

# **The goon show**

How the tax system works to subsidise  
cheap wine and alcohol consumption

June 2015

---

## About TAI

The Australia Institute is an independent public policy think tank based in Canberra. It is funded by donations from philanthropic trusts and individuals and commissioned research. Since its launch in 1994, the Institute has carried out highly influential research on a broad range of economic, social and environmental issues.

## Our philosophy

As we begin the 21st century, new dilemmas confront our society and our planet. Unprecedented levels of consumption co-exist with extreme poverty. Through new technology we are more connected than we have ever been, yet civic engagement is declining. Environmental neglect continues despite heightened ecological awareness. A better balance is urgently needed.

The Australia Institute's directors, staff and supporters represent a broad range of views and priorities. What unites us is a belief that through a combination of research and creativity we can promote new solutions and ways of thinking.

## Our purpose—'Research that matters'

The Institute aims to foster informed debate about our culture, our economy and our environment and bring greater accountability to the democratic process. Our goal is to gather, interpret and communicate evidence in order to both diagnose the problems we face and propose new solutions to tackle them.

The Institute is wholly independent and not affiliated with any other organisation. As an Approved Research Institute, donations to its Research Fund are tax deductible for the donor. Anyone wishing to donate can do so via the website at <https://www.tai.org.au> or by calling the Institute on 02 6130 0530. Our secure and user-friendly website allows donors to make either one-off or regular monthly donations and we encourage everyone who can to donate in this way as it assists our research in the most significant manner.

Level 5, 131 City Walk  
Canberra, ACT 2601  
Tel: (02) 61300530  
Email: [mail@tai.org.au](mailto:mail@tai.org.au)  
Website: [www.tai.org.au](http://www.tai.org.au)

## Summary

This paper presents an overview of the Wine Equalisation Tax (WET) in Australia and compares the current system with some reform alternatives and systems in other countries.

When the GST was introduced in July 2000, wine products were given special tax status. While beer and spirits attract an excise based on the volume of alcohol (a volumetric tax), wine is instead taxed on the wholesale value (an ad valorem tax). As a consequence, cheap wine attracts far less tax than beer or spirits, and is by far the cheapest potable alcohol commercially available in Australia.

The cheapest cask wine is generally available at retail for around 30 cents per standard drink (a standard drink is 12.5mL of alcohol). WET paid on that standard drink is around 4 cents. For a standard drink of beer bought at a supermarket, the excise alone is 44 cents, and such beer retails at prices of at least \$1 per standard drink. Spirits attract an excise of \$1 per standard drink, with the cheapest spirits costing around \$1.50 per standard drink at retail.<sup>1</sup>

The WET is set at 29% of the wholesale price of wine, with Australian producers able to claim a rebate at the same rate, up to \$500,000. This rebate can be claimed even if the claimant did not accrue a WET liability<sup>2</sup>. The WET generated \$792 million in 2013-14, after deducting rebates totalling \$311 million<sup>3</sup>. The net WET was paid entirely by just 67 entities<sup>4</sup> (less than 2% of WET payers). By comparison, the other 3,698 entities dealing with the WET – producers and wholesalers – between them generated no net WET, after rebates, with many receiving a net income from the rebate.

In addition to the concessional tax rate wine attracts, and rebates paid even without a WET liability, the Australian government spent \$17.9 million in 2012-13 on various assistance measures for the wine industry, as well as a \$25 million rebate to New Zealand producers<sup>5</sup>.

Partly due to these tax arrangements, wine prices have lagged far behind inflation. The average wholesale price paid to winemakers per litre of wine in 2012-13 (\$4.85) was almost identical to the price in 2007-08 (\$4.83)<sup>6</sup>.

Several comparisons have been made in the past few years between the Australian wine taxation regime and others internationally. Although only around half of OECD countries levy an excise on wine, most have a much higher Value Added Tax (VAT) than Australia's GST<sup>7</sup>. After accounting for VAT, Australian wine carries a similar level of tax.

This paper will examine the effects of three possible alternatives to a WET. The first, as proposed by the Henry Tax Review, will apply the current beer excise to wine. The second is a volumetric tax at a rate mid-way between beer and wine. The third is a per-litre excise, as is common across the OECD. For those countries which have an excise, the amounts vary widely, with an average of around \$3 per litre of wine.

All of these alternate taxation schemes would result in the cheapest wines increasing in price, with a corresponding reduction in sales, while premium wines would actually be taxed less, and would be expected to increase in sales, partly due to the price reduction and partly thanks to a smaller price differential compared with cheaper wines.

<sup>1</sup> Prices taken from [www.danmurphys.com.au](http://www.danmurphys.com.au) on 17/6/15.

