Economic impact on the alcoholic drinks industry. This study ${ }^{3}$, published in October 2019, took a mixed-methods approach to investigate a broad range of outcomes pertaining to the economic impact of MUP on producers and retailers. There were qualitative findings from interviews that suggested there was little effect on retailer revenue, and that a decline was mitigated by increased margins compensating for decreased sales volume. The contrast to the current study's finding that sales value increased overall may be due to differences in qualitative interview data and EPoS data. This study also noted
some de-listing (discontinuation) of some cider and perry products. An update to this study is due in late 2022.
- Sales-based consumption. This suite of studies investigates population-level sales and consumption post-implementation of MUP. The most recent publication ${ }^{4}$ from March 2021 found that the introduction of MUP in Scotland was associated with a reduction in per-adult off-trade alcohol sales of $3.5 \%$ in the 12 months following the implementation of MUP after adjusting for the best available geographical control and other factors. While using a different outcome measure, the findings from the current study, i.e. that natural volume sales reduced in Scotland by $2.4 \%$, echoed the $3.5 \%$ reduction in pure alcohol volume.


## Conclusion

In the first year of MUP in Scotland, the price of alcoholic drinks in the off-trade increased for all categories of alcoholic drinks (except for fortified wine in convenience stores) and for most brands. Price increases were the greatest for strong ciders and perry in convenience stores and for own-brand cider and spirits (gin, vodka and whisky) in supermarkets. This was not observed in England and Wales. In Scotland, the price increases appeared to be associated with reduced sales of larger containers in both single packs and multipacks, but there was some indication that the reduction in sales in larger container sizes was at least partially offset by increased sales in smaller container sizes. There was an overall decline in sales volumes, with greater price increases appearing to be associated with larger reductions in sales. However, some brands with lower reductions in sales volumes saw increased sales value, suggesting that the increase in price could offset the decrease in sales volumes. There was limited evidence that products were being introduced, discontinued, or reformulated as a result of MUP.

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