AMA Pre-Budget Submission 2022-23 Chapter 2: A tax on sugarsweetened beverages

# **OVERVIEW**

This chapter the *AMA Pre-Budget Submission 2022-23* draws on a recent paper by the AMA – <u>A tax on sugar-</u> <u>sweetened beverages: Modelled impacts on sugar consumption and government revenue</u> – with some of the modelling adapted to give estimates of impact over the four year forward estimates. The paper contains more detail and more modelling scenarios.

# **PROBLEM STATEMENT**

There is an obesity crisis in Australia which is getting worse. Sugar-sweetened beverages (SSBs) are a major contributor to the obesity crisis and provide almost no nutritional benefit, yet Australians consume them in huge volumes. With increasing body mass index (BMI), people's direct healthcare costs increase, many of which are borne by government.

#### Obesity

- 31 per cent of Australian adults and 8 per cent of children are obese. When including those who are overweight this
  increases to 67 per cent of adults and 25 per cent of children.<sup>1</sup>
- The prevalence of obesity in Australia is expected to continue to increase. It is estimated that a third (33%) of the
  projected adult population will be obese by 2025.<sup>2</sup>
- Obesity is a major risk factor for chronic and preventable conditions including type 2 diabetes, heart disease, hypertension, stroke, gall bladder disease, osteoarthritis, sleep apnoea and respiratory problems, mental health disorders and some cancers.

#### **SSBs**

- SSBs are drinks containing large amounts of 'free sugars' such as sucrose, high-fructose corn syrup or fruit juice. They deliver a high number of liquid calories but provide almost no nutritional benefit. There are 8-12 teaspoons (33-50 grams) of sugar in the average 375 millilitre can of soft drink.<sup>3</sup>
- Australians consume a lot of SSBs,<sup>4</sup> the AMA estimates at least 2.4 billion litres of SSBs per year.<sup>5</sup> In 2019-20, Australians consumed on average 70 grams of free sugar a day, with over a quarter (18g) of this coming from sugary drinks.<sup>6</sup>
- There is a strong association between SSB consumption and increased energy intake, weight gain and obesity.<sup>7</sup> Conversely, reduced consumption of SSBs is significantly associated with weight loss.<sup>8</sup>

### Cost

- People living with obesity have medical costs that are approximately 30 per cent greater than their healthy weight peers.<sup>9</sup>
- The AMA estimates that if no action is taken to stem the obesity crisis, by 2025 governments will have footed a further \$29.5 billion for the direct healthcare costs of obesity (over four years to 2024-25).<sup>10</sup>

# **POLICY PROPOSAL**

The AMA recommends implementing an excise tax based on sugar content on selected SSBs, at a rate of around \$0.40/100g sugar, to reduce consumption, improve health outcomes, and lower the financial burden on the healthcare system.

SSBs are a logical target for a public health intervention, given the high level of consumption of these products, which provide almost no nutritional benefit but make a major contribution to the obesity crisis, and to poor dental health, through high levels of free sugar.

A tax can deliver both a clear message for consumers that the product is unhealthy, and a tangible deterrent in the form of higher prices. An appropriately designed tax can also incentivise manufacturers to reduce the sugar content in their products.

SSBs are also a practical target for a tax, as they are a discreet category that is easily identifiable.

### SSBs subject to tax

- This category of beverage typically includes carbonated and non-carbonated fruit, dairy/milk, sport, energy and cordial drinks containing free sugars, and excludes alcoholic and artificially-sweetened (diet) drinks.
- The AMA's proposal is to tax a subset of SSBs all non-alcoholic drinks containing free sugars, excluding 100 per cent fruit juice, milk-based and cordial drinks. The focus is on drinks that provide no nutritional benefit.

## Design of tax

- The AMA recommends a sugar content tax a sliding scale where the tax increases as the sugar content increases.
- A sugar content tax is the most logical option, given that harm is caused proportionate to the sugar content, not the value or the liquid volume. It is the only option that creates an incentive for manufacturers to lower the sugar content of their products, and therefore is the option most targeted at reducing sugar consumption.

### Target of tax

- The AMA recommends the tax be applied to domestic and international manufacturers of SSBs.
- The tax should be targeted at the manufacturer in order to incentivise reformulation. An excise (and customs) tax is
  the most logical option to do this.

