

At-a-glance

What proportion of the price of a typical alcoholic beverage is taxation in Canada and why does it matter?

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Abstract

Introduction: Canadian distillers and brewers have claimed that between 50% and 80% of the price of alcoholic drinks are government taxes. These claims were made in campaigns to decrease alcohol taxation.

Methods: We investigated these claims using publicly available Statistics Canada data and provincial-level product sales data and breakdowns of the prices of typical alcohol beverages in major market sectors.

Results: In all cases, the rate of total sales tax and excise taxation are mostly between 20% and 30% of final retail prices, well below the industry claims.

Keywords: *substance use, alcohol use, harm reduction, surveys, public health, costs, societal costs, Canadian Substance Use Costs and Harms, taxation*

Highlights

- Alcohol industry groups have exaggerated the level of taxation applied to typical Canadian alcoholic beverages.
- Distillers claim the taxation rate is 80%, but our estimates show this to be in the range of 20% to 30%.
- Brewers claim the taxation rate is 47%, but our estimates show this to be in the range of 16% to 18%.

Introduction

Comprehensive scientific reviews of the government policies that reduce alcohol consumption and related harm consistently conclude that pricing and taxation strategies are the most effective.¹⁻³ A recent formal assessment found that that most Canadian governments fail at implementing evidence-based alcohol policies and have particularly poor pricing and taxation strategies.⁴

The federal government reintroduced indexing of alcohol excise taxation in 2017 (to maintain its value in line with inflation). However, an assessment of the policy implementation found the overall level and structure of excise taxes relatively ineffective at improving public health and safety outcomes.⁵ Major shortcomings include low tax rates as a legacy of past failures to index these to the cost of living; a failure to tax most alcoholic beverages on the basis of their alcohol content; and inconsistent rates across beverage types.

The scientific evidence in favour of using pricing and taxation strategies to reduce alcohol-related harms is strong. Nevertheless, such strategies have to be presented carefully as they are often unpopular.¹

To prevent the reintroduction of the indexing of alcohol excise taxes, Canadian producers claimed that this would involve increasing taxes.⁶ In fact, this move would only ensure prices keep pace with inflation. Canadian distillers and brewers claimed that 80% of the price of spirits⁶ and 50% of the price of beer was already tax.⁷

Producers' claims have been in the public domain since 2018, and an independent examination of the figures is warranted. Alcohol producers likely oppose excise tax increases as they directly compete with their profit margins and affect the price at which they can sell their products to retailers and distributors. Moreover, industry claims neglect to rigorously define what they consider "taxation" for the purposes of their figures, leaving these definitions open to interpretation.

One interpretation is that industry figures incorporate government-owned retail monopoly profits into their definition of taxation. This line of reasoning sets different standards for private retailers, the bulk of alcohol sales in Canada⁵, and government-owned retailers, and the profits of private retailers are not considered taxation.

Using product-level sales data from government liquor stores in British Columbia and Ontario, we investigated the veracity of these industry claims. We hope the outcomes of our analyses will explain what consumers are paying for. The analyses may also help policy makers evaluate alcohol industry claims when examining possible future alcohol tax and pricing reforms.

Methods

To examine pricing and tax breakdowns, we consulted aggregate statistics provided by Statistics Canada^{8,9,10} and product-level sales data from government liquor stores in British Columbia and Ontario, which we received directly from the provincial alcohol jurisdictions. Data from British

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Columbia are from 2014 and 2016, and data from Ontario are from 2017. We determined the following summary metrics from the product-level sales datasets:

- Typical beverage size in each major beverage category, that is, beer, wine, spirits, coolers and ciders, was chosen to be the most commonly sold size in terms of total sales in dollars and total sales in litres of beverage.
- Mean values, weighted by total sales in dollars, of the price, strength (i.e. percent alcohol), *ad valorem* sales tax and excise tax incurred at each of the typical beverage sizes for each of British Columbia and Ontario. These provincial values were then combined by another weighted mean, this time weighted by population, to produce a national estimate.

We considered four major beverage markets—beer, wine, spirits and ciders/coolers—when aggregating Statistics Canada data, and split ciders and coolers into their own categories when considering product-level data from British Columbia and Ontario.

When estimating the proportions in each market taken up by liquor manufacturer wholesale costs, government taxation and liquor authority profits from the Statistics Canada data, we combined a direct estimate of proportions based on Statistics Canada data with methods previously used to estimate the burden of excise taxation on alcoholic beverages in Canada.¹¹ Wholesale costs, *ad valorem* sales taxes and profits⁹ were distributed based entirely on the market share of each beverage category.^{8,9} Excise taxes were distributed based on previously described models¹¹, and excise taxation and excise tax changes are assumed to be fully passed through to consumers¹². These models are based on detailed individual product price, sales and production data; the models took into account different tax rates for brewers with small, medium and large production volumes. To provide results that are generalizable across Canada, we have considered only representative tax rates that are available at an aggregated level, these being excise, federal goods and services tax (GST) and provincial sales tax (PST) rates from British Columbia and Ontario. An approach that singled out a particular market, for example Prince Edward Island with its additional 25% *ad valorem* sales tax on alcohol or the market of Ontario products produced within Ontario which

are subject to an additional Basic Alcohol Tax, may produce different results, but would be far less generalizable to the whole of Canada.