<sup>2</sup> Australian Taxation Office; <https://www.ato.gov.au/Business/Wine-equalisation-tax/Calculating-WET-and-producer-rebates/Calculating-your-producer-rebate/Calculating-your-rebate/>

<sup>3</sup> Australian Taxation Office, Selected GST, WET and LCT items, 2001–02 to 2013–14 financial years

<sup>4</sup> Australian Taxation Office, WET and LCT, by range of liability, 2013–14 financial year

<sup>5</sup> Productivity Commission, Trade Assistance Review 2012-13

<sup>6</sup> Australian Bureau of Statistics, 1329.0 - Australian Wine and Grape Industry, 2012-13

<sup>7</sup> OECD, Consumption Tax Trends 2014

## The Wine Equalisation Tax (WET)

The WET was introduced in 2000 along with the GST. It was set at 29% of the wholesale price of wine, applied before GST, to equal the pre-GST Wholesale Sales Tax of 42%<sup>8</sup>. This special tax rate is applied to grape wine, fortified wine, other fruit and vegetable wines, mead, sake, and some ciders.

All other alcoholic drinks sold in Australia attract an excise based on the total amount of alcohol. These rates are adjusted twice per year in line with CPI, and fall into two categories<sup>9</sup>:

- Beer attracts an excise per litre of alcohol, ignoring the first 1.15% of alcohol by volume. This rate is lower for light and draught mid-strength beers, and each type of beer attracts less tax when packaged in kegs of greater than 48 litres.

**Table 1: Beer excise on taxable alcohol (alcohol >1.15% by volume)**

Beer	Excise (\$ / litre of alcohol)
Beer – full – bottle	47.09
Beer – full – keg	33.16
Beer – mid – bottle	47.09
Beer – mid – keg	25.33
Beer – light - bottle	40.43
Beer – light - keg	8.08

- All other alcoholic beverages are taxed \$79.77 per litre of alcohol, with the exception of brandy (a wine-based product), which has a concessional rate of \$74.50.

The excise on beer and spirits is accrued by the producer when the product leaves the place of production.

The WET applies to the last wholesale sale. If a wine producer sells to a wholesaler / distributor who will, in turn, make another wholesale sale to a retailer, the wine producer does not incur a WET liability as long as the wholesaler quoted their ABN. This also applied to Customs collections – the WET may be applied to the Customs value of the wine imports, but not if the product is to be on-sold at wholesale.

## WET compared with other alcohol excise

A direct comparison between wine and other alcohol tax is difficult because of the ad valorem nature of the WET. Cheap wine gets taxed less, so the tax per litre of alcohol varies a great deal. Broad estimates can be based on the average litre of wine in Australia.

<sup>8</sup> ANAO Audit, Administration of the Wine Equalisation Tax

<sup>9</sup> Australian Taxation Office, Excise Tariff Working Pages,

<http://law.ato.gov.au/atolaw/view.htm?Docid=PAC/BL030002/1&PiT=99991231235958>

**The average litre**

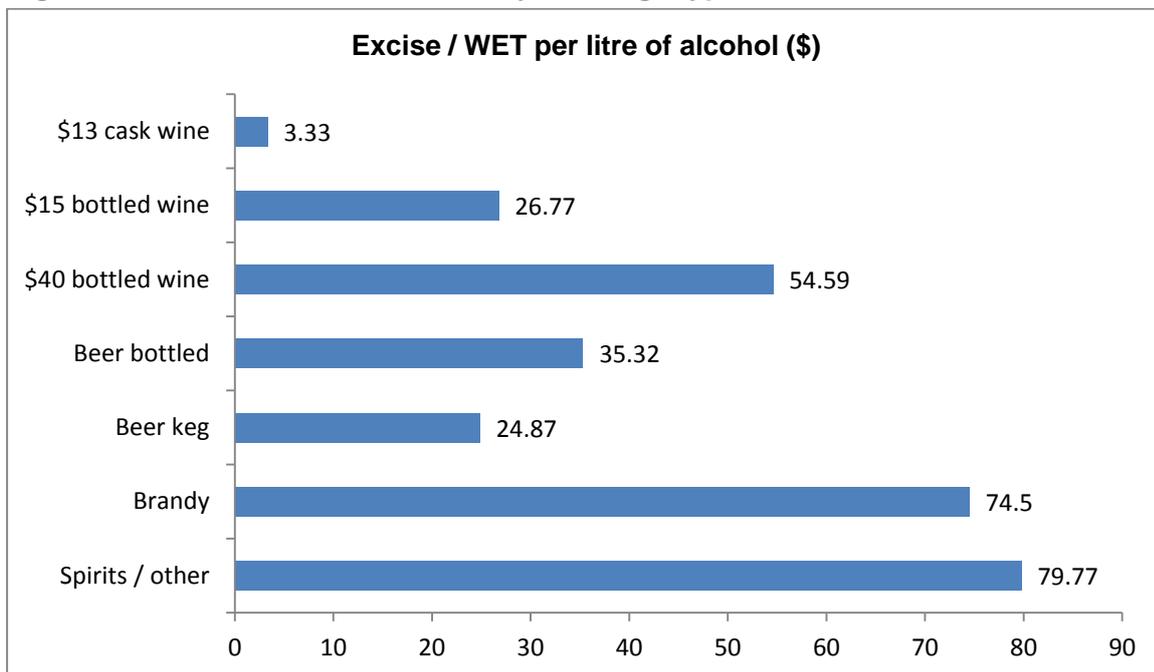
The average retail price of a litre of wine sold in Australia is around \$11.04 (based on ~\$6,000 million in sales<sup>10</sup>, with 543.348 million litres consumed<sup>11</sup>). The average level of alcohol is 12.7% by volume (based on 68.890 million litres of pure alcohol consumed from wine<sup>12</sup>).