### Scale of tax

- The AMA recommends a tax rate of \$0.40/100g sugar.
- The World Health Organization's recommendation is that a tax on SSBs would need to raise the retail price by at least 20 per cent in order to have a meaningful health effect.<sup>11</sup> The proposed rate would have the effect of increasing the price of the average supermarket SSB by at least 20 per cent.
- SSB tax rates vary around the world. Several comparable countries to Australia have implemented sugar content taxes, some of which are set at a similar rate to that which is proposed. The tax would raise the price of a 375ml can of coke (which contains 40g sugar) by \$0.16 (see Table 1 in the research paper).<sup>12</sup>

# **RISKS AND IMPLEMENTATION**

## Public support

Australian surveys have consistently shown majority support for a tax on SSBs.<sup>13</sup> Public support is even higher if tax revenue is hypothecated to fund initiatives to tackle obesity.<sup>14</sup> A nationally representative survey undertaken in 2017 found 60 per cent of Australians support a tax on sugary drinks. This increased to 77 per cent support if the proceeds were used to fund obesity prevention.<sup>15</sup>

### International success

- SSB taxes in other countries have been successful in reducing consumption and incentivising reformulation of SSBs.
- Almost 60 jurisdictions across the world have implemented SSB taxes.<sup>16,17</sup> There has been confirmed success already in a number of countries, including the United Kingdom (2018), Mexico (2014), France (2012), Chile (2014), Catalonia, Spain (2016) and in some US jurisdictions (Portland 1991; Cleveland 2003; Berkeley 2015), where robust evaluations have shown a drop in consumption following the tax.<sup>18</sup>

### Pass-through of tax

 There is no guarantee that an excise tax will be fully passed on to the consumer, as the retailer, wholesaler or manufacturer may choose to absorb it in part or in full. However, the international experience is that the SSB tax pass-through is sufficient to have an impact on consumption.<sup>19</sup> The government also has a range of options to influence tax pass-through such as raising the tax over time.

### Impact on obesity and healthcare expenditure

- Reduced sugar consumption and improved diet would likely lead to a reduction in the prevalence of obesity and substantial healthcare savings.
- According to previous Australian modelling, an SSB tax that increases the retail price by 20 per cent would lead to a reduction in the prevalence of obesity of around 2 per cent, and healthcare expenditure savings of \$609 million to \$1.73 billion (over the lifetime of the population modelled).<sup>20</sup>

## Impact on vulnerable groups

- A flat tax will inevitably have a greater impact on lower income consumers of the taxed product, as a proportion of their expenditure/income. However, this regressive effect is reduced if there is an untaxed substitute that consumers can easily switch to.<sup>21</sup>
- In the case of SSBs, healthy substitutes such as water are readily available and affordable to most people, and consumers can avoid the tax, as well as improving their health, by making this change.
- People who live with greater socioeconomic disadvantage are more likely to have poorer diets, be overweight and obese, and at a higher risk of cardiovascular disease, than people of comparatively less disadvantage.<sup>22</sup>
- Therefore, when viewed holistically, an SSB tax could be considered a progressive measure, since lower SES groups would theoretically experience a disproportionate health benefit in response to the tax, compared to higher SES groups. There is also potential to use the revenue from the tax to implement initiatives that would produce a benefit for lower SES groups, such as targeted subsidies on healthy foods.
- In some remote communities the water supply is unsafe and/or unstable. It must be recognised that price signals
  do not have the same relevance in this circumstance, if there is no safe and affordable source of hydration to switch
  to. Therefore, the impact of price rises in these areas must be considered to avoid creating further disadvantage,
  with particular attention paid to the safety and availability of drinking water, and the price of bottled water. The
  AMA recommends implementing the tax alongside measures to ensure reliable, safe access to water and affordable
  hydration beyond SSBs.

### Impact on sugar industry

- There would be minimal impact on Australia's sugar industry as about 80 per cent of Australia's domestic sugar production is exported (averaged over the past decade).<sup>23</sup> Only 5.3 per cent of total domestic production goes towards domestic SSB manufacture.<sup>24</sup>
- The estimated change in SSB consumption due to the proposed tax is 12 to 18 per cent (scenario 1 in the <u>research</u> <u>paper</u>), which translates to a 0.64 to 1.01 per cent drop in demand for domestic sugar production. The domestic sugar market has a much greater level of volatility than this change.<sup>25</sup>
- The impact on the sugar industry is anticipated to be minimal and does not appear to warrant a government assistance package. However, government may wish to consider whether there are any specific small farmers that mainly supply the domestic market, who may warrant an assistance package which could be funded from the tax revenue.

