17 April 2024

Eric Crampton

By email: eric.crampton@nzinitiative.org.nz
Ref: CASE-004003

Tēnā koe Eric

Additional release of information

I refer to your request under the Official Information Act 1982 (the Act) to the Ministry of Health – Manatū Hauora (the Ministry) on 6 September 2023 for information regarding the Independent Review of the Alcohol Levy.

On 14 March 2024, the Ministry issued a reconsidered response to your request (H2023031477 refers), in which five drafts of the Independent Review of the Alcohol Levy Stage 1 were released to you.

Subsequently on 25 March 2024, the Ministry also released additional information to you pertaining to a comment on an early draft of the review, which contained information about The New Zealand Initiative. As your initial request for official information was made in your capacity as Chief Economist for The New Zealand Initiative, the Ministry recognises this information should have been released to you pursuant to section 4(b) of the Act as part of our initial response. We apologise for this oversight.

On 3 April 2024, the Ministry was advised by the Office of the Ombudsman of your additional request for the following sections of the early drafts and any associated feedback:
- cost of alcohol related harm;
- criticism of the BERL report.

While the Ministry had previously advised the above and any relevant additional information could be sought under the Privacy Act 2020, we also recognise the importance of resolving this complaint as proactively as possible. As such, outlined in Appendix 1 are details of the additional documents requested.

We hope this resolves your complaint and any additional queries you have on this case. If you wish to discuss any aspect of your request with us, including this decision, please feel free to contact the OIA Services Team on: oiagr@health.govt.nz.

Under section 28(3) of the Act, you have the right to ask the Ombudsman to review any decisions made under this request. The Ombudsman may be contacted by email at: info@ombudsman.parliament.nz or by calling 0800 802 602.

Nāku noa, nā

Dr Andrew Old
Deputy Director-General
Public Health Agency | Te Pou Hauora Tūmatanui

Appendix 1: List of documents for release

#	Document details	Decision on release
1	Independent Review of the Alcohol Levy: Phase 1 rapid review (Phase 1 Report for review and comment)	Relevant excerpt released pursuant to section 16(1)(e) of the Act. Some information has been withheld under section 9(2)(a) of the Act, to protect the personal privacy.
2	Independent Review of the Alcohol Levy: Phase 1 rapid review (Phase 1 Report for review and comment – NPHS feedback)	
3	Independent Review of the Alcohol Levy: Phase 1 rapid review (Phase 1 Report for review and comment – Ministry edits)	

1.0   COST OF ALCOHOL-RELATED HARM

The most recent study to quantify the social cost of alcohol in New Zealand was conducted by BERL in 2009. Commissioned by ACC and the Ministry of Heath, the report aimed to quantify the social cost of alcohol and drug related harm looking at the personal, economic, and social impacts. In addition, the study aimed to understand the proportion of the social cost that is deemed 'avoidable' with government policy or changes in the behaviour of drinkers, and what proportion of the costs are related to injury and what proportion of the cost is borne by the government. While this report looked at the social cost of alcohol and other drug use, the information presented below relates to alcohol only.

The 2009 BERL report set out to calculate the net social cost of alcohol-related harm using a prevalence-based approach from a societal and government perspective. That is, it aimed to consider the incremental (cost minus the cost of benefits) cost of alcohol has on society and on government by estimating the cost alcohol-related harm causes in a given year based on past and present drinking.

The report states its intent is to calculate the net social costs of alcohol-related harm, acknowledging that there are benefits associated with fewer resources being used by those who die prematurely because of alcohol. However, the concept of net social cost was not applied in its entirety as the report made the decision to not to include any consideration of beneficial costs associated with the protective health effects of alcohol consumption, or the beneficial costs associated with the personal utility that is gained by people when the consume alcohol.

Other key aspects of the study methodology and assumptions from the BERL cost study include:

- The study took a prevalence approach focusing on the impacts of alcohol in a given year, in this case 2005/06, due to current and past alcohol consumption. This is compared against a counterfactual of no alcohol consumption.

- The study defined harmful alcohol use as over 20g of alcohol per day on average for women and over 40g on average per day for men.