WET liabilities and Customs collections totalled \$1,103 million in 2013-14<sup>13</sup>. So the average litre attracted a WET of \$2.03, or 18% of the retail price. However, WET rebates for Australian and New Zealand producers account for \$336 million<sup>14</sup>, putting the average net WET at \$1.41 per litre, or 13% of the retail price.

This gives an average excise per litre of alcohol at \$16.01 before rebates, and a net average of \$11.13 after rebates.

To provide a comparison of the impact of WET on different price points Figure 1 (below) uses retail values of \$13 for a cask (4L), and a \$15 and \$40 bottle (750mL) of red wine, each with 12.7% alcohol by volume, with an assumption that WET represents approximately 13% of the retail price.

**Figure 1: Excise / WET before GST by beverage type**



Excise for beer shown accounts for the reduction of 1.15% of alcohol by volume, based on an alcohol content of 4.6% for full strength beer. Full strength represents by far the largest segment of the beer market in Australia.

Figure 1 illustrates the impact the WET has on wine pricing. The tax per litre of alcohol in wine is dependent on the wholesale price of that wine. As a consequence, cheap wine

<sup>10</sup> IBIS World

<sup>11</sup> Australian Bureau of Statistics, 4307.0.55.001 - Apparent Consumption of Alcohol, Australia, 2013-14

<sup>12</sup> Ibid

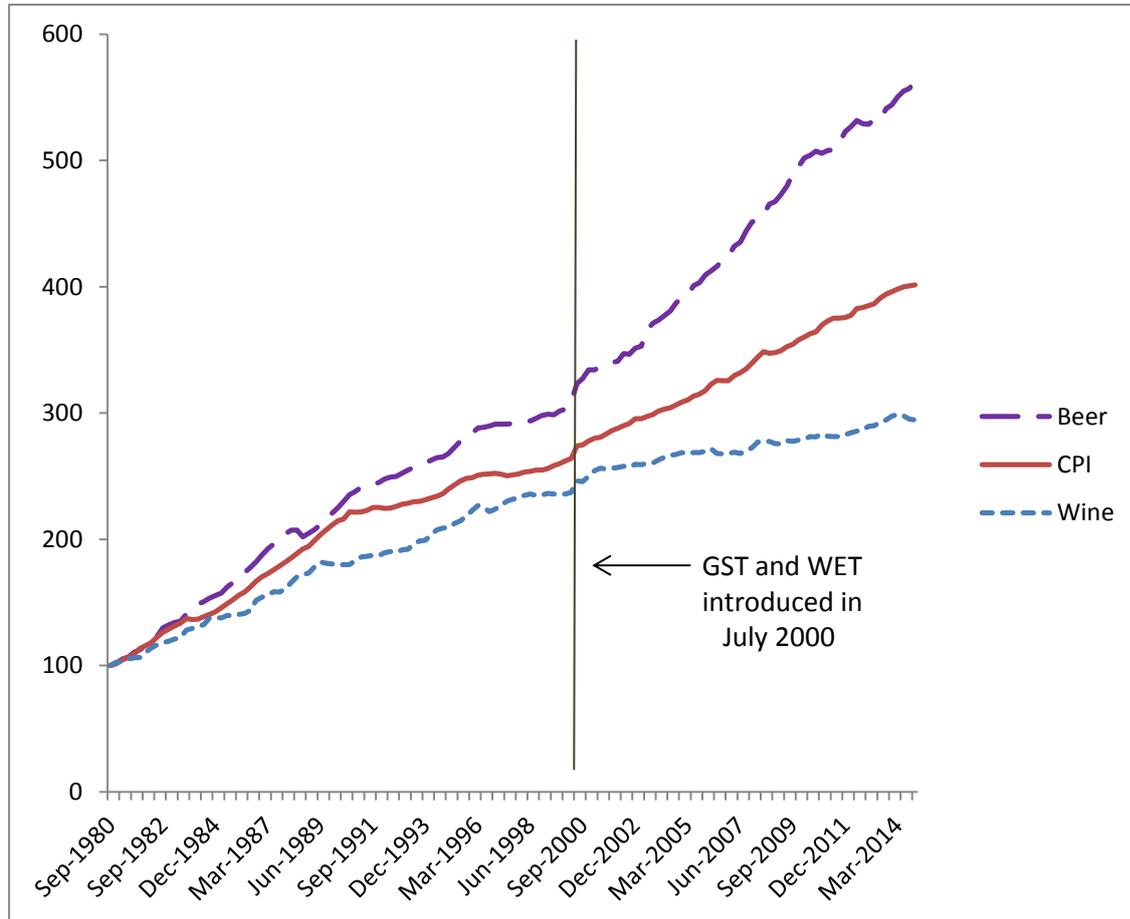
<sup>13</sup> Australian Taxation Office, Selected GST, WET and LCT items, 2001-02 to 2013-14 financial years

<sup>14</sup> Ibid

attracts much less tax per litre of alcohol than more expensive wine – and even less than light beer stored in kegs.