# TIMEFRAMES AND COSTING OVER FOUR YEARS

Original modelling by the AMA indicates a tax on select SSBs would reduce sugar consumption by 21 per cent in 2022-23 to 31 per cent by 2025-26. It would raise annual government revenue of \$740 million in 2022-23, falling to \$678 million in 2025-26.

Over four years, this would translate to government revenue of \$2,839 million across the forward estimates. More importantly, it would result in the reduction of 3.15 kilograms of sugar per person per year consumed through SSBs. The rate of tax per 100g of sugar is indexed at CPI, or an assumed 2 per cent across the forward estimates.

#### Table 1: Impact of implementing an excise tax on select SSBs

	2021-22 (baseline)	2022-23	2023-24	2024-25	2025-26	Total across forward estimates
Sugar per person from SSBs (kg/person)	8.90	6.91	6.54	6.10	5.75	
Excise rate per 100g sugar (\$)	0	0.40	0.41	0.42	0.42	
SSB revenue (\$m)	0	740	724	697	678	2,839
Estimated cost of administration to Australian Taxation Office (\$m)		2	0.5	0.5	0.5	3.5
Net revenue to government (\$m)		738	723.5	696.5	677.5	2,835.5

Revenue estimates have been derived using the more conservative price elasticity (in revenue terms) from the paper, derived from real-world impact evaluations of SSB taxes around the world (-1.00).<sup>26</sup>

Consumption of SSBs would drop the most when the tax is first introduced. An assumption in this modelling is that manufacturers would reformulate their products to reduce the impact of the tax and to align with an accelerated consumer preference for healthier beverages. These two factors cause the revenue raised from the tax to fall over time. The rate of reformulation has been assumed to match a similar reduction in sugar per beverage (34%) to what was seen in the UK following introduction of a similar tax, but across a longer timeframe of 5 years, whereas this occurred in the UK within 3 years.

In this modelling, the impact of the tax is compared to and built upon a 'no tax' scenario. In the no tax scenario, there is assumed to be growth in underlying beverage consumption due to Australian population growth, in line with flat consumption per person. There is also assumed to be a gradual move toward no and low sugar beverages at the rate of a 1 per cent increase in market share of those products each year, in line with the aggregate industry trend.<sup>27</sup>

It is anticipated the government would use the existing ATO policies and processes responsible for excise and excise equivalent goods to administer the new SSB tax. It is assumed there would be an initial cost to set up new internal processes – an indicative estimate is given of \$2 million set-up cost and \$0.5 million per year thereafter for the ATO's ongoing compliance duties.

# REFERENCES

<sup>1</sup> Australian Bureau of Statistics (2018). *National Health Survey: State and Territory Findings, 2017-18.* Retrieved 29/06/2021 from: https://www.abs.gov.au/statistics/health/health-conditions-and-risks/national-health-survey-state-and-territory-findings/latest-release

<sup>2</sup> PwC Australia (2015). *Weighing the cost of obesity: A case for action.* pp4-5, 61-63. Retrieved 22/12/2020 from: https://www.pwc.com.au/pdf/weighing-the-cost-of-obesity-final.pdf

<sup>3</sup> Miller, C., Wakefield, M., Braunack-Mayer, A., Roder, D., O'Dea, K., Ettridge, K. & Dono, J. (2019). Who drinks sugar sweetened beverages and juice? An Australian population study of behaviour, awareness and attitudes. *BMC Obesity*  $\delta$ (1). Doi: 10.1186/s40608-018-0224-2

<sup>4</sup> Australian Bureau of Statistics (2018). *National Health Survey: State and Territory Findings, 2017-18.* Retrieved 29/06/2021 from: https://www.abs.gov.au/statistics/health/health-conditions-and-risks/national-health-survey-state-and-territory-findings/latest-release

<sup>5</sup> See full paper for explanation of how this was calculated: Australian Medical Association (2021). *A tax on sugar-sweetened beverages: Modelled impacts on sugar consumption and government revenue.* Retrieved 03/08/2021 from: https://www.ama.com.au/articles/tax-sugar-sweetened-beverages-what-modelling-shows

