Effect of minimum unit pricing on consumption of unrecorded alcohol in South Africa and the Western Cape in particular, including strategies to minimize negative outcomes

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25/4/2023
• Background and aim of project
• Categories of unrecorded alcohol
• Health & economic effects of unrecorded alcohol & possible impacts of imposition of MUP
• Estimate of current extent of unrecorded alcohol in South Africa by sub-type and possible effect of implementing MUP on volumetric use of each
• Selected mitigation strategies
• Conclusion
Background

• WHO Global Strategy to Reduce the Harmful Use of Alcohol (WHO, 2010)
  • Area 7, pricing policies, proposed establishing a system for specific domestic taxation on alcohol accompanied by an effective enforcement system, which may take into account among other measures, establishing minimum prices for alcohol where applicable.
  • Area 9 focused on reducing the public health impact of illicit alcohol and informally produced alcohol. This area gives recognition to both the possibility of consumption of illicitly or informally produced alcohol having negative health consequences due to a higher ethanol content and potential contamination with toxic substances, such as methanol and that it might also hamper governments’ abilities to tax and control legally produced alcohol.

• Minimum unit pricing (MUP) establishes a 'floor price' beneath which alcohol cannot be legally sold.
  • Rationale behind MUP is to decrease alcohol consumption, and particularly harmful use of alcohol, through increasing the price of the cheapest alcoholic beverages which tend to be consumed by the heaviest drinkers
  • Concerns raised in countries where MUP has been implemented typically include the view that raising the prices of the cheapest alcohol will inevitably lead to an increase in unrecorded alcohol, and particularly illicit alcohol which is a sub-category of unrecorded alcohol
AIM

To give attention to:

• the extent to which the introduction of MUP of alcohol in the Western Cape province, or in South Africa as a whole, is likely to impact the use of unrecorded alcohol and associated harms

• how MUP be implemented in a way that will minimize any moves toward increased use of unrecorded alcohol
Categories of unrecorded alcohol

- **Recorded Alcohol**
  - Taxed or otherwise registered alcohol

- **Unrecorded Alcohol**
  - Legal but unrecorded alcohol products (homemade or other)
  - Alcohol products recorded elsewhere, but not in the jurisdiction where consumed
  - Surrogate alcohol; non-beverage alcohol products not officially intended for human consumption or it may be intended for human consumption but not declared as such to avoid taxes
  - Illegal homemade and/or artisanal production
  - Illegal production or smuggling on a commercial (industrial) scale. Also includes so called "3rd shift alcohol (produced from legitimate sources but sold off the books)

  - Homemade fruit spirits; homebrewed beer; wine products for home consumption
  - Cross-border shopping
  - Cosmetics (mouth-wash, perfumes, etc.); denatured alcohol; automobile products; medicinal compounds such as rubbing alcohol
  - Moonshine; samogon; wine, beer and spirits production in countries where it is illegal
  - Mainly spirits, but also, untaxed beer or wine (e.g. production of alcohol being not on the books: third shift
Categories of unrecorded alcohol

- SA falls into the category of countries having 20%-30% of the total alcohol consumption as unrecorded, with 2.0 to 2.5 L of unrecorded alcohol consumed/capita/annum, and where the two largest categories of unrecorded alcohol consumption are homemade alcohol (#1) and illegal production (#2) followed by lesser amounts of alcohol bought over the border and surrogate alcohol (Probst et al., 2019).

- Unrecorded alcohol can be legal or illegal, but the distinction is not always clear

- Unrecorded alcohol is typically cheaper than recorded alcohol
  - As a result of this price differential, any policy which aims to use tax increases on recorded alcohol in an effort to reduce consumption will only reach its full potential if there is little switching by drinkers to the less expensive unrecorded alcohol as a result of the tax hike
  - Another problem with unrecorded alcohol is that it is sometimes less healthy

Figure 1
The country-specific proportion (%) of unrecorded alcohol consumption of the total alcohol consumption per capita among adults in 2015.
Health effects of different sub-types of unrecorded alcohol and possible impacts following the imposition of MUP

- By definition, unrecorded alcohol does not allow for quality control of its ingredients by health authorities

- While some have argued that unrecorded alcohol consumption incurs more harm per liter of pure alcohol than does recorded consumption (Skehan et al., 2016), a recent review indicated that in most cases it does not pose a threat to health above the effects of ethanol itself (Lachenmeier et al., 2021). A major exception is the addition of methanol (Rehm et al., 2014)

- Any discussion of the possible negative effects of an increase in unrecorded alcohol use following imposition of MUP must also be counter-balanced against the positive effects of a reduction in consumption, and especially a reduction in heavy drinking, resulting from the MUP

- It is important to consider both the varying possible harms of each category of unrecorded alcohol as well as the extent to which each category is likely to increase if MUP were to be implemented in the Western Cape/South Africa (see Table 1)
Economic effects of MUP on different sub-types of unrecorded alcohol

In 2015 South Africa’s legal alcohol industry was estimated to contribute approximately R88 bn to the country’s GDP and directly and indirectly support employment of about 244,000 people (Short et al., 2017).