This appears to have exerted a strong downward pressure on prices, as seen in Figure 1. The rate at which wine prices lag behind the Consumer Price Index (CPI) and beer prices markedly increases after the introduction of the WET in July 2000<sup>15</sup>.

**Figure 2: Australian wine and beer prices compared with CPI**



Source: ABS; Figures shown as percentage of index values at September 1980.

The ABS tracks sales by winemaking businesses. This largely reflects the wholesale price of wine paid to producers. Wine producers were paid about the same per litre in 2012-13 (\$4.86) as they were paid in 2007-08 (\$4.83).

**Table 2: Domestic sales of Australian wine by winemaking businesses**

	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13
<b>Volume (million L)</b>	456.1	439.9	449.8	470.8	463.9	497.6	487.7
<b>Value (\$m)</b>	2037.1	2125.4	2053.0	2122.6	2331.0	2498.6	2369.2
<b>Average price per litre</b>	\$4.47	\$4.83	\$4.56	\$4.51	\$5.02	\$5.02	\$4.86

Source: Australian Bureau of Statistics, 1329.0 - Australian Wine and Grape Industry, 2012-13

<sup>15</sup> Australian Bureau of Statistics, 6401.0 Consumer Price Index, Australia

## WET rebate and net tax

Australian producers (and those wholesalers who blend or otherwise add to production) are entitled to claim a rebate at the same rate as the WET – that is, 29% of the wholesale value – to a maximum of \$500,000 for each entity.

This rebate can be claimed even if the sale did not attract a WET. As a consequence, the vast majority of entities (over 90%) attracting a WET liability and/or eligible for a rebate in 2013-14 had between them a net WET liability of -\$104 million<sup>16</sup>. This is comprised of \$83 million of WET liabilities, and \$187 million in rebates. On average, this group each received a net payment of around \$30,000 from the WET.

At the extreme end, a producer could spend \$1.7 million to produce grapes, sell this product at cost to another producer or valid wholesaler, and get a 29% profit paid through the rebate.

Most of the net WET was paid by 23 entities, who attracted a net liability of \$691 million<sup>17</sup>. Essentially the entire net WET is accounted for by 67 entities, with a net of \$791 million between them, compared with the total net of \$792 million.

**Table 3: Wine Equalisation Tax, net liabilities by range, FY2013-14**

Net WET paid	Number of entities	\$m
<b>Less than \$100,000</b>	3,517	-104
<b>\$100,000–\$499,999</b>	133	31
<b>\$500,000–\$999,999</b>	48	34
<b>\$1,000,000–\$4,999,999</b>	44	100
<b>\$5,000,000 or more</b>	23	691
<b>Customs collections</b>	na	39
<b>Total</b>	<b>3,765</b>	<b>792</b>

Source: Australian Taxation Office, WET and LCT, by range of liability, 2013–14 financial year

With regards to tax impacting Australian produced wine, the Customs value of wine imports in 2013-14 was \$634 million<sup>18</sup>. At the border, this would attract a WET liability of \$184 million. However, only \$39 million was collected by Customs, meaning that the remainder was to be on-sold in a final wholesale event. Assuming a modest wholesale mark-up after import, imported wine represents around 20% of the total WET paid.

Australian wine, then, generated around \$600 million in net tax from the WET in 2013-14.

Who receives the rebates? Any producer who has less than \$1.7 million in wholesale sales pays either no WET, or receives a net payment from the rebate – so small producers benefit most, as a proportion of sales. The rebate does apply to cellar door sales, which could be seen as assistance to regional tourism. However, the Australian and New Zealand Wine Industry Directory, 2015, lists only 1,626 cellar doors in Australia. This compares with 3,517 who, between them, generate a negative WET.

<sup>16</sup> Australian Taxation Office, WET and LCT, by range of liability, 2013–14 financial year

<sup>17</sup> Australian Taxation Office, WET and LCT, by range of liability, 2013–14 financial year

<sup>18</sup> Australian Bureau of Statistics, 8504.0 - Shipments of Wine and Brandy in Australia by Australian Winemakers and Importers, June 2014

## Industry assistance

In addition to the WET rebate, in 2012-13 the wine industry received several other assistance measures listed by the Productivity Commission<sup>19</sup>:

- Australian Wine Industry Support: \$0.5 million
- Wine Australia Corporation: \$2.7 million
- Grape and Wine R&D Corporation: \$9.7 million
- Brand preferential excise rate: \$4 million

Another \$25 million was spent on the New Zealand wine producer rebate.