<sup>6</sup> Australian Bureau of Statistics (2020). *Apparent Consumption of Selected Foodstuffs, Australia.* Retrieved 03/08/2021 from: https://www.abs.gov.au/statistics/health/health-conditions-and-risks/apparent-consumption-selected-foodstuffs-australia/2019-20; World Health Organization (2015). *Guideline: Sugars intake for adults and children.* Geneva: World Health Organization. Retrieved 18/02/2021 from: https://www.who.int/publications/i/item/9789241549028

<sup>7</sup> Malik, V.S., Schulze, M.B. & Hu, F.B. (2006). Intake of sugar-sweetened beverages and weight gain: a systematic review. *The American Journal of Clinical Nutrition 84*(2), 274-288. Doi: 10.1093/ajcn/84.2.274; Vartanian, L.R., Schwartz, M.B. & Brownell, K.D. (2007). Effects of Soft Drink Consumption on Nutrition and Health: A Systematic Review and Meta-Analysis. *American Journal of Public Health 97*(4), 667-675. Doi: 10.2105/AJPH.2005.083782

<sup>8</sup> Chen, L., Appel, L.J., Loria, C., Lin, P., Champagne, C.M., Elmer, P.J., ... & Caballero, B. (2009). Reduction in consumption of sugar-sweetened beverages is associated with weight loss: the PREMIER trial. *The American Journal of Clinical Nutrition 89*(5), 1299–1306. Doi: 10.3945/ajcn.2008.27240

<sup>9</sup> Withrow, D. & Alter, D.A. (2011). The economic burden of obesity worldwide: a systematic review of the direct costs of obesity. *Obesity Reviews 12*, 131-141. Doi: 10.1111/j.1467789X.2009.00712.

<sup>10</sup> See full paper for explanation of how this was calculated: Australian Medical Association (2021). *A tax on sugar-sweetened beverages: Modelled impacts on sugar consumption and government revenue.* Retrieved 03/08/2021 from: https://www.ama.com.au/articles/tax-sugar-sweetened-beverages-what-modelling-shows

<sup>11</sup> World Health Organization (2016). *Fiscal policies for diet and prevention of noncommunicable diseases.* Technical Meeting Report. 5-6 May 2015, Geneva, Switzerland. WHO: Geneva. pp9, 24. Retrieved 18/02/2021 from: https://apps.who.int/iris/bitstream/handle/10665/250131/9789241511247-eng.pdf?sequence=1

<sup>12</sup> Rethink Sugary Drink. '*How much sugar is in...?*'Retrieved 02/02/2021 from: https://www.rethinksugarydrink.org.au/how-much-sugar

<sup>13</sup> Miller, C.L., Dono, J., Wakefield, M.A., Pettigrew, S., Coveney, J., Roder, D., ... & Ettridge, K.A. (2019). Are Australians ready for warning labels, marketing bans and sugary drink taxes? Two cross-sectional surveys measuring support for policy responses to sugar-sweetened beverages. *BMJ Open 9*, e027962. Doi: 10.1136/ bmjopen-2018-027962; Sainsbury, E., Hendy, C., Magnusson, R. & Colagiuri, S. (2018). Public support for government regulatory interventions for overweight and obesity in Australia. *BMC Public Health 18*, 513. Doi: 10.1186/s12889-0185455-0; Morley, B., Martin, J., Niven, P. & Wakefield. M. (2012). Public opinion on food-related obesity prevention policy initiatives. *Health Promotion Journal of Australia 23*(2), 86-91.

<sup>14</sup> Miller, C.L., Dono, J., Wakefield, M.A., Pettigrew, S., Coveney, J., Roder, D., ... & Ettridge, K.A. (2019). Are Australians ready for warning labels, marketing bans and sugary drink taxes? Two cross-sectional surveys measuring support for policy responses to sugar-sweetened beverages. *BMJ Open 9*, e027962. Doi: 10.1136/ bmjopen-2018-027962; Sainsbury, E., Hendy, C., Magnusson, R. & Colagiuri, S. (2018). Public support for government regulatory interventions for overweight and obesity in Australia. *BMC Public Health 18*, 513. Doi: 10.1186/s12889-0185455-0.