- The method was largely adapted from an earlier Australian study by Collins and Lapsley published in 2006. While the BERL study used New Zealand data and inputs where possible, many input gaps were filled by the Collins and Lapsley 2006 study.

- The indirect costs in the study were estimated using the human capital approach.

- Costs were estimated using a top-down approach. That is, epidemiological and attributable risk data was used to identify what proportion of described costs can be attributed to alcohol.

- The study included intangible costs (costs associated with loss of quality and quantity of life due to alcohol).

The costs included in the BERL model are summarised in **Appendix X**.

The high-level results of the BERL 2009 report relating to alcohol were:

- In 2005/2006, the social cost of alcohol-related harm in New Zealand was $4,794 billion, or $5,296 billion if the proportion of costs that could not be separated by drug/alcohol use is added as a weighted proportion.

- The largest contributors to this cost in decreasing order were:

    o Premature death due to alcohol misuse (32%)

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    o Healthcare (6%)

    o Road crashes (4%)

    o Loss of quality of life due to alcohol misuse (15%)

The report states an assumption based on a collection of international literature that 50% of social costs could be avoided. Given alcohol represented 70% of the total cost of alcohol and drug related harm, 35% of alcohol costs were reported to be avoidable accounting for $2,400 million.

In 2018, an updated cost estimate was presented at the Alcohol Action New Zealand Conference which reported the 2018 cost to be $7.9 billion dollars. It appears this update was a population growth and inflation update from the previous 2005/6 figure (Nana, 2018).

1.1.1 Criticism of the BERL report

The estimate of the social cost of alcohol-related harm in New Zealand published by BERL in 2009 and crudely updated in 2018 has been widely cited in the alcohol-harm research and policy space in New Zealand over the last 14 years (BERL, 2009; Nana, 2018).

However, this estimate, or rather the methods used to generate it, have been heavily criticised. One of the key critics of the work is Dr Eric Crampton who has published several reports, journal articles and blogs that detail issues with the BERL methodology and questions the appropriateness of using results generated by this methodology for informing policy decisions (Crampton & Burgess, 2009; Crampton et al., 2012; Crampton, 2018).

Inclusion of private alcohol spending and other private costs as social costs

The BERL study incorporated the value of private expenditure on alcohol consumed above a defined threshold as a social cost. Dr Crampton argues that:

- private costs borne by the consumer of the alcohol are not externally imposed and so from an economic perspective should not typically be included in an analysis intended to inform policy decisions

- these private costs have offsetting benefits so that even if they are included, the only reasonable way of doing this would be to also include the benefits of alcohol consumption, which include possible health benefits and utility gains. Even for consumption resulting in net harm, there will be some gross benefit. BERL's method implicitly assumed gross benefits to be zero for a large cohort of drinkers. (Crampton & Burgess, 2009; Crampton et al., 2012).

The argument about utility gains is based on the economic concept of consumer surplus which suggests that consumers on average would have been willing to spend more on the good than the equilibrium price at which it was purchased. This means consumers derive a net benefit from consumption. The net benefit of consumption is the difference between the positive utility gain (the satisfaction or enjoyment derived from the good) and the cost of the purchase. (Crampton & Burgess, 2009; Crampton et al., 2012). The private utility gained by drinkers is not measured or included in the BERL estimate so the included private cost of alcohol does not represent a net impact and skews the results towards higher total costs. This does not imply that the last pint consumed by a heavy and addicted drinker produces net benefits. Rather, that there are at least some gross benefits that need to be weighed against gross costs to derive a net benefit or cost figure.

Threshold for 'harmful drinking'

The BERL study considered harmful alcohol consumption to be alcohol use over a threshold of 20g of alcohol per day on average for women and 40g per day on average for men. This is equivalent to 1.5 330ml cans of beer at 5 percent alcohol for women and 3 cans for men.

In calculating the cost of alcohol production, or resources forgone in the manufacturing alcohol for harmful consumption, BERL considers that half of the alcohol sold in New Zealand is consumed harmfully and applies this proportion to the total cost of alcohol purchased in New Zealand. This approach appears to assume the costs of the proportion of alcohol that is consumed without harm before the epidemiological threshold is surpassed is counted as harmful drinking as well as the over the threshold drinking. However, no costs of any other non-harmful drinking below the threshold are considered, nor are the related benefits. This is partly driven by a counterfactual of no-drinking instead of reducing drinking to below the harm threshold. It also assumes that above-threshold drinking has no gross consumption benefits to be weighed against other harms. Overall, this results in an inflated cost estimate of harmful drinking (Crampton & Burgess, 2009).