## International context

The taxation level of wine in Australia is difficult to compare with tax systems in the OECD, as a wholesale sales tax like the WET is rare. Far more common is a value added tax (VAT), usually at a rate much higher than Australia's GST, and around half of OECD countries add a tax on the volume of product (not alcohol).

Table 4 uses the average litre of wine to compare rates in several OECD countries, and shows the percentage that tax represents of the final retail price. Australia's listed excise is based on 13% of retail, at 12.7% alcohol by volume.

**Table 4: Taxation of wine per litre of product in selected OECD countries**

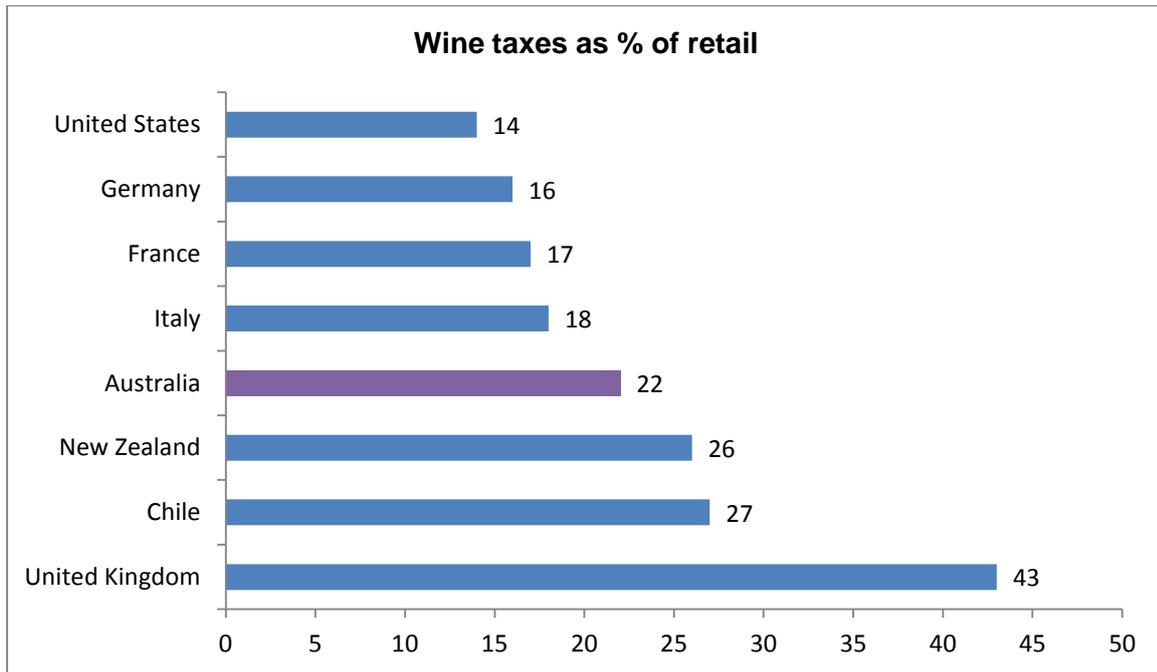
Country	Excise per litre (AUD)	VAT (%)	% of tax at retail
<b>Australia</b>	1.41	10	22
<b>Chile</b>	2.19	19	27
<b>France</b>	0.06	20	17
<b>Germany</b>	0	19	16
<b>Italy</b>	0	22	18
<b>New Zealand</b>	2.53	15	26
<b>United Kingdom</b>	5.36	20	43
<b>United States</b>	0.61	~12	14

Sources: WFA and WGGGA 2008, Submission to the Senate Community Affairs Committee Inquiry into Ready-to-Drink Alcohol Beverages.; and OECD, Consumption Tax Trends 2014. Conversion of currency based on OECD USD equivalents, applying AUD exchange rate at 17 July 2015.

It is important to note that Australia's excise per litre is much less for cheaper wine, and more for super-premium wine. It is also greater for large producers (whose rebate represents a negligible proportion of tax paid), and much less for small producers (who pay no WET, and often pay an effectively negative excise). Without a rebate, the excise is effectively \$2.03 per litre, or (with GST) 27% of retail.

<sup>19</sup> Productivity Commission, Trade Assistance Review 2012-13

Figure 3: Tax of wine at retail for selected OECD countries



Thanks to a VAT much lower than most OECD countries, Australia's total level of wine taxation is comparable.

## Alternative taxes

The WET means that cheap cask wine attracts almost no alcohol-specific tax, and consequently gives it a significant market advantage over other alcoholic beverages. The retail price per standard drink of some wine is less than the excise alone on beer or spirits. At the other end of the market, super-premium wine effectively pays an excise higher than the beer equivalent.

The WET appears to have caused downward pressure on wine prices since its introduction, and favours cask wine or cheap bottled wine – associated with problem drinking<sup>2021</sup> – over all other alcoholic beverages.

Taxation of alcohol has two purposes: to generate revenue; and to reduce the social costs of problem drinking. Giving cheap wine a much lower tax rate than other drinks is counterproductive to both objectives.