<sup>15</sup> Miller, C.L., Dono, J., Wakefield, M.A., Pettigrew, S., Coveney, J., Roder, D., ... & Ettridge, K.A. (2019). Are Australians ready for warning labels, marketing bans and sugary drink taxes? Two cross-sectional surveys measuring support for policy responses to sugar-sweetened beverages. *BMJ Open 9*, e027962. Doi: 10.1136/ bmjopen-2018-027962

<sup>16</sup> Popkin, B.M. & Ng, S.W. (2021). Sugar-sweetened beverage taxes: Lessons to date and the future of taxation. *PLoS Med 18*(1), e1003412. Doi: 10.1371/journal.pmed.1003412

<sup>17</sup> Obesity Evidence Hub. (2021, August 17). *Countries that have taxes on sugar-sweetened beverages (SSBs).* Retrieved 27/01/2022 from: https://www.obesityevidencehub.org.au/collections/prevention/countries-that-have-implemented-taxes-on-sugar-sweetened-beverages-ssbs <sup>18</sup> Teng, A.M., Jones, A.C., Mizdrak, A., Signal, L., Genc, M. & Wilson, N. (2019). Impact of sugar-sweetened beverage taxes on purchases and dietary intake: Systematic review and meta-analysis. *Obesity Reviews 20*, 1187-1204. Doi: 10.1111/obr.12868; Bandy, L.K., Scarborough, P., Harrington, R.A., Rayner, M. & Jebb, S.A. (2020). Reductions in sugar sales from soft drinks in the UK from 2015 to 2018. *BMC Medicine 18*. Doi:10.1186/s12916-019-1477-4

<sup>19</sup> See Teng, A.M., Jones, A.C., Mizdrak, A., Signal, L., Genc, M. & Wilson, N. (2019). Impact of sugar-sweetened beverage taxes on purchases and dietary intake: Systematic review and meta-analysis. *Obesity Reviews 20*, 1187-1204. doi 10.1111/obr.12868

<sup>20</sup> Veerman, J.L., Sacks, G., Antonopoulos, N. & Martin, J. (2016). The impact of a tax on sugar-sweetened beverages on health and health care costs: A modelling study. *PLoS ONE 11*(4), e0151460. Doi: 10.1371/journal.pone.0151460

<sup>21</sup> Thow, A.M., Downs, S. & Jan, S. (2014). A systematic review of the effectiveness of food taxes and subsidies to improve diets: Understanding the recent evidence. *Nutrition Reviews 72*(9), 551-565. Doi: 10.1111/nure.12123

<sup>22</sup> Backholer, K. & Baker, P. (2018). Sugar-sweetened beverage taxes: The potential for cardiovascular health. *Current Cardiovascular Risk Reports 12*. Doi: 10.1007/s12170-018-0593-6

<sup>23</sup> Sugar production estimates are from Australian Bureau of Agricultural and Resource Economics and Sciences (ABARES). *Agricultural Commodity Statistics 2020 – Rural Commodities – Sugar.* Retrieved 18/02/2021 from: https://www.agriculture.gov.au/abares/research-topics/agricultural-outlook/data#2020

<sup>24</sup> See full paper for explanation of how this was calculated: Australian Medical Association (2021). *A tax on sugar-sweetened beverages: Modelled impacts on sugar consumption and government revenue.* Retrieved 03/08/2021 from: https://www.ama.com.au/articles/tax-sugar-sweetened-beverages-what-modelling-shows

<sup>25</sup> See full paper for explanation of how this was calculated: Australian Medical Association (2021). *A tax on sugar-sweetened beverages: Modelled impacts on sugar consumption and government revenue.* Retrieved 03/08/2021 from: https://www.ama.com.au/articles/tax-sugar-sweetened-beverages-what-modelling-shows

<sup>26</sup> Teng, A.M., Jones, A.C., Mizdrak, A., Signal, L., Genc, M. & Wilson, N. (2019). Impact of sugar-sweetened beverage taxes on purchases and dietary intake: Systematic review and meta-analysis. *Obesity Reviews 20,* 1187-1204.

<sup>27</sup> This is a conservative assumption based on reported market trends in IBISWorld (2020). *Soft Drink Manufacturing in Australia.* 



Submitted October 2021 39 Brisbane Avenue Barton ACT 2600 Telephone: 02 6270 5400 www.ama.com.au