No consideration of positive health benefits of alcohol

Economic evaluation of the costs of illness usually aim to consider the net cost of disease or risk factor. Net cost implies that positive or beneficial/protective effects should be considered against the negative effects or costs associated with harm. The net or incremental cost would be lower if the cost of health care services that are not required or used because of health gains associated with alcohol use were included (Crampton & Burgess, 2009; Crampton et al., 2012).

Overestimation of costs due to assumptions around drinking quantity and harm.

One of alcohol's most policy relevant costs is cited as the cost of crimes and traffic accidents that would not have occurred in the absence of alcohol. Dr Crampton and colleagues argue that it may not be appropriate to include the total cost of a crime where alcohol had only some role in the crime. In other words, in some cases alcohol may have contributed to the severity of the crime, but it is possible that some crime would have been committed even if alcohol had not been involved. (Crampton & Burgess, 2009; Crampton et al., 2012).

Double counting of the impact of premature death and loss of quality-of-life impacts on productivity.

Dr Crampton and colleagues criticise the inclusion of both loss of life costs and loss of productivity due to premature mortality as double counting. The intangible costs in BERL are valued using the Land Transport New Zealand value of a statistical life value (VOSL). The VOSL calculated by the transport sector aims to quantify how much the government should be prepared to pay to save a life and includes consideration of lost productivity in its value. Hence the separate inclusion of productivity losses associated with premature mortality result in double counting which inflates the overall cost estimate (Crampton & Burgess, 2009; Crampton et al., 2012).

Similarly, Dr Crampton and colleagues argue that to include losses of quality of life without including potential quality of life gains associated with alcohol results in an overestimation (Crampton & Burgess, 2009; Crampton et al., 2012).

Counting of excise tax as a social cost

The BERL report included excise tax paid on alcohol as a social cost. As Dr Crampton points out, an excise tax is simply a transfer of funds from a consumer to government which is then transferred again through government spending. It is not a social cost any more than the GST, or even income tax, is a social cost, and its inclusion (due to the high amount of excise tax paid on alcohol) leads to significant overestimation of social costs.

It should be noted, however, that BERL claim to have remedied this issue in the later estimate, although methodology for the revised estimate was never published.

Debate about what should be considered regarding productivity

Dr Crampton and colleagues also debate what costs should be included when considering productivity losses as result of alcohol. Crampton argues that the only relevant external economic productivity cost is the cost of the employer finding a replacement for the worker (i.e., costs borne unexpectedly by the employer) (Crampton & Burgess, 2009; Crampton et al., 2012). The BERL study considered a range of costs associated with lost productivity (including lost productivity due of premature death, excess unemployment, absenteeism, presenteeism and productivity lost due to incarceration).

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Conclusion

Dr Crampton and colleagues have articulated a range of concerns with the BERL methodology including how calculations were done and what costs are included or excluded. Some of these issues are related to the fundamental differences between an economic approach and a public health approach (e.g., exclusion of private costs), and some are clearly methodological flaws (e.g., double counting).

Dr Crampton and colleagues argue that the methodological issues identified account for about 40 percent of BERL's estimated total cost and that a more accurate estimate is approximately $2,995.1 million, of which just $146.3 million is deemed the policy relevant, net of the external costs portion, with 63 percent relating to crime, 18% relating to health care costs and 11 percent for road crash costs (Crampton & Burgess, 2009).

In later work, Crampton, Burgess and Taylor (2011) assessed the reliability of work by Collins & Lapsley (2008), which formed the basis for BERL's estimate. While doing so, they revised the BERL estimate of external costs to $967 million – in excess of the alcohol excise take in the reference year. Crampton et al. also suggested that future work focus on cost-effectiveness of interventions aimed at reducing harms, rather than measuring gross harms.

