

Minimum unit price for alcohol.

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What is it?

A minimum unit price (MUP), also known as a ‘floor price’, establishes a price per standard drink below which alcohol cannot be sold.

States and territories, which have responsibility for liquor licensing, can set MUP while only the Commonwealth can impose excise (tax). Alcoholic beverages (other than wine) and spirits are subject to excise. Excise rates for alcohol are indexed twice a year in line with the consumer price index (CPI) – generally on 1 February and 1 August.

A MUP would increase revenue and profits for some alcohol retailers, wholesalers, importers and producers, while an alcohol tax increase would see increased revenue going to the Government. Unlike an increase in tax, a MUP cannot be avoided by discounting, loss-leading marketing or below cost selling. Some segments of the alcohol industry are likely to object to the introduction of a MUP.

While MUP usually applies to on-premise sales of alcoholic beverages (e.g., in restaurants or bars) as well as off-premise sales (e.g., packaged liquor at a liquor store), MUPs set so far are not sufficiently high enough to affect most on-premise sale prices.



Why?

Controls on price have been identified by the World Health Organization as the most effective measure that governments can implement to reduce the harm caused by alcohol.¹

Three quarters (77%) of Australians consumed alcohol in the last 12 months, with a quarter of them exceeding the single occasion risk guidelines (4 standard drinks) at least monthly. Alcohol was estimated to cost \$1.686 billion to the health care system.

Cheap alcohol is readily available in Australia. Off-premise sales account for 80% of alcohol sold in Australia,² with low cost alcohol pricing being a key marketing strategy to boost sales. This includes price promotions such as discounted prices, two-for-one deals, docket deals, etc. Alcohol is now sold for as little as 23 cents per standard drink.²

Wine is most likely to be sold cheaply as it is taxed at a relatively low rate and on value, rather than on alcohol content, as is the case with beer and spirits (see Figure 1).³ The lower the price of wine, the less tax is paid.³

The heaviest drinkers account for a large fraction of alcohol sales:⁴

- 3% of drinkers consume 20% of alcohol sold in Australia
- 10% of drinkers consume 40% of the alcohol sold in Australia.

The heaviest consumers were more likely to purchase cask wine and full-strength beer.⁴ The price of cask wine will rise significantly under a MUP.

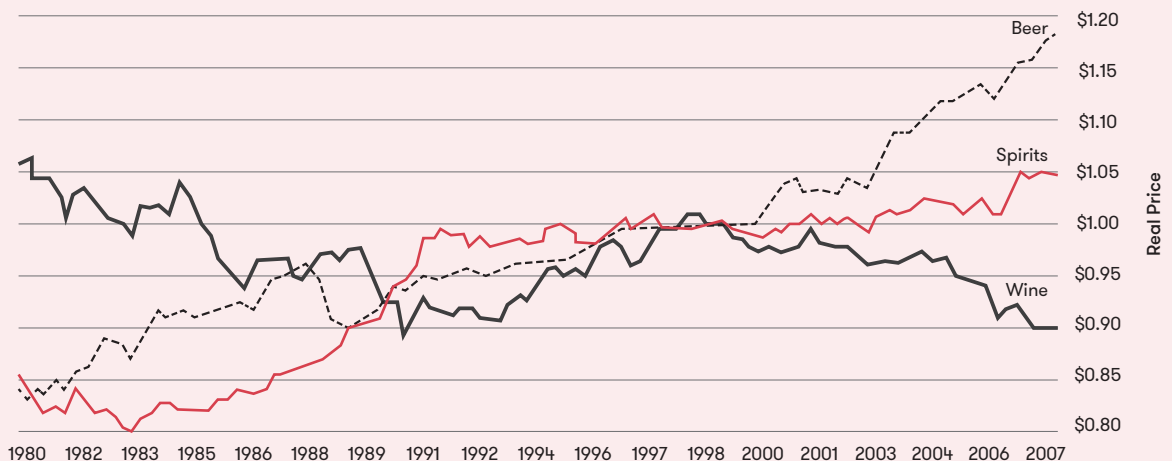
Younger drinkers, particularly those drinking heavily, are more likely to select cheaper drinks, and heavier drinking young people are more likely to drink high potency ready to drink (RTD) beverages.⁵

There is a strong link between alcohol price, consumption and alcohol-related harms.