Three possible alternatives to the WET were modelled to determine the possible impact of alcohol taxation reform:

- **As beer:** The Henry Tax Review<sup>22</sup> recommended that wine be taxed in the same way as full strength bottled beer – that is, a volumetric tax, currently \$47.09 per litre of pure alcohol in the product, ignoring the first 1.15% of alcohol by volume. A litre of wine containing 12.7% alcohol would attract \$5.44 in excise under this system.
- **Mid-way:** Another possibility would be to tax wine at a rate mid-way between the rates for beer and for spirits. Full strength bottled beer is taxed at around 75% of the listed excise – that is, beer with 4.6% alcohol by volume is taxed as if it were 4.6 – 1.15 = 3.45%, which is 75% of its true content. This would tax beer at \$35.32 per litre of alcohol. Spirits are taxed at \$79.77. A mid-way tax would set wine at \$57.54 per litre of alcohol.
- **Per litre:** And finally, a tax of \$3 per litre of wine would bring Australia's taxation of wine into line with the approximate OECD average, for countries charging a wine-specific excise. This tax would have a see-saw effect around the \$15 mark: a \$15 bottle's price would be unchanged, while cheaper wine would increase in price, and wine more expensive would decrease.

The impact on consumption requires an estimate for elasticity. That is, for each percentage change in the price of wine, by what percentage would consumption change? Two meta studies have found the elasticity of wine to be -0.66<sup>23</sup> and -0.69<sup>24</sup> respectively. Table 5 (below) is based on an elasticity of -0.675. A 1% increase in price is estimated to cause a 0.675% decrease in consumption.

---

<sup>20</sup> Wagenaar, A.C., Salois, M.J. & Komro, K.A. (2009). 'Effects of beverage alcohol price and tax levels on drinking: A meta-analysis of 1003 estimates from 112 studies. *Addiction*'. 104: 179-190

<sup>21</sup> Xuan, Z., Chaloupka, F.J., Blanchette, J.G., Nguyen, T.H., Heeren, T.C., Nelson, T.F. & Naimi, T.S. (2015). 'The relationship between alcohol taxes and binge drinking: Evaluating new tax measures incorporating multiple tax and beverage types'. *Addiction*. Volume 110, Issue 3, pages 441–450.

<sup>22</sup> Treasury, 'Australia's future tax system, Report to the Treasurer, December 2009'

<sup>23</sup> Fogarty, J. 2006. 'The nature of the demand for alcohol: Understanding elasticity', *British Food Journal*, vol 108 (4), pp. 316-332.

<sup>24</sup> Wagenaar AC, 2009. 'Effects of beverage alcohol price and tax levels on drinking: a meta-analysis of 1003 estimates from 112 studies', *Addiction* vol 104 (2), pp. 179–190.

Table 5 uses the average litre to assess the impact of each tax, accounting for a reduction in consumption due to increased price.

**Table 5: Prices, demand, and revenue under alternative tax systems, per litre of wine**

Tax system	Retail price	% increase	% change in consumption	Excise	Net tax (\$m)
<b>Current:</b> 29% of wholesale	11.04	n/a	n/a	1.41	767
<b>As beer:</b> \$47.09 per litre of alcohol >1.15%	15.48	40	-27	5.44	2,153
<b>Mid-way:</b> \$57.54 per litre of alcohol	17.53	59	-40	7.31	2,394
<b>Per litre:</b> \$3 per litre of wine	12.79	16	-11	3.00	1,455

Source: author's calculations

It is important to note that even at the highest rate of excise (the “mid-way” tax at \$57.54 per litre of alcohol), the cheapest wine would still be the cheapest alcohol available in off-trade. A \$13 cask would go up to \$40. At just under \$1 per standard drink it would still be slightly cheaper than the cheapest bottled beer.

With the other alternate taxes resulting in a larger difference – wine would be significantly cheaper than beer or spirits – it is likely that the elasticity used is overstated at the extreme end. Drinkers who choose the cheapest alcohol will still choose wine.

Hence, it is likely that elasticity is overstated at the highest values, and that demand is likely to be significantly higher than that assumed in Table 5.

### The WET as a subsidy

The preferential tax treatment of wine over other alcoholic beverages can be seen as effectively a subsidy for wine. The cost to the taxpayer of this subsidy is the difference in tax receipts between the WET and the tax that would be generated by a tax in line with other alcoholic drinks.

**Table 6: Tax revenue lost due to WET**

Tax scheme compared	Revenue lost (\$m)
<b>As beer</b>	1,386
<b>Mid way</b>	1,627
<b>Per litre</b>	688

Source: author's calculations

In other words, the WET can be seen as a subsidy to the wine industry in the order of \$1 billion a year.

## Impact on consumption and production

The Henry Tax Review recommended a slow adoption of an alternative tax scheme for wine, to give the industry time to adjust.

The negative values for the change in consumption in Table 5 would be heavily skewed towards the cheaper wine, with more expensive wine actually seeing an increase in consumption. A study by the University of Adelaide<sup>25</sup> estimated that a beer tax, if applied to wine, would cause a 33.2% reduction in non-premium wine production and a 13.4% decrease for commercial premium, but would actually increase super premium production by 15%.