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Commented [A1]: There wasn't sufficient time for me to go through this entire section in detail, nor was there time for me to go through the NZIER document provided by s 9(2)(a) Thus, please note that the absence of comments or edits is not to be taken as an endorsement for this content.

Commented [A2]: Are there any?

Commented [A3R2]: International research is challenging the methodologies used in research claiming a beneficial effect - the myth of the 'j" curve.

Commented [A4]: Description further on that should be here instead

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> **Commented [A5]:** Eric Crampton is one person (are there actually others?). He is part of the NZ Initiative which is pro business and regularly lobbies against restrictions on alcohol and other unhealthy consumer products. He has also been funded by the alcohol industry eg Brewers Association to undertake work for them. I don't think it is appropriate to be including his views in a health led piece of work. The way it is currently written feels unbalanced.

- private costs borne by the consumer of the alcohol are not externally imposed and so from an economic perspective should not typically be included in an analysis intended to inform policy decisions

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> **Commented [A6]:** These have largely been discredited?

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> **Commented [A7]:** This definition needs to be up further where it is first mentioned.

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Commented [A9]: Given the amount of space provided for EC's analysis should there not be a further section with BERL's right of reply?

Conclusion

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Commented [S] ?? - economic benefits? What is this saying?

Commented [S] Problematic concept…….WHO current position = "there are no studies that would demonstrate that the potential beneficial effects of light and moderate drinking on cardiovascular diseases and type 2 diabetes outweigh the cancer risk associated with these same levels of alcohol consumption for individual consumers"

https://www.who.int/europe/news/item/04-01-2023-no-level-of-alcohol-consumption-is-safe-for-our-health

Allen + Clarke
Independent Review of the Alcohol Levy – Manatū Hauora

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Commented S In certain circles......

Commented S I'd be wary of stating things like this – makes him sound a bit obsessive and with a particular agenda to promote.....and we know some of his research has been funded by industry....
https://www.nbr.co.nz/economist-champions-rights-of-moderate-drinkers/

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The argument about utility gains is based on the economic concept of consumer surplus which suggests that consumers on average would have been willing to spend more on the good than the equilibrium price at which it was purchased. This means consumers derive a net benefit from consumption. The net benefit of consumption is the difference between the positive utility gain (the satisfaction or enjoyment derived from the good) and the cost of the purchase. (Crampton & Burgess, 2009; Crampton et al., 2012). The private utility gained by drinkers is not measured or included in the BERL estimate so the included private cost of alcohol does not represent a net impact and skews the results towards higher total costs. This does not imply that the last pint consumed by a heavy and addicted drinker produces net benefits. Rather, that there are at least some gross benefits that need to be weighed against gross costs to derive a net benefit or cost figure.

Threshold for 'harmful drinking'

The BERL study considered harmful alcohol consumption to be alcohol use over a threshold of 20g of alcohol per day on average for women and 40g per day on average for men. This is equivalent to 1.5 330ml cans of beer at 5 percent alcohol for women and 3 cans for men.

In calculating the cost of alcohol production, or resources forgone in the manufacturing alcohol for harmful consumption, BERL considers that half of the alcohol sold in New Zealand is consumed harmfully and applies this proportion to the total cost of alcohol purchased in New Zealand. This approach appears to assume the costs of the proportion of alcohol that is consumed without harm before the epidemiological threshold is surpassed is counted as harmful drinking as well as the over the threshold drinking. However, no costs of any other non-harmful drinking below the threshold are considered, nor are the related benefits. This is partly driven by a counterfactual of no-drinking instead of reducing drinking to below the harm threshold. It also assumes that above-threshold drinking has no gross consumption benefits to be weighed against other harms. Overall, this results in an inflated cost estimate of harmful drinking (Crampton & Burgess, 2009).

No consideration of positive health benefits of alcohol

Economic evaluation of the costs of illness usually aim to consider the net cost of disease or risk factor. Net cost implies that positive or beneficial/protective effects should be considered against the negative effects or costs associated with harm. The net or incremental cost would be lower if the cost of health care services that are not required or used because of health gains associated with alcohol use were included (Crampton & Burgess, 2009; Crampton et al., 2012).

Overestimation of costs due to assumptions around drinking quantity and harm.