When prices increase, alcohol consumption and harms decrease. This effect is seen in overall consumption as well as in measures of heavy or problematic drinking, and in the level of harms experienced by the drinker themselves or to others, including family members.^{1,6-8}

While there are different price impacts across societies, in general, a price increase of 10% reduces consumption by an average of 5%.^{9,10}

Figure 1. Prices of alcoholic beverages relative to other consumption (June 1999 \$1.00), Australia, September 1980 to March 2008



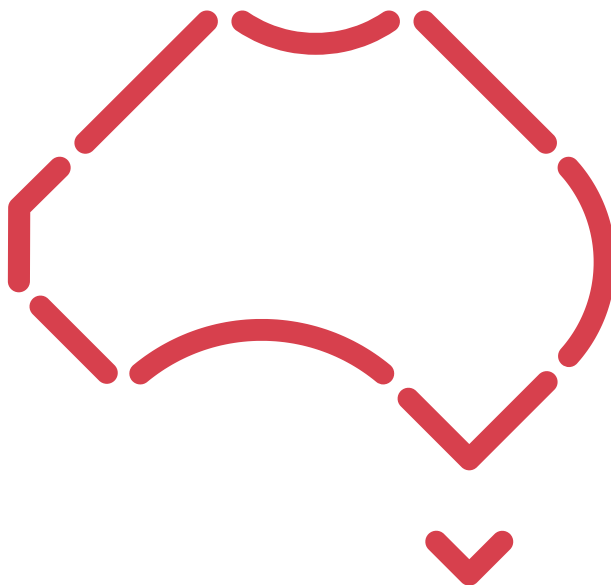
Source: Australian Government: Technical Report 3: Preventing alcohol-related harm, a window of opportunity (p9)

In Australia

The effectiveness of increasing alcohol prices in the community has been tested in some short-term policy initiatives in the Northern Territory.

The NT Government sanctioned indirect price controls in 2002 in Alice Springs by banning off-premise sales of cask wine. Restrictions varied resulting in bans of cask wine in containers >2 litres and fortified wine in containers >1 litre in volume.

The evaluation of this price control method reported a 37% increase in the mean price of alcohol from \$0.80 to \$1.10 per standard drink, based on newspaper advertisements for off-premise sales. This coincided with a reduction in alcohol consumption as indicated by wholesale sales data from about 4 to about 3.5 litres per quarter by people aged 15 years.¹¹



While this case study is limited in scope, it provides an Australian example of how reducing the availability of the cheapest alcohol products can influence a reduction in alcohol consumption and related harms. A shortcoming of the regime was that consumers substituted products by moving to the next cheapest beverage, fortified bottled wine.^{11,12}

The NT Government also influenced pricing of wine in 1995 when it introduced a \$0.35 levy on the sale of cask wine to address harm across the Territory. The levy was ruled unconstitutional by the High Court in August 1997. Prior to the introduction of the levy, mean quarterly per capita consumption of cask wine was 0.73 litres (per person aged ≥ 15 years). This dropped to 0.49 litres per person following the introduction of the levy. During this time there was no corresponding shift (or switching) to other beverage types, such as beer. In the period after the removal of the levy, consumption increased to 0.58 litres per person.¹³

A third Australian example of price influencing consumption is the introduction of the 'alcopops' tax.

The tax closed the loophole created after the introduction of the GST which saw ready to drink (RTD) alcohol beverages taxed at a lower rate than spirits, leading to increased RTD sales. In the first full year that the RTD alcohol beverages tax was in effect (2008–09), there was a 30% decrease in sales of RTDs. This was followed by a further decline in 2009–10.¹⁴

Over the same period there was an increase in the sales of other spirits; however, this increase was less than half of the decrease in RTD sales, resulting in a net effect of a 1.5% reduction in all alcohol apparently consumed. Critics point to a study that concluded the tax had no impact on alcohol-related harm presentations of 15–29 year olds at Gold Coast emergency departments.¹⁵

Modelling studies

Research regarding the overall population of Australian drinkers found that a 1% increase in the price of alcohol was associated with 0.96% reduction in the consumption of alcohol.^{16,17}

Overseas, a Sheffield University group has done extensive modelling in preparation for, and during debate over, introducing MUP in Scotland.¹⁸ The study found that as MUP increases:

- **overall consumption would decrease:** a 50 pence MUP was estimated to be associated with a 5.7% reduction in consumption and, when combined with discount bans (prohibiting all price based promotion and multi-buy offers), this increased to a 7.8% reduction
- **alcohol-related hospital admissions and deaths were projected to decrease:** a 50 pence MUP was estimated to be associated with 427 fewer annual deaths and 8600 fewer annual hospital admissions. Most of the prevented deaths would be in harmful drinkers (men/women consuming more than 50/35 units per week)
- **alcohol-related crimes were projected to decrease:** a 50 pence MUP (with a ban in off-license discounting and prohibition of all forms of price-based promotion and multi buy offers) would be associated with 4700 fewer offences per annum
- **absenteeism from work was projected to decrease:** a 50 pence MUP was estimated to be associated with 46,800 fewer days absence from work
- **unemployment due to alcohol problems would decrease:** a 50 pence MUP was estimated to be associated with 1500 avoided cases of unemployment per annum.