Results

In every major beverage market, the overall tax take is 20% to 31% (excise taxes + sales taxes), with the largest proportion applied to spirits (Table 1). In each market, the wholesale costs are approximately 37% to 42%, and the total liquor authority profits are the remainder, at 32% to 38%.

A bottle of spirits, the beverage with the highest tax burden by proportion of total price, has an average total tax contribution of \$8.92 on the \$43.01 price tag, or approximately 20.7% (Table 2). Similar computations on the rest of the beverages yield taxation burdens of less than 20% across all other beverage types. It is worth noting that *ad valorem* sales taxes account for the vast majority of the investigated taxation, with excise taxes adding very little to the total price of alcohol to beverages other than spirits. The greatest excise tax take, by percent of final price, falls onto spirits, where the excise taxation rates vary according to their alcoholic strength and volume.

Discussion

Our results are a straightforward summary of the typical taxation included in the price of alcoholic beverages in Canada. They are meant to be interpreted on a national scale. When applying this analysis to a particular province, provincial alcohol taxation rates such as Ontario's Basic Alcohol Taxes on beverages produced within Ontario or Prince Edward Island's additional 25% *ad valorem* sales tax on alcohol must be considered. Even if such regional variation doubled a given

tax burden, all results would fall far below the tax burdens claimed by industry.

Canadian distillers claim that 80% of the price of spirits in Canada is made up of taxation.⁹ Our estimates show that the tax burden was 20% to 30%. Moreover, the pricing breakdown using aggregate Statistics Canada data suggests that distillers are receiving more than one-third of the final sale prices of the spirits they produce. This suggests that Canadian distillers need to define and support their claim more rigorously. Even if industry is including government retailer profits in their 80% taxation figure, the amounts do not match their claim.

Our findings also contradict the brewers' claim that almost half of the price of beer is made up of taxes. Our figures are between 16% and 18% of our product-level data (Table 2), and an estimated tax burden (excise plus sales) of 22% (Table 1). These figures are heavily dependent on provincial sales tax rates and the sliding excise tax rate scale that is based on brewery sizing.

We found that 41% of beer prices goes toward the wholesale prices (Table 1). Could industry be including government retailer profits in their 50% taxation figure? If so, we stress that such an interpretation is flawed because it sets different standards for private retailers and government-owned retailers.

There is a paucity of Canadian research into the relationship between excise taxes, levels of alcohol consumption and alcohol-related harm. While the existence and general scale of these relationships is generally well-established in the international literature,^{1-3,11} their more precise quantification for Canadian markets would be valuable. Modelling studies of the likely impacts of alternative taxation and pricing policies on levels of consumption and

TABLE 1
Percent contributions of taxes to the final retail price of “typical” alcoholic beverages in Canada, 2017/2018, aggregated

Beverage	Percent contribution (%)				
	Wholesale	Excise tax	Profit	Sales tax	Excise + sales tax
Beer	41.35	8.90	36.93	12.81	21.71
Wine	42.26	6.91	37.74	13.09	20.00
Spirits	36.67	19.22	32.75	11.36	30.58
Coolers/cider	41.21	9.22	36.80	12.77	21.99

Data source: Statistics Canada. Tables 10-10-0011-01, 10-10-0010-01 et 10-10-0012-01. Ottawa, (ON): Statistics Canada; 2018.⁸⁻¹⁰

TABLE 2
Mean prices and taxes paid for typical container sizes in British Columbia and Ontario, by beverage type

Beverage	Volume (mL)	Mean alcoholic strength (%)	Mean price (\$)	Mean sales tax (\$)	Mean excise tax (\$)	Mean remainder (\$)	Mean total tax (\$)
Beer ^a	473	5.07 ^c	2.41	0.31	0.06	2.03	0.38
Beer ^b	2130	4.93 ^c	10.93	1.42	0.54	8.97	1.96
Wine	750	15.05	19.88	2.59	0.46	16.83	3.05
Spirits	750	37.86	43.01	5.60	3.32	34.09	8.92
Coolers	473	6.46	2.91	0.38	0.14	2.39	0.52
Ciders	500	4.71	2.94	0.38	0.15	2.41	0.53

Note: Data in table are aggregated from provincial product-level sales data.

^a Single can of beer.

^b Six-pack of 355 mL bottles.

^c Alcohol strength is averaged over beverages in the same volume category. The 473 mL category contained more stronger, mass-produced options than the 2130 mL category, which contained more craft beers, hence the differing average strength.

harm in Canada¹¹ can be a helpful guide toward more effective public health policies to reduce harms from alcohol.

Conclusion

In summary, the current baseline level of provincial and federal taxation on alcoholic beverages in Canada falls below one-third of the final retail prices of all alcohol beverage types, and below 22% for beer, wine and coolers/ciders. These analyses suggest that there is ample scope for increasing excise taxes on alcoholic products in Canada. This would improve public health outcomes and compensate for lost revenue due to past failures to index alcohol excise taxes to the cost of living.

Conflicts of interest

None.

Authors' contributions and statement

SC: Software, methodology, writing – original draft; TM: Conceptualization, methodology, writing – review and editing; AS: Methodology, writing – review and editing.

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