**Table 7: Simulation results: effects on volume of wine production**

Wine type	% change in production
<b>Non-premium</b>	-33.2%
<b>Commercial premium</b>	-13.4%
<b>Super premium</b>	+15.0%
<b>Total</b>	-15.1%

Source: Wine export demand shocks and wine tax reform in Australia: Regional consequences using an economy-wide approach, Kym Anderson, University of Adelaide; These figures were based on the beer excise in February 2010 of \$40.82.

The University of Adelaide<sup>26</sup> also modelled the impact on wine growing regions. They found that a volumetric tax would hit hardest in the hot-country wine growing regions, where extremely cheap grapes dominate. These regions include the lower Murrumbidgee in New South Wales, and South Australia's Riverland region. These two highly irrigated areas produce more than half of Australia's non-premium wine grapes.

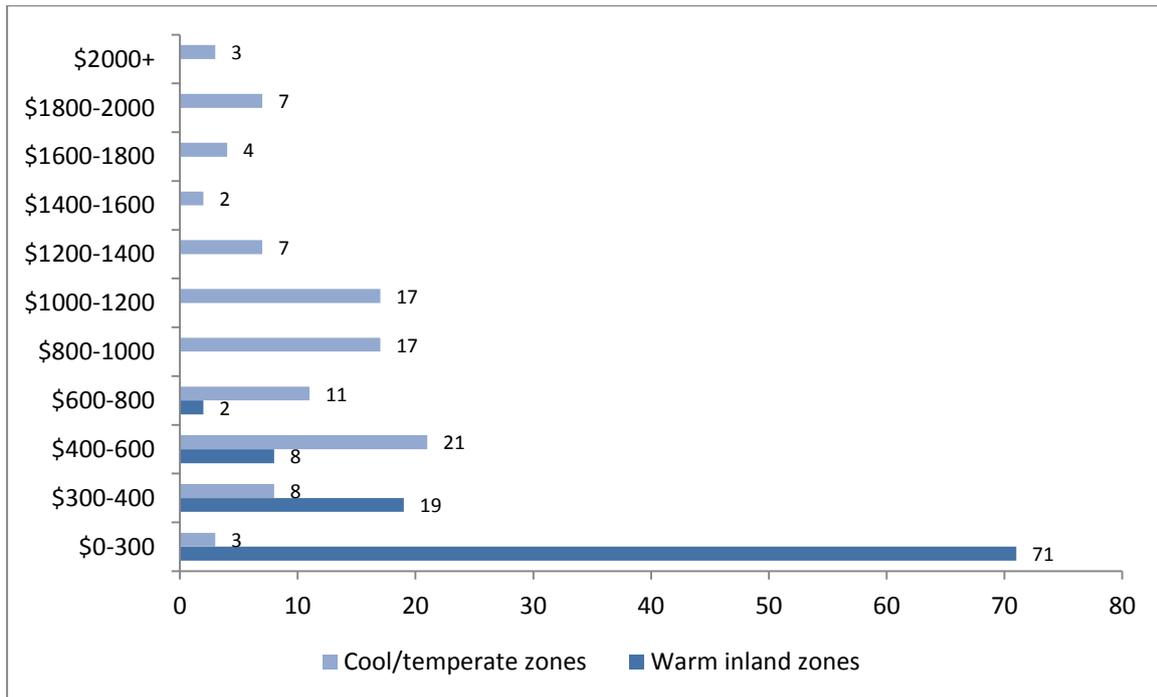
Wine production would be expected to increase in the cool and temperate zones, where higher quality grapes are produced.

Figures 4 and 5 show that the bulk of cheap low quality wine is produced in warm inland zones, and that these areas produce little else. It is this type that would be hit hardest by a volumetric tax.

<sup>25</sup> K Anderson, 2010, 'Wine export demand shocks and wine tax reform in Australia: Regional consequences using an economy-wide approach', University of Adelaide, Wine Economics Research Centre working paper No. 0210