It is important to note that a modelling study is a 'what-if' exercise, estimating what effects would be. It is not about studying what happened with an actual change. Further to this, the Sheffield modelling, whilst highly technically competent, was limited to available data, with spending from one study and consumption data from another. This means that the units of analysis were not individual consumers or households, but rather small demographic segments of the Scottish or British population.

Modelling

Pros and Cons

Impacts on consumers

Concerns have been raised that alcohol taxation and pricing policies may have unanticipated negative impacts on consumers. There are concerns that a MUP will unfairly impact low income households, and/or moderate drinkers with little impact on high risk/harmful drinkers who are not sensitive to price.

Low income groups/socially disadvantaged

Individuals in lower socioeconomic groups experience greater alcohol-attributable harms compared with individuals from advantaged areas.¹⁹

Low-income earners are generally the most price responsive, as they are likely to consume cheaper products. Therefore, increasing the lower price points would reduce consumption.²⁰

Some studies dispute this however, with studies of the consumption patterns of low-income households and impacts of MUP producing mixed results. One study indicated that low income households are not the predominant purchasers of any alcohol, or even cheap alcohol. The lowest income households were the most likely to buy cheap alcohol from off-premise retailers²¹ but because their overall purchasing was low, any impact was on a minority of low-income households.

There is also concern that a MUP will have regressive impacts on consumers – that is, the increase in spending will be higher as a proportion of income for the poorest households compared to the wealthiest. An Australian study identified that for beer, wine and spirits consumption combined, a MUP will have a regressive impact, with spending increases of around 2.7% of income for consumers in the lowest-income quintile, compared with 0.3% of income for those in the highest-income quintile. However, the impacts would be greatest for the heaviest drinkers. Those in the lowest income quintile who are heavy consumers of wine have an increase of around 6% of income with a MUP at \$1.00 with an increase of less than 0.1% for light consumers of wine.²²

Whilst there are some regressive impacts associated with a MUP, the reduction in consumption is also considerable with a predicted mean reduction of around 11.5 standard drinks per week amongst wine drinkers in the lowest income quintile, compared to a reduction of around 2.5 drinks per week amongst those in the highest income quintile.²²

Any effects of a MUP on those in low income groups are likely to impact the heaviest drinkers most and the benefits are likely to outweigh the harms. Because harmful drinkers on low incomes purchase more alcohol at less than the minimum unit price threshold compared with other groups, they would be affected most by a MUP.²³ Modelling suggests individuals in the lowest socioeconomic group benefit the most in health terms from a MUP, accruing 82% of the reductions in premature deaths and 87% of the gains in Quality Adjusted Life Years.^{* 23}

Those who drink heavily bear the greatest burden of harm from alcohol and are the most likely to purchase cheaper drinks. A minority of Australian drinkers (10%) consume a disproportionate amount of total alcohol consumed (40%).⁴ This is similar to Scotland where 24.5% of drinkers consume 70% of all alcohol.²⁴

Concerns that the heaviest drinkers may not be price sensitive and may simply increase expenditure rather than decrease consumption have been investigated with mixed results. Research demonstrates that, other than those in the lightest 10% of drinkers, all other Australian drinkers are price sensitive.¹⁶

Greatest price sensitivity is seen amongst those in the heaviest 10% of drinkers (based on the amount consumed), where modelling demonstrated a 1% increase in the price of alcohol associated with 1.26% reduction in consumption.¹⁶

* Quality Adjusted Life Years measures the benefit of an intervention by relating the relative improvement in health with the life expectancy of a person or group. A single QALY is equivalent to one year of perfect health. QALYs are measured by a person's capacity to carry out daily life activities, freedom from pain and mental disturbance.