One of alcohol's most policy relevant costs is cited as the cost of crimes and traffic accidents that would not have occurred in the absence of alcohol. Dr Crampton and colleagues argue that it may not be appropriate to include the total cost of a crime where alcohol had only some role in the crime. In other words, in some cases alcohol may have contributed to the severity of the crime, but it is possible that some crime would have been committed even if alcohol had not been involved. (Crampton & Burgess, 2009; Crampton et al., 2012).

Double counting of the impact of premature death and loss of quality-of-life impacts on productivity.

Dr Crampton and colleagues criticise the inclusion of both loss of life costs and loss of productivity due to premature mortality as double counting. The intangible costs in BERL are valued using the Land Transport New Zealand value of a statistical life value (VOSL). The VOSL calculated by the transport sector aims to quantify how much the government should be prepared to pay to save a life and includes consideration of lost productivity in its value. Hence the separate inclusion of productivity losses associated with premature mortality result in double counting which inflates the overall cost estimate (Crampton & Burgess, 2009; Crampton et al., 2012).

Similarly, Dr Crampton and colleagues argue that to include losses of quality of life without including potential quality of life gains associated with alcohol results in an overestimation (Crampton & Burgess, 2009; Crampton et al., 2012).

Counting of excise tax as a social cost

The BERL report included excise tax paid on alcohol as a social cost. As Dr Crampton points out, an excise tax is simply a transfer of funds from a consumer to government which is then transferred again through government spending. It is not a social cost any more than the GST, or even income tax, is a social cost, and its inclusion (due to the high amount of excise tax paid on alcohol) leads to significant overestimation of social costs.

It should be noted, however, that BERL claim to have remedied this issue in the later estimate, although methodology for the revised estimate was never published.

Debate about what should be considered regarding productivity

Dr Crampton and colleagues also debate what costs should be included when considering productivity losses as result of alcohol. Crampton argues that the only relevant external economic productivity cost is the cost of the employer finding a replacement for the worker (i.e., costs borne unexpectedly by the employer) (Crampton & Burgess, 2009; Crampton et al., 2012). The BERL study considered a range of costs associated with lost productivity (including lost productivity due of premature death, excess unemployment, absenteeism, presenteeism and productivity lost due to incarceration).

In addition, Dr Crampton argues that taxes forgone due to premature death need to be balanced against the payments the government is no longer required to make to support the individual including superannuation and subsidised rest-home care. (Crampton & Burgess, 2009; Crampton et al., 2012).

Conclusion

Dr Crampton and colleagues have articulated a range of concerns with the BERL methodology including how calculations were done and what costs are included or excluded. Some of these issues are related to the fundamental differences between an economic approach and a public health approach (e.g., exclusion of private costs), and some are clearly methodological flaws (e.g., double counting).

Dr Crampton and colleagues argue that the methodological issues identified account for about 40 percent of BERL's estimated total cost and that a more accurate estimate is approximately $2,995.1 million, of which just $146.3 million is deemed the policy relevant, net of the external costs portion, with 63 percent relating to crime, 18% relating to health care costs and 11 percent for road crash costs (Crampton & Burgess, 2009).

In later work, Crampton, Burgess and Taylor (2011) assessed the reliability of work by Collins & Lapsley (2008), which formed the basis for BERL's estimate. While doing so, they revised the BERL estimate of external costs to $967 million – in excess of the alcohol excise take in the reference year. Crampton et al. also suggested that future work focus on cost-effectiveness of interventions aimed at reducing harms, rather than measuring gross harms.

5.1.2 Evidence from other countries

A literature review was conducted to identify other estimates of the social cost of alcohol related harm that have been published since the BERL report was published in 2009. The literature review focused on studies that represent the social cost of alcohol at a national-level and consider costs of both the consumers of alcohol and society in general. Where more than one study of the same country has been published since 2009, the most recent publication was included. The United States, United Kingdom, Australia, Ireland, and Canada were the focus of the literature search given the higher generalisability of results to a New Zealand setting.

The table below summaries the three international studies relating to the social cost of alcohol-related harm that were identified in this literatures search and compares them to the New Zealand study conducted by BERL in 2009.