A recent Euromonitor study (2021) found that the South African economy suffered a loss of R6.4 bn in 2017 due to illicit alcohol activities from an illicit and unregulated industry that generates an annual revenue of R12.9 bn.

The economic effects of MUP on different sub-types of unrecorded alcohol are summarized in Table 1.
### Table 1: Health & economic effects of unrecorded alcohol & possible impacts of imposition of MUP

<table>
<thead>
<tr>
<th>Description</th>
<th>Legal</th>
<th>Health</th>
<th>Economic</th>
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<tbody>
<tr>
<td>1. Legal but unrecorded alcohol products in SA</td>
<td>Y</td>
<td>Consumers may consume more ethanol if they find that the home brewed products they turn to as a result of MUP cost substantially less</td>
<td>Lower revenue to govt since value added comes after point of sale.</td>
</tr>
<tr>
<td>2. Alcohol products recorded elsewhere but not in SA</td>
<td>Y</td>
<td>Similar to normal alcohol products, but people may consume more because it is cheaper</td>
<td>- Loss of sales revenue&lt;br&gt;- Loss of local jobs&lt;br&gt;- Avoids local VAT&lt;br&gt;- Unlikely to avoid excise tax because of the common customs union unless from outside SACU</td>
</tr>
<tr>
<td>3. Surrogate alcohol</td>
<td>N</td>
<td>Fatal poisoning, blindness, or death&lt;br&gt;- Increased incidence of liver diseases&lt;br&gt;- More than 50 different major disease conditions including some cancer types such as esophageal cancer have been reported</td>
<td>Health costs associated with some products and also loss of VAT for products sold illegally.</td>
</tr>
<tr>
<td>4. Illegal homemade artisanal production</td>
<td>N</td>
<td>Can result in negative health effects including liver disease and death if mixed with contaminants added to increase potency</td>
<td>- Loss of sales revenue&lt;br&gt;- Health costs&lt;br&gt;- Loss of excise tax and VAT</td>
</tr>
<tr>
<td>5. Illegal production &amp; smuggling on a commercial scale</td>
<td>N</td>
<td>May contain additional toxic compound that may cause subsequent harm, predominantly to vulnerable populations&lt;br&gt;- Similar to normal alcohol products, people may consume more because it is cheaper</td>
<td>Loss of sales revenue&lt;br&gt;Loss of excise tax and VAT&lt;br&gt;Health costs if not produced according to normal product standards</td>
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Estimate of current extent of unrecorded alcohol in South Africa by sub-type

- Homebrewed alcohol-home consumption
- Alcohol products recorded outside of SA
- Surrogate alcohol
- Illegal homemade alcohol
- Illegal production & smuggling of alcohol
### Estimate of current extent of unrecorded alcohol in South Africa by sub-type and possible effect of implementing MUP on volumetric use of each type of unrecorded alcohol