Impact on moderate drinkers

Moderate drinkers are the least likely to buy cheap alcohol.²¹

Because they tend to buy alcohol that is above the MUP, modelling suggests that this policy would only have small impacts on their alcohol consumption and spending (modelled on a 50 pence MUP).²⁴ Consumption would drop by 1.2% (3.7 units per drinker per year) and annual spending among moderate drinkers would be largely unaffected (a 0.5% or £2 increase per annum).²⁴ This is the case irrespective of economic status.

Shifting people to different beverages

One objection to raising taxation on alcohol is whether drinkers will transfer their drinking to a different beverage.⁶

Consumers can off-set the price increases in a number of ways, including choosing a cheaper product within a beverage category. However, a MUP restricts the capacity of a consumer to switch to a cheaper product as discounting beneath the floor price is not possible. When the alcopops tax was implemented the concern was that individuals would switch to buying full strength spirits to mix their own drinks.⁶ However, research has indicated that while the sales of spirits rose slightly, this did not compensate for the decrease in alcopops sales.¹⁴

Shifting people to illicit drugs

There have been claims that individuals may substitute expensive alcohol products with drug use.

Whilst alcohol and cannabis have been suggested as substitutes, it has been demonstrated that alcohol and cannabis act as both substitutes and complements. Policies aimed at one substance may inadvertently affect consumption of the other substance.²⁵ In 2010, following claims the alcopops tax was partly responsible for greater ecstasy use, Dr Jenny Chalmers, drug and alcohol senior research fellow at the University of New South Wales, said: “It could be the case that young people might use more ecstasy or start using it when the price of alcohol increases. However, the evidence from the very few studies worldwide on switching from alcohol to illicit drugs is inconclusive.”²⁶

Preloading

For young adults, ‘preloading’ or drinking in domestic settings prior to going out, is associated with higher levels of harm.²⁷

This practice is mainly motivated by the lower prices of packaged liquor in off-premise compared to on-premises venues, and the intent to achieve intoxication through high consumption. To some extent a MUP is likely to reduce the difference in the price of alcohol between the two venue types.

Impacts on retailers and producers

It is not entirely clear if additional profits made as a result of a MUP would be collected by retailers and producers or wholesalers or importers rather than government. However, with a price increase on the cheapest forms of alcohol, the Australian Government’s GST revenue would somewhat increase.

Maintaining an appropriate minimum price level

In most cases, minimum unit prices are typically set in absolute rather than relative terms. Inflation means any set level will reduce in real terms unless indexed in some way (e.g. CPI or income).

The alcohol industry's lawsuits delaying Scottish MUP by five years meant that the value of the MUP was substantially devalued by inflation by the time it was implemented.

The Foundation for Alcohol Research and Education notes that because income typically grows faster than inflation, indexing to CPI would result in a reduction in the floor price relative to income and negate the intention of the MUP by reducing the relative cost of alcohol. It recommends that the MUP be attached to a measure of income, such as average weekly earnings.²⁸

ADF position

- The ADF supports the introduction of a MUP in all states and territories.
- Ideally MUP would need to be accompanied by rules that restrict promotions such as '2 for 1 drinks before midnight', as well as research to determine if drink substitution has occurred in vulnerable communities.
- Concurrently, the Australian Government should work towards the volumetric taxation of alcohol as proposed in the 2009 Future Tax System Review to address the low cost of some products.
- MUP should be set at between \$1.30 to \$1.50 per standard drink.
- If there is inadequate progress towards MUP by state and territory governments, the Commonwealth should explore its constitutional options.