Commented [S] Sorry…..eek……but far too much space devoted to critiquing the BERL study and promoting Eric Crampton's views – not appropriate for this report. Just saying it is time for an update on the BERL study and that NZIER will use a different methodology would have been enough – sorry guys…….but this whole section concerns me ……even just the number of times Crampton has been referenced (and **no one** else referenced) does not demonstrate a balanced approach to analysis in this section….sorry….

Table 3: Summary of selected international studies reporting on the social cost of alcohol-related harms.

Country (Author, date)	Year of study costs	Total Social cost of alcohol (Local currency and cost estimate year, millions)	Total Social cost of alcohol (2023 NZD millions)	Social cost of alcohol per person (b, c)	Social cost of alcohol per person (c, d)	Social cost of alcohol as a % of GDP (e)	Tangible Costs (% of total costs)	Intangible (% of total costs)
New Zealand (BERL et al 2009)	2006	NZ$4,7934 (a)	$7,260	NZ$1,146	$1,735	2.79%	NZ$3,231.6 million (67%)	NZ$1,561.9 million (33%)
Australia (Whetton et al 2021)	2017/18	AU$66,817	$85,459	AU$2,676	$3,475	3.80%	AU$18,165 million (27%)	AU$48,651 million (73%)
Canada∞ (CSUCH 2020)	2017	CAN$16,625	$23,803	CAD$454.92	$651	0.78%	CAN$16.625 million (100%)	Not included
US∞ (Sacks et al 2015)	2010	US$ 49,026	$561,727	US$805.06	$1,816	1.65%	US$249,026 million (100%)	Not included

(a) Figure reported in BERL 2009 for alcohol only. It does not include expenditure that could not be separated between alcohol and other drugs which is listed separately in the report

(b) Local currency and cost estimate year

(c) Denominator is total population for noted country in year of study data soured from the World Bank

(d) 2023 NZD, population study year

(e) Denominator is GDP in current local currency unit for year of study data soured from the World Bank

∞ Analysis is an update of previous analysis

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These four studies were conducted in New Zealand (2005/6 costs), Australia (2017/18 costs), Canada (2017 costs), and the US (2010 costs) and differed significantly in their findings (BERL, 2009; Canadian Substance Use Costs and Harms Scientific Working Group, 2020; Sacks et al., 2015; Whetton et al., 2021).

In order to compare the relative value of each of four identified studies, all total costs were converted to 2023 NZD using CPI and currency exchange rates and divided by the total population size of the country during the year considered in the study to account for large differences in population size contributing to the cost.

In this comparison, the social cost of alcohol appears highest in Australia with an estimated cost of $3,343 per person (Whetton et al., 2021). New Zealand and the US follow with a cost per person of $1,392 and $1,655 respectively (BERL, 2009; Sacks et al., 2015). Canada's estimate of the social cost of alcohol was the lowest of the four studies observed with the social cost of alcohol estimated to be $651 per person (Canadian Substance Use Costs and Harms Scientific Working Group, 2020). Although the lower Canadian estimate is in some way driven by the exclusion of intangible costs, the detail and quantification of included costs is also likely to have a significant impact.

Comparison of the four identified studies results as a proportion of the study countries GDP in the year of the costs calculated in the study reflects similar trends to the analysis of population size. The Australian study estimate reflected a cost that was 3.80% of GDP, followed by NZ and the US estimate of 2.79% and 1.65% respectively of GDP and lastly, Canada with estimate of 0.78% of GDP. (BERL, 2009; Canadian Substance Use Costs and Harms Scientific Working Group, 2020; Sacks et al., 2015; Whetton et al., 2021).

A key point to note in comparing the 4 studies we analysed is that the US and Canadian estimates do not consider the intangible costs of alcohol where the Australian and New Zealand estimates do. A major systematic review of the costs of alcohol-related harms (Manthley et al., 2021) provides the figure below to illustrate the range of costs of alcohol-related harms in peer-reviewed studies. This study places the BERL result and the Australian result outside the 95 percent confidence interval for the cost of alcohol-related harms as a percent of GDP (1.2 to 1.7 percent of GDP).

Commented [S] This section is a useful comparison, but suggest re-reading with as objective a lens as possible to ensure the narrative isn't leaning one way or the other at this stage.