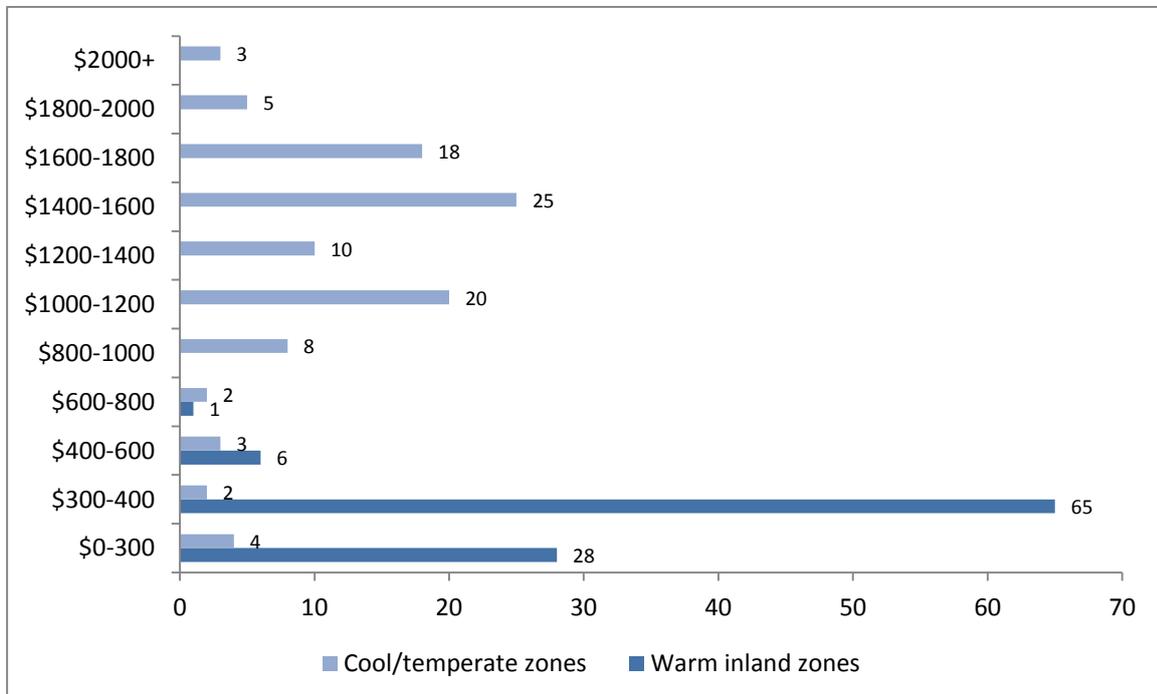
<sup>26</sup> Ibid

Figure 4: White wine percentage of production by price range, 2011 (\$/tonne)



Source: The Australia Institute 2011. Richardson and Denniss, 'The Australian wine tax regime', quoting Wine Australia 2011. Winegrape purchases: Price Dispersion Report, Market Insight Report

Figure 5: Red wine percentage of production by price range, 2011 (\$/tonne)



Source: The Australia Institute 2011. Richardson and Denniss, 'The Australian wine tax regime', quoting Wine Australia 2011. Winegrape purchases: Price Dispersion Report, Market Insight Report

## Conclusion

Australia's taxation treatment of wine encourages bulk production of the lowest quality wine. This has placed downward pressure on the price of wine, and lead to stagnation of the price compared to CPI. Cheap cask wine at retail is cheaper than the excise on beer, per standard drink.

A volumetric tax would work to increase the cost of the cheapest wines, while having a positive effect on super-premium wines.

By removing the privileged treatment of wine, the government could receive increased revenues in the order of \$1 billion each year. This revenue is presently lost under the WET, and is in effect a subsidy to the wine industry, encouraging production of low quality grapes in hot, irrigation intensive regions.

## References

Australian Bureau of Statistics (ABS). *Apparent Consumption of Alcohol, Australia, 2013-14*. Cat no 4307.0.55.001.

ABS 2014. *Australian Wine and Grape Industry, 2012-13*. Cat no 1329.0.

ABS 2015. *Consumer Price Index, Australia*. Cat no 6401.0.

ABS 2014. *Shipments of Wine and Brandy in Australia by Australian Winemakers and Importers, June 2014*. Cat no 8504.0.

OECD 2014. *Consumption Tax Trends 2014*. Table 4.A4.2

Australian Taxation Office (ATO) 2014. *Calculating your producer rebate*.

ATO 2015. Excise Tariff Working Pages,

<http://law.ato.gov.au/atolaw/view.htm?Docid=PAC/BL030002/1&PiT=99991231235958>

ATO 2014. *Selected GST, WET and LCT items, 2001–02 to 2013–14 financial years*

ATO 2014. *WET and LCT, by range of liability, 2013–14 financial year*

Dan Murphy's 2014. *Buy Wine, Champagne, Beer & Spirits Online | Dan Murphy's*  
<<http://danmurphys.com.au/>> accessed 17 July 2015

Fogarty, J. 2006. 'The nature of the demand for alcohol: Understanding elasticity', *British Food Journal*, vol 108 (4), pp. 316-332

IBISWorld. <http://www.ibisworld.com.au/industry/default.aspx?indid=117>

Productivity Commission 2014, *Trade Assistance Review 2012-13*

Wagenaar AC, 2009. 'Effects of beverage alcohol price and tax levels on drinking: a meta-analysis of 1003 estimates from 112 studies', *Addiction* vol 104 (2), pp. 179–190.

WFA and WGGGA 2008. *Submission to the Senate Community Affairs Committee Inquiry into Ready-to-Drink Alcohol Beverages*.

Xuan, Z., Chaloupka, F.J., Blanchette, J.G., Nguyen, T.H., Heeren, T.C., Nelson, T.F. & Naimi, T.S. (2015). 'The relationship between alcohol taxes and binge drinking: Evaluating new tax measures incorporating multiple tax and beverage types'. *Addiction*. Volume 110, Issue 3, pages 441–450.