References

- World Health Organization. 'Best buys' and other recommended interventions for the prevention and control of noncommunicable diseases: Updated (2017) Appendix 3 of the Global Action Plan for the prevention and control of noncommunicable diseases 2013–2020. 2017.
- Johnston R, Keric D, Stafford J. *The Case for a Minimum (Floor) Price on Alcohol in Western Australia*. Perth; 2018.
- Australian National Preventive Health Agency. *Exploring the public interest case for a minimum (floor) price for alcohol*. Canberra; 2012.
- Sharma A, Vandenberg B, Hollingsworth B. *Minimum pricing of alcohol versus volumetric taxation: which policy will reduce heavy consumption without adversely affecting light and moderate consumers?* PLoS ONE. 2014;9(1):e80936.
- Wall M, Casswell S, Yeh LC. *Purchases by heavier drinking young people concentrated in lower priced beverages: Implications for policy*. Drug and Alcohol Review. 2017;36(3):352–8.
- Babor T, Caetano R, Casswell S, Edwards G, Giesbrecht N, Graham K, et al. *Alcohol: no ordinary commodity: research and public policy*. Rev Bras Psiquiatr. 2003;26(4):280–3.
- Anderson P, Baumberg B. *Alcohol in Europe—public health perspective: report summary*. Drugs: Education, Prevention and Policy. 2006;13(6):483–8.
- Campbell G, Fogarty J. *The nature of the demand for alcohol: understanding elasticity*. British Food Journal. 2006.
- Wagenaar AC, Salois MJ, Komro KA. *Effects of beverage alcohol price and tax levels on drinking: a meta-analysis of 1003 estimates from 112 studies*. Addiction (Abingdon, England). 2009;104(2):179–90.
- Gallet CA. *The demand for alcohol: a meta-analysis of elasticities*. Australian Journal of Agricultural and Resource Economics. 2007;51(2):121–35.
- Symons M, Gray D, Chikritzhs T, Skov S, Siggers S, Boffa J, et al. *A longitudinal study of influences on alcohol consumption and related harm in Central Australia: with a particular emphasis on the role of price*. 2012.
- Alcohol Policy Coalition. *Submission to the National Drug Strategy Consultation, 24 February 2010*. 2010.
- Gray D, Chikritzhs T, Stockwell T. *The Northern Territory's cask wine levy: health and taxation policy implications*. National Drug Research Institute. 1999:93.
- Skov S, Chikritzhs T, Kypri K, Miller P, Hall W, Daube M, et al. *Is the "alcopops" tax working? Probably yes but there is a bigger picture*. Medical Journal of Australia. 2011;195(2):84–6.
- Kisely S, Pais J, White A, Connor J, Quek L, Crilly J, et al. *Effect of the increase in "alcopops" tax on alcohol-related harms in young people: a controlled interrupted time series*. Medical Journal of Australia. 2011;195(11–12):690–3.
- Byrnes J, Shakeshaft A, Petrie D, Doran C. *Is response to price equal for those with higher alcohol consumption?* The European Journal of Health Economics. 2016;17(1):23–9.
- Jiang H, Livingston M, Room R, Callinan S. *Price elasticity of on- and off-premises demand for alcoholic drinks: A Tobit analysis*. Drug and Alcohol Dependence. 2016;163:222–8.
- Meng Y, Hill-McManus D, Brennan A, Meier P. *Model-based appraisal of alcohol minimum pricing and off-licensed trade discount bans in Scotland using the Sheffield Alcohol Policy Model (v. 2): Second update based on newly available data*. Sheffield: ScHARR, University of Sheffield. 2012.
- Katikireddi S, Whitley E, Lewsey J, Gray L, Leyland A. *Socioeconomic status as an effect modifier of alcohol consumption and harm: analysis of linked cohort data*. The Lancet Public Health. 2017;2(6):e267–e76.
- Callinan S, Room R, Livingston M, Jiang H. *Who purchases low-cost alcohol in Australia?* Alcohol and alcoholism. 2015;50(6):647–53.
- Ludbrook A, Petrie D, McKenzie L, Farrar S. *Tackling alcohol misuse*. Applied health economics and health policy. 2012;10(1):51–63.
- Vandenberg B, Sharma A. *Are alcohol taxation and pricing policies regressive? Product-level effects of a specific tax and a minimum unit price for alcohol*. Alcohol and alcoholism. 2016;51(4):493–502.
- Holmes J, Meng Y, Meier P, Brennan A, Angus C, Campbell-Burton A, et al. *Effects of minimum unit pricing for alcohol on different income and socioeconomic groups: a modelling study*. The Lancet. 2014;383(9929):1655–64.
- Angus C, Holmes J, Pryce R, Meier P, Brennan A. *Model-based appraisal of the comparative impact of Minimum Unit Pricing and taxation policies in Scotland. An adaptation of the Sheffield alcohol policy model version*. 2016;3.
- Subbaraman MS. *Substitution and complementarity of alcohol and cannabis: A review of the literature*. Substance Use & Misuse. 2016;51(11):1399–1414.
- Johnston C, Argoon A. *Alcohol price spike fuels switch to ecstasy*. The Sydney Morning Herald. 2010.
- Giesbrecht N, Wettlaufer A, Cukier S, Geddie G, Gonçalves A-H, Reisdorfer E. *Do alcohol pricing and availability policies have differential effects on sub-populations? A commentary*. The International Journal of Alcohol and Drug Research. 2016;5(3):89–99.
- Foundation for Alcohol Research and Education. *The Price is Right: Setting a Minimum Unit Price on Alcohol in the Northern Territory*. Canberra; 2017.