<table>
<thead>
<tr>
<th>Type</th>
<th>“Possible” effect of implementing MUP in SA/WC</th>
</tr>
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<tbody>
<tr>
<td>Homebrewed alcohol for own consumption</td>
<td>Risk of increased use of legal but unrecorded products if MUP is instituted is thus certainly a factor in SA, but if only ~6% of the alcohol consumed in South Africa is from homebrews and a minority of that is for own consumption, then any increase from MUP is likely to be small</td>
</tr>
<tr>
<td>Alcohol products recorded elsewhere</td>
<td>Given travel costs of cross-border shopping (esp for people in WC), unlikely that there will be a substantial increase in unrecorded alcohol from (legal) cross-border shopping</td>
</tr>
<tr>
<td>Surrogate alcohol</td>
<td>Products such as perfumes and hand sanitizers are not routinely substituted for ethanol on a large scale as ethanol is cheap and readily available. Should alcohol not be available because of it not being affordable to some drinkers due to the implementation of MUP, the most likely substitute is likely to be methanol or mouthwash or cough syrups containing codeine and alcohol. Based on research in NT of Australia and Scotland (Buykx et al., 2021; Faulkner et al., 2015), substitution from low-cost alcohol to non-liquor alcohol products (or drugs) is also unlikely to occur on a large scale</td>
</tr>
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</table>
| Illicit homemade artisanal production     | • One might think that increased homebrewing for resale would certainly be a risk if MUP was implemented in South Africa especially as small-scale brewing and selling of homebrew alcohol, especially by women in rural, urban and peri-urban areas, is commonplace  
  • But not generally aspirational to drink homebrewed alcohol in South Africa, especially by younger, urban populations and furthermore the alcohol-content is generally lower than many forms of industrially or semi-industrially produced alcohol products and they “spoil” quite quickly if not consumed soon after production which limits their potential for harm and trade  
  • ITO public health an increase in consumption of illicit homebrewed alcohol will probably not be particularly harmful from a public health point of view in comparison to benefits of MUP, though a few individuals will get sick and possibly even die from contaminated alcohol products. Any loss in excise revenue is likely to be recovered from increased VAT received on other products being sold above the MUP |
| Illegal production & smuggling on a commercial scale (mostly spirits) | • Extent to which there would be an increase in smuggling of alcohol across provincial/national borders would depend on whether minimum prices were raised sufficiently high as to make it worthwhile to purchase alcohol outside WC/SA and pay for it to be smuggled across borders + extent of countermeasures ... but it could definitely be an issue.  
  • Same argument would go for counterfeit, spirit-based products and strategies to avoid excise taxes on spirits-based products through illegally diverting spirits products destined for the export market into the local market or illegally bring such products back into the local markets. |
# Selected mitigation strategies

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| Homebrewed-alcohol | • Educate home brewers of the dangers of including certain products in their concoctions + public in how to identify unrecorded alcohol products and the risks associated with consuming such products  
                   • Increase efforts to bring more homebrewed products for resale into the regulated market, possibly through offering financial incentives for registration of producers, set up systems that offer tax exemption for a transitional time period for businesses that register, & conduct quality control measures |
| Surrogate alcohol | • Require bittering agents and colourants to be added to all forms of industrial alcohol  
                   • Develop and introduce of low-cost methanol detection systems  
                   • Require retail outlets place items such as methylated spirits or mouthwash containing alcohol "behind the counter”  
                   • Introduce minimum prices at same level as beverage alcohol for cosmetic lotions containing more than a certain percentage of alcohol; alternatively tax such products at the same price as alcohol or at the very least abolish tax exemption for denatured alcohol  
                   • Reduce container size of surrogate alcohol products or restrict number of bottles allowed to be sold per person or in other ways reduce availability of surrogate alcohols, e.g. by prohibiting their sales in vending machines and in windscreen wiper fluid |
## Selected mitigation strategies

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| Cross-border smuggling                    | • Improve efforts to reduce cross-border smuggling through means such as sharing data and intelligence and data across customs agencies in neighbouring countries  
• Invest in scanning equipment, and allocation of border control personnel/anti-smuggling teams to police borders (incl provincial)  
• Address corruption at border posts and in general assign dedicated prosecutors on cases involving illicit trade and ensure consistency in sanctions in cases where illicit traders are found guilty                                                                                     |
| Illegal local alcohol production & trade  | • Put in place electronic surveillance systems to track alcohol trade whereby a QR code is required to be placed on all products and ensuring that they need to be scanned at key points along the distribution and sale chain before alcohol products can be sold in South Africa  
• Implement intelligence driven policing to facilitate the targeting of large-scale operations to produce and sell unrecorded alcohol and possibly including the setting up of hotlines with rewards  
• Institute harsh penalties for counterfeiting alcohol and ensure that cases are seen through to successful prosecution                                                                                                                                                    |
Conclusion

• Would be naïve to think that there would not be a move towards unrecorded alcohol use following imposition of MUP in SA
• With implementation of better enforcement of liquor trading regulations and the addition of new systems like tracking and tracing, we might well see a reduction of unrecorded alcohol use from current levels
• Given the cost savings and increased revenue opportunities for governments who implement alcohol pricing policies, measures could be taken to offset negative impacts on low-income groups
• To reduce the likelihood of substantial moves towards consumption of unrecorded alcohol consideration should be given to not starting with an excessively high MUP
• An NB mitigation strategy is to ensure high levels of inspections of licensed outlets to ensure that products are not being sold below the MUP and the imposition of severe enough sanctions in cases where products are sold below the MUP
• Countering any possible increase in unrecorded alcohol use following the implementation of MUP should be considered in the light of the broader benefits
• Don’t criminalise the behaviour of small home-based brewers (often women) who typically sell small quantities of unrecorded alcohol
• NB to set up systems to try to monitor the use of unrecorded alcohol products and any associated negative health consequences following the imposition of MUP so that the effects on policy changes on unrecorded alcohol and associated harms can be measured and adjustments made where necessary